

Appendix 20c: PR14 Reconciliation submission summary

Yorkshire Water PR14 Reconciliation and Accounting for Past Delivery Summary (v2.0)

PR19 Business Plan
3 September 2018

It's part of our
Blueprint for Yorkshire



YorkshireWater

Change Control Table

Version No.	Purpose / Change		Date
V1.0	PR14 reconciliation submission 13 July 2018		13 July 2018
V2.0	Updated for submission as an appendix with main business plan		3 September 2018
	Change location	Change details	Comments
	4.2 - 2015-16 Performance	<p><u>First para:</u></p> <ul style="list-style-type: none"> Bullet (1) Pollution incidents. Ref. updated from SA3 to SA3b to aid clarity of the measure being reported. Removal of any reference to category 1 pollution incidents as these do not contribute to PC SA3b performance. Bullet (2) Solutions delivered by working with others. Ref. WC1 amended to WC2 	To aid clarity
	4.3 - 2016-17 Performance	<p><u>First para:</u></p> <ul style="list-style-type: none"> Bullet (3) Pollution incidents. Ref. updated from SA3 to SA3b to aid clarity of the measure being reported. Update 217 incidents to 207 incidents. Bullet (4) Solutions delivered by working with others. Ref. WC1 amended to WC2 	To aid clarity. Change in metric correcting a transcription error from v1.0
	4.4 - 2017-18 Performance	<p><u>First para:</u></p> <ul style="list-style-type: none"> Bullet (3) Pollution incidents. Ref. updated from SA3 to SA3b to aid clarity of the measure being reported. Bullet (4) Solutions delivered by working with others. Ref. WC1 amended to WC2 <p><u>Second para:</u></p> <ul style="list-style-type: none"> Bullet (4) Drinking water contacts. Penalty level amended from £0.0035m to £0.0033m. 	To aid clarity Change in metric correcting a transcription error from v1.0
	4.5 - 2018-20 Forecast Performance	<p><u>First para:</u></p> <ul style="list-style-type: none"> Bullet (4) Pollution incidents. Ref. updated from SA3 to SA3b to aid clarity of the measure being reported, and removal of the reference to category 1 pollution incidents. Bullet (6) Solutions delivered by working with others. Ref. WC1 amended to WC2 <p><u>Second para:</u></p> <ul style="list-style-type: none"> Bullet (3) Land conserved. Forecast land conserved and enhanced amended from 11,634 hectares to 11,689 hectares in line with revised App5 data table. 	To aid clarity Update aligned to revision in data table
	4.6 - Past performance	Table 4.2 – summary of complaints – updated to reflect recent information available on complaints referred to CCWater and associated forecasts. Remains aligned to App31 table.	Update aligned to revision in data table
	5.4.1 – Wholesale Water Programme	Update to para 12: 'forecasting in total £49m' amended to £58m	Update in finance data
	5.4.2 – Wholesale Wastewater Programme	Update to para 11: 'forecasting in total £45m' amended to £43m	Update in finance data

	Change location	Change details	Comments
	6. Customer support for proposed adjustments to 2020-25 price controls	New final para added: "Update for v2.0 - Customer testing has confirmed customer support for the proposed adjustments. Further details of the testing and support can be found within our PR19 plan submission"	Reference to updated information available
	8. Proposed PR14 Reconciliation Revenue and RCV Adjustments	Table 7.1: Additional 'total adjustments' row added to the table to help clarity for reader.	To aid clarity

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1. PR14 Reconciliation – Board Assurance Statement

Our aim is to deliver a PR14 performance reconciliation that is in line with the Ofwat guidance and PR14 reconciliations rule book. This is a requirement for an early submission in July 2018 for PR19 in September 2018.

Good assurance needs to be provided at the right time, proportionate to the level of risk identified, ask the right questions and produce good evidence to support the information to deliver the PR14 reconciliation. Our assurance approach is risk based (where we place more focus in areas that are higher risk) and uses a method called ‘three levels of assurance’.

The first level of assurance is from management controls applied through our front-line operations from the teams who deliver the information. The second level of assurance consists of oversight teams with specialist knowledge from our finance, regulation and legal teams. The third level of assurance is provided through independent assurance including our external technical auditors, Deloitte and Halcrow. This approach is best practice and is described in more detail in our Assurance Plan and in our Data Assurance Summary.

To satisfy ourselves that the information is accurate and accessible, all elements of the PR14 reconciliation have been subject to an appropriate assurance process. In particular:

- Our assurance processes for annual reporting are certified to the British Standard ISO9001:2015 Quality Management System. This is best practice and externally verified.
- Our assurance process has included audit checks and challenges by data providers, data managers, table owners, senior managers and directors. The assurance process also included review and challenge by our external technical auditors, Deloitte and Halcrow. We have reviewed and actioned all findings from these assurance processes.
- The outputs from the assurance processes have been reviewed and challenged by the Board Audit Committee.

The Board of Yorkshire Water understands that it is accountable for the quality and transparency of the information provided within the PR14 reconciliation. The Board owns the information that is presented in the submission. The Board has obtained comfort from the Board Audit Committee that there are appropriate controls and assurance processes in place regarding the information contained within the PR14 reconciliation.

So far as the directors are aware, there is no relevant audit information of which the company's independent technical and financial auditors are unaware. The directors have taken all the steps that they ought to have taken as directors in order to make themselves aware of any relevant audit information and to establish that the company's independent auditors are aware of the information.

Board Assurance Statement

Signed by Yorkshire Water Services Limited Board of Directors



Anthony Rabin
Chairman



Richard Flint
Chief Executive



Liz Barber
Director of Finance, Regulation & Markets



Pamela Doherty
Director of Service Delivery



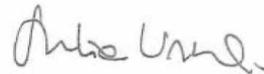
Nevil Muncaster
Director of Asset Management



Ray O'Toole
Senior Non-Executive Director



Teresa Robson-Capps
Non-Executive Director



Julia Unwin
Non-Executive Director



Mark Amsden
Company Secretary (Interim)



Andrew Wyllie
Non-Executive Director



Michael Osborne
Director



Scott Auty
Director



Andrew Dench
Director

2. Introduction

A key part of the 2019 price review (PR19) is the assessment and calculation of adjustments to take account of Yorkshire Waters performance over the period 2015-20 and the incentive mechanisms put in place at the 2014 price review (PR14) and confirmed within our PR14 Final Determination.

At the PR14 price review Ofwat introduced a number of incentive mechanisms that had the potential to reward or penalise companies where they out or under-performed against agreed targets for improving performance for customers, and mechanisms that shared with customers benefits from efficiencies achieved or penalties for legitimate additional costs in the delivery of services.

In support of the incentive mechanisms and sharing arrangements, a number of reconciliation mechanisms were developed to take into account for the PR19 price review performance achieved over the 2015-20 period, along with those factors not reconciled from the earlier 2009 price review (PR09).

Ofwat requires companies to submit specific data and information in order to reconcile companies' performance during 2015-20. This information consists of a number of defined data tables, reconciliation models and commentaries¹. The output from the reconciliation will be proposed adjustments to the Yorkshire Water revenues and regulatory capital value (RCV) for performance delivered between 2015-20.

Ofwat published its PR14 reconciliation rulebook², which explains how it will take account of performance over 2015-20, and those factors not reconciled from PR09, at PR19. The rulebook describes the approach to the reconciliation of a series of incentive mechanisms. These incentive mechanisms will generate RCV and revenue adjustments for companies for the PR19 control period.

These reconciliation mechanisms are set out below:

- **Outcome delivery incentives** – outperformance payments for companies that exceed their stretching performance commitment levels, and underperformance penalties for customers if performance is below their performance commitment levels.
- **Wholesale total expenditure (totex) sharing** – where a company's out or under-performance on totex is shared with customers.
- **Wholesale revenue forecasting incentive mechanism (WRFIM)** – financial incentives for companies to make accurate forecasts for wholesale revenue, ensuring under and over-recovery is reconciled.
- **Water trading incentive** – incentive payments for new water trades that start in the 2010-15 period.
- **2010-15 reconciliation** – further adjustments for performance against the PR09 incentive mechanisms, including the Capital Incentive Scheme (CIS), to reflect the update for actual 2014-15 performance.

¹ Delivering Water 2020: Our methodology for the 2019 price review – Updated guidance for the final business plan data tables – 31 May 2018

² Ofwat PR14 reconciliation rulebook – updated 13 Dec 2017

- **Land disposals** – adjusting the RCV to share any proceeds from disposals of interest in land equally with customers.
- **Residential retail** – the total revenue allowance is adjusted for actual customer numbers.

In addition, the PR19 methodology consultation document³ describes the reconciliation required by companies for the service incentive mechanism (SIM).

Ofwat will take account of performance in the 2015-20 period in its initial assessments of business plans at PR19.

2.1. Our approach to PR19

To develop a comprehensive PR19 business plan, Yorkshire Water has engaged extensively with customers to understand what is important to them, how their lives interact with water and wastewater services, and what they want from us. These conversations have helped us understand where we need to focus our activities, now and into the long term.

We heard from customers, and stakeholders, who felt overall that we did a good job, but there are aspects of our services they would like to see improve.

We have reflected the feedback in the current and next planning period, by adopting a twin-track approach.

- In areas where we can improve now, we are driving further performance commitment improvement within the 2015-20 period. We have been working on improving areas of our business over the last 12 months.
- We will build in these immediate improvements with our PR19 business plans as the platform for further service quality improvement.

In section 4 of this document, we explain our forecast performance for the PR14 performance commitments for the remainder of the 2015-20 period, showing where the trajectory of improvement year on year is significantly positive, transitioning into our PR19 performance commitments.

³ Delivering Water 2020: Our final methodology for the PR19 price review: section 12. Accounting for past delivery (Dec 2017)

3. The PR14 reconciliation submission

The Yorkshire Water PR14 reconciliation submission to Ofwat consists of a suite of completed and audited data tables and reconciliation models as provided by Ofwat. The data is supplemented with detailed commentaries for each data table in accordance with Ofwat guidelines. A high-level summary narrative explaining the context of the PR14 reconciliation and the resulting proposed adjustments and details of our past performance over the 2015-20 period.

The submission contains of the following three PR14 reconciliations models and two feeder models:

- Totex menu PR14 reconciliation model spreadsheet
- WRFIM PR14 reconciliation model spreadsheet
- Residential (household) retail PR14 reconciliation model spreadsheet
- Revenue adjustments feeder model
- RCV adjustments feeder model

The PR14 submission to Ofwat also includes 14 data tables that collect information specific to our performance during 2015-20, which are listed in table 6.1 below. These data tables have been completed in accordance with the data requirements set out in Ofwat's the PR14 reconciliation rulebook and its PR19 data table guidance, and have been subject to both internal and external assurance.

Accompanying the data tables is a document with detailed commentaries explaining relevant characteristics of the data provided and supplementary information on complaints and pollution performance, as required by Ofwat in its data table guidance of 31 May 2018. The document is called 'PR14 Reconciliation Commentary to Data Tables'.

This high-level commentary document will also be submitted to Ofwat so it can consider Yorkshire Water's past performance, and ensure confidence the PR19 business plan is deliverable.

This document contains an assurance statement from the Yorkshire Water Services Limited Board and statements from our external auditors, Deloitte and Halcrow, who have provided expert assurance support for the PR14 reconciliation process.

The PR14 documentation will be published on the YW website for customers and other stakeholders to access.

Table 6.1 - PR14 reconciliation data tables

Purpose	Table ref:	Content	External Assurance Provider
Past delivery: Reconciling 2015-20 performance	App5	PR14 reconciliation – performance commitments	Halcrow
	App6	PR14 reconciliation - sub-measures	Halcrow
	App27	PR14 reconciliation – financial outcome delivery incentives summary	Deloitte
	App9	Adjustments to RCV from disposals of interest in land	Deloitte
	App23	Inflation measures	Deloitte
	App25	PR14 reconciliation adjustments summary	Deloitte
	App31	Past performance	Halcrow
Water services mechanisms	WS13	PR14 wholesale revenue forecast incentive mechanism for the water service	Deloitte
	WS15	PR14 wholesale total expenditure outperformance sharing for the water service	Deloitte
	WS17	PR14 water trading incentive reconciliation	n/a – nil return
Wastewater services mechanisms	WWS13	PR14 wholesale revenue forecast incentive mechanism for the wastewater service	Deloitte
	WWS15	PR14 wholesale total expenditure outperformance sharing for the wastewater service	Deloitte
Household retail reconciliation and SIM	R9	PR14 reconciliation of household retail revenue	Deloitte
	R10	PR14 service incentive mechanism	Halcrow

4. Accounting for past delivery

In our Final Determination for the period 2015-2020 we committed to delivering on performance and service outcomes for our customers and making investments that reflected their views and priorities.

The outcomes are supported by 26 associated performance commitments (PC's) that detail the level of performance we have committed to deliver on behalf of our customers. Achievement against these performance commitments is measured by Ofwat and shared with our customers through the annual performance reporting (APR) regime. To make sure we deliver against the performance commitments a number of these have attached to them financial rewards and penalties (financial outcome delivery incentives), and others have reputational incentives if we exceed or fail against them.

Our actual performance in terms of both service level performance against our 26 PC targets as well as our financial performance is published annually through the Annual Performance Report (APR) to Ofwat and the public and other stakeholders. The performance information in the APR is externally assured by external auditors before receiving company Board approval to be submitted.

The independent customer challenge group (CCG), the Yorkshire Forum for Water Customers is updated on our performance throughout the year, as well as given access to our external auditor. This helps support our transparency commitment to our customers.

It is important to assess and account for our delivery both achieved and forecast to be achieved, against the plans Yorkshire Water made and our Final Determination for the 2015-20 period. This assessment will help Ofwat understand how well we have already delivered for our customers and how we are able to deliver for them for the next planning period 2020-25. It will also enable any adjustments we propose to our revenues and RCV for the 2020-25 period to be assessed as part of the business planning process.

4.1. Summary of our performance in the 2015-20 period

To date, our business and operational performance has been strong with Yorkshire Water achieving an overall performance commitment reward position in each of the first three years of the 2015-20 period. This was despite a number of challenging events faced by the business and many of our customers over the period, such as significant flooding in 2015, and severe winter weather in 2018.

Throughout the period we have performed well against our 26 performance commitments and the associated performance targets. Many performance commitments have been achieved and are assessed as being in reward. Table 4.1 provides a summary of our 26 performance commitments achieved and failed to date and our forecast position to the end of the 2015-2020 period.

We describe the performance commitments where we have out-performed our targets and achieved a reward position beyond the relevant reward deadband for the measure. We also describe those commitments where we have failed to perform as planned and either missed our target but remained within the relevant penalty deadband for the measure and the applicable year, or breached the penalty deadband resulting in the financial consequence of a penalty.

Table 4.1 – Summary of PC performance for the 2015-20 period (at 2012-13 price basis)

Performance Summary (duplicate measures removed)	Actual 2015-16	Actual 2016-17	Actual 2017-18	Forecast 2018-19	Forecast 2019-20	Total
PC's achieved / in reward	15	15	13	15	23	
PC's failed (within deadband)	1	1	2	1	2	
PC's failed in penalty (outside deadband)	0	0	1	1	1	
PC's failed (reputational only)	1	1	1	0	0	
PC's not applicable in year	9	9	9	9	0	
Reward (£m) 2012-13 price basis	5.74	8.78	19.23	16.68	31.99	82.41
Penalty (£m) * 2012-13 price basis	0.00	0.00	(6.57)	(4.26)	(3.60)	(14.44)
Overall net position (£m) 2012-13 price basis	5.74	8.78	12.66	12.41	28.39	67.97

* - The 'penalty' value assessed against PC's with an attached financial outcome delivery incentive is reinvested in service improvement and does not contribute to revenue or RCV adjustments in the 2020-25 period.

4.2. 2015-16 Performance

In 2015-16 we met, exceeded or were on target to meet 24 of our 26 performance commitments.

Performance commitments where we out-performed our targets that results in a financial outcome delivery incentive reward for the year were;

- (1) Pollution incidents (ref. SA3b): We had 180 category 3 incidents under this performance commitment definition against a target of 237 category 3 incidents. We out-performed beyond the reward deadband for this measure (211 incidents).

Throughout the 2015-20 period we have been targeting our investment to minimise environmental pollution from our assets. Further investment has been allocated to target not only meeting our performance commitment service levels, but to target a sector upper quartile performance by the end of the first year of the AMP7 period (the 2020-25 period).

- (2) Solutions Delivered by Working with Others (ref. WC2 and SB3): This commitment identifies and fund shares solutions to be delivered through working with third party multi-agencies, organisations or individuals, outside our normal operational supply chain partners. We delivered 4 solutions against a target of 3. This attracted a small reward incentive, which is reinvested in future working with others solutions.

The two in year commitments that we did not meet were;

- (1) Drinking Water Quality compliance (ref. WA1): We achieved 99.954% compliance compared to a target of 99.960% due to high nickel, lead and iron failures in the distribution system.

Although we did not meet the target our performance was within the allowable deadband of acceptable performance and therefore does not attract a financial penalty.

- (2) Renewable Energy Generation (refs. WD1, SC1, and RC1): We delivered 11.3% of our overall energy requirements from energy we generated through renewable technology, compared to our target of 12%. This under performance was due to the significant damage to some of our key energy generation equipment at our sites during the flooding over the Christmas and New Year period for 2015-16.

Failure of this performance commitment carries no financial reward or penalty however could have a reputational impact with our customers and stakeholders.

Our overall service performance was strong and met a net overall reward position.

4.3. 2016-17 Performance

In 2016-17 we met, exceeded or were on target to meet 24 of our 26 performance commitments. Performance commitments where we out-performed our targets that results in a financial outcome delivery incentive reward for the year were;

- (1) Water Supply Interruptions (ref. WB2) recorded as the number of minutes lost supply per property served: We achieved performance 9.78 mins lost supply against a target of 12.81 mins and reward deadband of 12.00 mins. We exceeded our targeted performance for this measure by investing in a balance of capital improvements to target some of our high-risk areas to reduce the number of properties that can only be supplied from a single source of clean water on our network.

Whilst our plan to date has delivered year on year performance improvements, we will continue to review our ways of working both in capital delivery and operations to minimise any interruptions to our customer supply on both planned and unplanned work.

- (2) Internal Sewer Flooding incidents (ref. SA1): This measure includes incidents due to blocked and defective gullies and overloaded sewers in high rainfall events up to a defined return period. We recorded 1,769 incidents against a target of 1,898 and reward deadband of 1,808 for the year.

We achieved significant reduction in the number of incidents due to overloaded sewers across the 2015-17 years and forecast this to continue. Whilst we continually review any possible solutions to address properties that experience internal flooding and promote any that are affordable, when reviewing cost-benefit we originally re-directed £30m of funding from our original £95m plan for hydraulic flooding due to overloaded sewers into the initial £25m programme to address flooding due to other causes. This has enabled us to promote solutions to resolve many more internal flooding issues and reduce the impact on customers of any cyclical network cleaning programme that may have been in place to mitigate recurrent incidents.

- (3) Pollution incidents (ref. SA3b): We again out-performed beyond the reward deadband for this measure (211 incidents) with 207 incidents against a target 224.
- (4) Solutions Delivered by Working with Others (ref. WC2 and SB3): We delivered 5 solutions against a target of 3 for the year. This attracted a small reward incentive, which is reinvested in future working with others solutions.

The two commitments that we did not meet for 2016-17 were;

- (1) Drinking Water Contacts (ref. WA3): We reduced the number of customers who needed to contact us about the drinking water quality (discolouration, taste, odour, or illness) down from 10,007 in 2015-16 to 9,093, but we failed to meet our improving performance commitment target of 8,120 contacts in the year.

Although we did not meet the target our performance was within the deadband of acceptable performance and therefore does not attract a financial penalty.

- (2) Renewable Energy Generation (refs. WD1, SC1, and RC1): We achieved 10.0% of our energy needs generated through the use of renewable technology, compared to our target of 12%. As explained above, this was due to the continued outages of key energy generation equipment at our sites following the flooding in 2015-16.

4.4. 2017-18 Performance

In 2017-18 we met, exceeded or were on target to meet 22 out of our 26 performance commitments. Performance commitments where we out-performed our targets that results in a financial outcome delivery incentive reward for the year were;

- (1) Water Supply Interruptions (ref. WB2) recorded as the number of minutes lost supply per property served: We achieved 6.96 mins performance against a target of 12.00 mins and reward deadband also of 12.00 mins.
- (2) Internal Sewer Flooding incidents (ref. SA1): We recorded 1,681 incidents against a target of 1,919 and reward deadband of 1,808 for the year.
- (3) Pollution incidents (ref. SA3b): We again out-performed beyond the reward deadband (remains at 211 incidents) with 202 incidents against a target of 211.
- (4) Solutions Delivered by Working with Others (ref. WC2 and SB3): We delivered 12 solutions against a target of 3 for the year. This attracted a small reward incentive, which is reinvested in future working with others solutions.

The four commitments that we did not meet in the year were;

- (1) Drinking Water Quality compliance (ref. WA1): We achieved 99.953% compliance compared to a tightened target of 100.000%. This performance is within the deadband of acceptable performance and therefore does not attract a financial penalty.
- (2) Leakage (ref. WB1). The amount of water lost when we transport water between our treatment works and customer homes and businesses: We achieved a performance of 300.3MI/d water lost from our network compared with our target of 297.1MI/d. This

performance is within the deadband of 302.1Ml/d and therefore does not attract a financial penalty.

Our leakage performance was impacted by severe winter weather in December 2017 when freezing temperatures contributed to a 58Ml/d increase in our leakage performance. This was addressed by more leakage reduction activities over Christmas and we recovered our performance to meet our leakage target by the end of February.

This meant we were better placed to mitigate the impacts of the 'Beast from the East' in March 2018. This second winter weather event increased our leakage by 41Ml/d but the concentrated leakage activities across our network made sure there were few prolonged supply interruptions for customers. Missing this target for 2017-18 is disappointing, especially based on what our customers have told us about the need to further improve our leakage performance.

To reach our targets, significant and material investment will be committed to our leakage performance over the next two years. This investment is being funded through money saved in our day to day activities by being even more efficient. This means that we are improving our service at no additional cost to customers.

- (3) Renewable Energy Generation (refs. WD1, SC1, and RC1): Although we improved the proportion we generate from renewable technologies from the previous year to 11.40%, we still missed the 12% target. Key energy generation equipment is still out of service or not performing at target capacity, largely due to delays in capital schemes.

Failure of this performance commitment carries no financial reward or penalty however could have a reputational impact with our customers and stakeholders.

- (4) Drinking Water Contacts (ref. WA3): Despite continuing to reduce the number of contacts from 9,093 in 2016-17 to 8,100 we missed the tightened target of 6,108 resulting in a financial penalty. The previous use of a deadband for this measure has also fallen away for the latter years of this 2015-20 period.

The year on year improvement has been driven by changes to our original plan of mains rehabilitation towards a mix of mains rehabilitation and network flushing activities.

This performance commitment is reported by financial year and has a financial penalty of £0.0033m for every contact outside the deadband of acceptable performance resulting in a financial penalty of £6.57m (at 2012-13 prices) in the current reporting year. The penalty value will not be returned to customers via a revenue or RCV adjustment, instead it will be invested to make service improvements.

We continue to target further reductions in the number of drinking water quality contacts from our customers by maintaining our network flushing programme supported by network rehabilitation. However, we do not forecast to meet the 6,108 upper quartile contacts target determined by Ofwat in our Final Determination for the remainder of the 2015-20 period.

In regards to the customer service measure for the water industry (SIM), our year end position on customer service shows a mixed position. A very strong performance on managing customer service on billing, in which Yorkshire Water ranks as number one in the sector, is

balanced by significantly lower results for how we deal with clean and wastewater customer service issues. This is clearly an issue which we will be addressing.

4.5. 2018-20 Forecast Performance

For the remainder of the 2015-20 period we forecast our performance against our performance commitment framework will continue to be strong achieving or exceeding on 24 and 23 performance commitments in 2018-19 and 2019-20 respectively.

Performance commitments where we forecast to out-perform our targets that result in a financial outcome delivery incentive reward are;

- (1) Leakage (ref. WB1). We forecast to make significant improvements in the final year of the period, planning to achieve a performance of 235MI/d water lost from our network compared with a target of 287.1MI/d. This performance is better than deadband of 274MI/d and therefore will attract a financial reward.
- (2) Water Supply Interruptions (ref. WB2): We forecast to achieve 6.00 mins for 2018-19 and 4.00 mins for 2019-20 against a target of 12.00 mins and payment deadband also of 12.00 mins (capped at 8.08 mins). Again, this will result in payments for outperformance for each year.
- (3) Internal Sewer Flooding incidents (ref. SA1): We forecast to have 1,796 incidents for 2018-19 and 1,463 incidents for 2019-20 against a target of 1,919 and payment deadband of 1,808 for both years. For 2019-20 forecast performance a payment cap of 1,651 incidents limits the reward payment level.
- (4) Pollution incidents (ref. SA3b): We forecast 180 and 155 category 3 incidents over the two years. These are above the targets and reward deadband (remains at 211 incidents).
- (5) Length of River Improved (WC1 and SB4): We forecast to have improved 464km of river length under the Water Framework Directive component measures against a target of 440km. This performance is better than deadband and will attract a financial reward.
- (6) Solutions Delivered by Working with Others (ref. WC2 and SB3): We forecast to delivered 18 further solutions over the next two years of the period. This will generate a small reward incentive, which is to be reinvested in future working with others solutions for the 2020-15 period.

We have forecast that we will only fail to meet three performance commitments for 2018-19 and 2019-20.

- (1) Drinking Water Quality compliance (ref. WA1): We forecast to achieve 99.960% compliance for both 2018-19 and 2019-20. This is against a target of 100.000%. This performance is within the deadband of acceptable performance and therefore does not attract a financial penalty.
- (2) Drinking Water Contacts (ref. WA3): We plan to make further improvements with forecast performance of 7,400 and 7,200 customer contacts in 2018-19 and 2019-20 respectively. As the target remains at 6,108 with no deadband in place we forecast

financial underperformance penalties of £4.26m and £3.60m (at 2012-13 prices) applying. The penalty value will not be returned to customers via a revenue or RCV adjustment, instead it will be invested to make service improvements.

- (3) Amount of Land Conserved and Enhanced (ref. WC3): This measure in hectares of the amount of land we conserve and enhance, for example Biodiversity 2020, Ancient Woodlands and Sites of Special Scientific Interest (SSSI). The land can be company owned or not. This measure is a cumulative end of period commitment and we forecast to have conserved and enhanced 11,689 hectares of land, compared to a performance target of 11,736 hectares. This performance is within the deadband of acceptable performance (11,501 hectares) and therefore does not attract a financial penalty.

We also plan to improve our performance against the SIM residential customer experience measure. Although SIM will operate for 2018-19 only in advance of it being replaced with the new C-MeX experience measure for PR19, we are making improvements to our customer management approach to provide a better experience for customers who face service issues and how more of these issues are promptly and fully resolved. We forecast to improve our total SIM score (which is a combination of qualitative and quantitative results) for 2018-19 to 87.

As detailed we have deployed significant resources in the last quarter of the year to start the delivery of our long-term plan to make substantial reductions in leakage.

As part of our development of new service commitments for PR19, we spent a significant amount of time talking to customers last this and this year and getting their views on the service we provide both now and in the future. It was clear from this engagement that although customers are broadly content with the service they receive, they believe that our performance could be much improved in areas which mean the most to them – leakage, minor pollution incidents and instances of sewer flooding. Although they like our performance on interruptions to supply, where we are one of the leaders in the sector, they still think we could do better.

Based on this feedback, and also responding to the Ofwat PR19 methodology we decided to make a significant investment of £230m in service improvement. This investment, which was approved by the Yorkshire Water board in November and December, will deliver dramatic service enhancements including a 40 per cent reduction in leakage by the end of the next five-year period. Minor pollution incidents are also targeted under the plan and should also fall by 40 per cent, whilst we are targeting a 70 per cent reduction in sewer flooding.

The new performance levels will be delivered in three ways: first, the deployment of additional resources to traditional activities such as leakage inspection, providing much greater coverage in the field; secondly the use of new analytics to change the way in which we deploy those resources to ensure they have the greatest effect for our customers and finally the use of new technology to give us better information on the way in which our network is performing.

We plan to report every six months on the implementation of this plan and progress against the new targets.

4.6. Past Performance

As part of the PR19 business plan process and this PR14 reconciliation, we also report on performance that does not directly relate to our 26 performance commitments. We provide to

Ofwat information on our household and non-household customer complaints performance, and our compliance with environmental and water quality statutory requirements.

Details of the actual and forecast performance over the 2015-20 period is provided in data table App31 and in the PR14 Reconciliation commentary to data tables that accompanies this submission.

For complaints performance, table 4.2 provides numbers received and then numbers escalated to external customer advocacy bodies for dispute resolution.

Table 4.2 – summary of complaints from customers and escalations and investigations

Complaints from residential and business customers (incl, developer services customers)	2015-16	2016-17	2017-18	2018-19	2019-20
Stage 1 complaints received	7562	6434	5353	4749	4749
Complaints escalated internally to stage 2	499	306	164	147	147
Complaints referred to CCWater	532	496	434	363	328
Investigations opened by CCWater	1	0	0	0	0
Complaints investigated by Ofwat or WATRS	7	17	10	10	10

4.7. Factors influencing past performance

Although we have shown strong overall performance across the 2015-20 period, we have faced some challenging circumstances which we have worked hard to mitigate the most significant impacts of to our operations.

4.7.1. 2015-16 floods

Overall business and operational performance has been strong from 2015 to 2018 with the company achieving an overall reward position in each year. This was despite the business and many of our customers being impacted by some of the worst flooding ever experienced in parts of Leeds, Bradford, York and the Calder Valley over the Christmas and New Year period in 2015-16. Water services were maintained to all customers, despite flooding of more than 100 works and pumping stations. The damaged assets are under a continued programme of remedial works that commenced in 2016 and we have delivered work with external agencies on surface water management to minimise the risk of similar events in the future.

We experienced unexpected totex to recover the performance and condition of assets damaged during the floods on 26 December 2015. We received £51.9m (at 2012-13 prices) of insurance reflecting the fair value of estimated exceptional costs to restore the assets, and within our statutory accounts recorded exceptional opex costs of £25.15m (at 2012-13 prices) during the period of construction to rectify the damage incurred.

Given that these costs were covered by insurance we have excluded them from the actual totex so that none of these costs will be recovered from our customers via the PR14 reconciliation adjustments.

4.7.2. 2018 freeze / thaw event

Although early in 2018 extreme winter weather hit our region (commonly referred to as the Beast from the East), we performed well due to our advance preparedness and comprehensive response to events. Our annual preparations for a potential cold weather event commenced back in November 2017, with the provision of additional equipment and resource and contingency plans prepared. We actively recruited more leakage inspectors and obtained increased repair resource from our contract partners.

Our executive team considered long-range weather forecasts and took the decision to deploy resources to prepare for a predicted increase in both leakage and water demand. Both the operational company incident management team (CIMT) and the executive led crisis management team (CMT) were formed to manage the response during the event. Whilst the significant freeze then thaw situation did have an impact on some of our performance commitment service levels in the short term, we managed to maintain supplies and services to all but a small number of customers. Ofwat acknowledged in its June investigation report that Yorkshire Water had performed well and communicated with customers throughout the event.

Most issues reported by customers during the period were caused by frozen private supplies or isolated bursts on our network. Our earlier decisions to source and mobilise significant additional resource enabled us to minimise the impact on our customers by responding rapidly to any supply interruptions.

We have reviewed our preparedness and response to this extreme winter weather situation, and along with the findings of the Ofwat investigation into the resilience of services in England and Wales to this event, and a customer survey we have ourselves commissioned, we will further develop our approach to manage future incidents of this scale.

4.7.3. Drinking water quality contacts

Drinking water quality contacts (taste, odour, discolouration and illness) is the only financially incentivised performance commitment where we have failed to meet the mandated target level this year and we forecast to remain in this position for the rest of the PR14 period. The drinking water quality contacts measure was one of the performance measures Ofwat significantly tightened, against our PR14 submitted performance level targets, in order to drive upper quartile performance across the industry.

Customer contact numbers since the start of the reporting period (10,007 in 2015-16) have reduced to 8,100 in the current report year. This improvement has been driven by changes to our original plan of mains rehabilitation towards a mix of mains rehabilitation and network flushing activities. We still have not met the determined upper quartile target of 6,108.

Whilst we continue to target further reductions in customer contacts over the remaining two years by maintaining our network flushing programme supported by network rehabilitation, we do not forecast to meet the 6,108 UQ target. Further financial penalties of £4.26m and £3.60m are forecast, resulting in a total penalty level on this performance commitment of £14.4m in the reporting period 2015-20.

In line with our Final Determination, the penalty value will not be returned to customers via a revenue or RCV adjustment. Instead with the agreement of our customers at PR14, it will be reinvested on further asset improvements within three years of the failure to meet targets.

At PR14 customers determined that they would prefer to see reinvestment to drive material improvements in failing services, rather than receive a small rebate and continue to suffer service failures or performance that is not at targeted levels.

We have ensured that the reinvested funds within this AMP and for the 2020-25 period are not included in totex out or under-performance sharing mechanisms.

5. PR14 Reconciliation Proposed Adjustments

In total we are forecasting to invest £1,805m of regulatory capital in our assets to support both delivery of our performance commitments made to our customers in the Final Determination (FD) and our stretched aspirations to target upper quartile performance on the PR19 comparative measures for the 2020-25 period.

Table 5.1 identifies the capital expenditure split by Wholesale Water and Wastewater in comparison to the Final Determination allowed:

Table 5.1- Summary of capex reconciliation (in 2012-13 price basis)

	Final Determination (£m)	Forecast Outturn (£m)
Wholesale water	713.7	731.2
Wholesale wastewater	1,144.0	1074.2
Total Programme	1857.7	1805.4

Whilst we have seen delivery cost pressures in this period we have managed to outperform the FD in each of the capital programme areas. This has allowed us to reinvest savings and efficiencies back into the programme to support our upper quartile (UQ) plans for 2018-19 and into the PR19 period, as well as make significant investment into our energy generation assets to ensure long term sustainable and cost-efficient disposal of sludge.

5.1. Summary of the PR14 reconciliation proposed adjustments

The PR14 reconciliation has been undertaken against the Yorkshire Water Final Determination (FD). The incentive mechanisms will generate RCV and revenue adjustments for YW for the PR19 price control (2020-25 period). The adjustments will apply to relevant controls (water and wastewater network plus and the household retail controls).

The totality of the proposed adjustment is:

Total adjustment

Revenue adjustment -	£70.8m
RCV adjustment -	(£138.1m)

Tables 5.2 to 5.4 below details the breakdown of adjustment values by each incentive and reconciliation mechanism against the associated price control, and whether the adjustment applies to revenues or the RCV.

PR14 and PR09 Incentive mechanism adjustments allocation analysis.

Table 5.2 - Wholesale Water – 2017-18 FYA (CPIH deflated)

Incentive mechanism	Data tables	Revenue adjustment £m	RCV adjustment £m
Outcome delivery incentives	App27	44.460	-
Wholesale total expenditure (totex) reconciliation	WS15	3.822	37.519
Wholesale revenue forecasting incentive mechanism (WRFIM)	WS13	(8.263)	n/a
Water trading incentive	WS17	n/a	n/a
PR09 2010-15 reconciliation	App25	1.473	3.468
Land disposals	App9	n/a	(1.276)
PR09 CIS reconciliation	App25	n/a	(45.807)
Total Wholesale Water adjustments		41.492	(6.096)

Table 5.3 - Wholesale Wastewater - 2017-18 FYA (CPIH deflated)

Incentive mechanism	Data tables	Revenue adjustment £m	RCV adjustment £m
Outcome delivery incentives	App27	49.892	-
Wholesale total expenditure (totex) reconciliation	WWS15	(6.410)	(65.837)
Wholesale revenue forecasting incentive mechanism (WRFIM)	WWS13	(14.057)	n/a
PR09 2010-15 reconciliation	App25	3.032	3.662
Land disposals	App9	n/a	0.242
PR09 CIS reconciliation	App25	n/a	(70.039)
Total Wholesale Wastewater adjustments		32.457	(131.971)

Table 5.4 - Retail Household - 2017-18 FYA (CPIH deflated)

Incentive mechanism	Data tables	Revenue adjustment £m	RCV adjustment £m
Household retail	R9	(3.127)	n/a
PR14 SIM incentive	R10	-	n/a
Total Household Retail adjustments		(3.127)	-

5.2. PR19 adjustment for PR14 Totex

The forecast outperformance that we have calculated using the Ofwat published model is shown in table 5.5 below.

Table 5.5 – Totex summary

Outperformance	Price base	2015-16	2016-17	2017-18	2018-19	2019-20	2015-20
Outp - Water	2012-13	75	8	(44)	(80)	(53)	(94)
Outp - Waste	2012-13	99	51	17	(67)	(7)	94
Outp - Total	2012-13	174	59	(27)	(147)	(60)	(0)

The underperformance in wholesale water results in the following PR19 adjustment is shown in table 5.6.

Table 5.6 – Water totex adjustments

Water Totex adjustments	Item ref	Price base	Totex £m
Water: Revenue adjustment from totex menu model	WS15024	2012-13 FYA (RPI)	3.338
Water: RCV adjustment from totex menu model	WS15025	2012-13 FYA (RPI)	32.771
Water: Totex menu revenue adjustment at 2017-18 FYA CPIH deflated price base	WS15026	2017-18 FYA (CPIH deflated)	3.822
Water: Totex menu RCV adjustment at 2017-18 FYA CPIH deflated price base	WS15027	2017-18 FYA (CPIH deflated)	37.519

The out performance in wholesale wastewater results in the following PR19 adjustment is shown in table 5.7.

Table 5.7 – Wastewater totex adjustments

Water Totex adjustments	Item ref	Price base	Totex £m
Wastewater: revenue adjustment from totex menu model	WWS15019	2012-13 FYA (RPI)	(5.599)
Wastewater: RCV adjustment from totex menu model	WWS15020	2012-13 FYA (RPI)	(57.505)
Wastewater: Totex menu revenue adjustment at 2017-18 FYA CPIH deflated price base	WWS15021	2017-18 FYA (CPIH deflated)	(6.410)
Wastewater: Totex menu RCV adjustment at 2017-18 FYA CPIH deflated price base	WWS15022	2017-18 FYA (CPIH deflated)	(65.837)

5.3. Opex performance

We have split the allowed PR14 totex into wholesale water and wastewater opex and capex for the purposes of explaining our opex outperformance, and used existing (and forecast) APR operating cost actuals to calculate under or outperformance for the period. Changes to both financial accounting standards and regulatory accounting treatment need to be understood in order to understand underlying performance, and these changes have been listed below on table A.6.

Accounting changes and exceptional items

The following changes have been made to provide a revised outperformance number, and these are listed in table 5.8.

- Some infrastructure renewals accounting moved from capex to opex in 2015 as a result of the move to new international accounting standards. This totals £95.3m (£51.8m and £43.63m).
- We have experienced significant unexpected totex to recover the performance and condition of assets damaged during the floods on 26 December 2015. In this case we received £51.9m (2012-13 prices) of insurance reflecting the fair value of estimated exceptional costs to restore the assets, and within our statutory accounts recorded exceptional opex costs of £25.15m (2012-13 prices) during the period of construction to rectify the damage incurred.
- We have introduced inter price control charges for the consumption of water by waste sites and the treatment of clean water sludges, as well as refined overhead allocations resulting in more cost allocation to wholesale water.

Opex movements within 2015-20

Actual opex remained close to FD for both water and sewerage for 2015 to 2017, with year 2018 achieving outperformance in both water and waste. For years 2018 to 2020 we forecast to invest significantly more additional activity into the plan to drive up service standards in response to feedback from customers and Ofwat's PR19 methodology which outlines the upper quartile (UQ) targets for leakage, supply interruptions, pollution and sewer flooding. A further £58m of opex funding has been included within water wholesale and £17m within waste wholesale.

There have been significant opex movements during 2018. Whilst the severe winter event (referred to earlier) resulted in increased leakage expenditure of £8m in water, these increases were largely offset by a successful refund from a historic Cumulo 2005 rates appeal which resulted in a one-off £6.5m refund. A new sewerage R&M contract bedded in during the period, with a refund obtained during the year for the overspend in the prior year, contributing to the efficiencies seen in 2018.

Continued efficiencies 2018-20 are however challenged by:

- Increases in Environment Agency (EA) Subsistence and Application charges previously funded by government through Grant Aid.
- The impact of the EA's refusal to allow continued recycling of green waste to agriculture.
- Further increases to the insurance premium as a consequence of significant historic claims (e.g. December 2015 flooding event).

- The ongoing Traffic Management Act implementation by several Local Authorities relating to permitting charges for road works, which mainly impacts the water wholesale price control given the location of water assets in the highways.

Table 5.8 – Opex underperformance compared to FD after adjusting for IAS16 infrastructure renewal, (all values in 2012-13 price basis)

Actual and forecast opex performance	2015-16 £m	2016-17 £m	2017-18 £m	2018-19 £m	2019-20 £m	2015-20 £m
Wholesale water derived opex - allowed expenditure from menu	152.08	153.32	154.13	154.71	155.74	769.98
Wholesale water actual opex	160.83	164.06	169.88	199.19	202.77	896.73
Wholesale water opex performance	(8.75)	(10.74)	(15.75)	(44.48)	(47.03)	(126.75)
	2015-16 £m	2016-17 £m	2017-18 £m	2018-19 £m	2019-20 £m	2015-20 £m
Wholesale wastewater derived opex - allowed expenditure from menu	158.65	158.88	158.88	158.88	158.88	794.17
Wholesale wastewater actual opex	164.17	183.46	155.56	161.62	162.50	827.32
Wholesale wastewater opex performance	(5.53)	(24.58)	3.32	(2.74)	(3.62)	(33.15)
Total opex underperformance	(14.28)	(35.32)	(12.43)	(47.22)	(50.65)	(159.90)

Changes in accounting treatment and exceptional items	2015-16 £m	2016-17 £m	2017-18 £m	2018-19 £m	2019-20 £m	2015-20 £m
Water IAS 16	9.77	9.72	10.84	11.13	10.33	51.80
Waste IAS 16	7.57	7.69	6.53	12.23	9.62	43.63
Exceptional items - waste - to adjust	1.41	16.53	7.21			25.15
Account for APR improvements - Net changes to wholesale water	-	-	6.80	6.80	6.80	20.40
Account for APR improvements - net changes to wholesale wastewater	-	-	(6.80)	(6.80)	(6.80)	(20.40)

5.4. Capex reconciliation

In total we are forecasting to invest £1,805m of regulatory capital in our assets to support both delivery of our performance commitments made to our customers in the FD and our stretched aspirations to target UQ performance on the PR19 comparative measures.

Table 5.9 below identifies the Capital split by wholesale water and wastewater in comparison to the Final Determination allowed.

Table 5.9 - Summary of capex reconciliation (in 2012-13 price basis)

	Final Determination (£m)	Forecast Outturn (£m)
Wholesale water	713.7	731.2
Wholesale wastewater	1,144.0	1074.2
Total Programme	1857.7	1805.4

5.4.1. Wholesale Water Programme

Gross regulated capital expenditure associated with the wholesale water (WW) programme in the current reporting year was £177.5m (2012-13 price base) against the FD in year of £134.0m. With the associated income totalling £15.9m in comparison to the £10.8m allowed in the FD the net expenditure in the current reporting year was £161.6m against the FD of £123.2m.

Although there are timing differences in some areas of the WW programme when compared to the original FD profile, we continue to see cost pressures to deliver our regulatory water quality improvements at some of our key water treatment works. Additional investment is also being re-allocated to ensure we deliver our leakage targets in year.

Income on the WW programme in the current year is higher than that allowed in the FD even though requests for mains diversions and new domestic connections is at a lower level than that identified in the FD. The increased income which offsets this reduction is due to the inclusion of Section 45 (S45) new water connections which are not included within the FD.

Actual net capital expenditure to the end of 2017-18 against WW programme FD of £462.1m totals £416.4m. This investment has supported the successful delivery of our water or cross business performance commitments in the first three years of the current period. To date we have achieved, and continue to forecast that we will achieve, acceptable service level performance on all our performance commitments with most agreed targets being met or bettered, except for drinking water quality contacts.

When reviewing the income variance to the end of 2017-18 to that allowed in the FD, the same trend continues on reduced 3rd party mains diversion requests and water new connections offset by additional S45 income leading to more income to date compared to the FD allowance.

As part of the Annual Performance Report (APR) return, in line with FRS102, an accounting adjustment is made to the total regulated capital expenditure each year to ensure any costs associated with activities to maintain the operating capability of existing assets, such as repairs to existing structures, re-pointing, cleaning, flushing, jetting, and clearing major obstacles, is transferred to operating costs. These adjustments are shown in the table 5.10 below along with further non-regulatory financial accounting adjustments made in 2015-16 and 2016-17 and atypical expenditure through the current review period to address the damage caused by the floods in December 2015.

The FD for the WW programme is £713.7m and as part of our internal annual business planning process we have identified areas of efficiency and savings for business choices totalling over £56m. After reviewing performance to date against our agreed performance commitment service level targets, a plan was approved at the Yorkshire Water Board to reinvest £73.6m of the total wholesale programme outperformance to target further service level improvements within the current period. This is to support our aspirations to deliver upper quartile industry performance to our customers in the areas of water quality and leakage and to target frontier performance on water supply interruptions.

Table 5.10 - Wholesale water programme capex (in 2012-13 price base)

Wholesale Water Programme (£m) 2012-13 price base	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Annual Performance Report (Table 2B)	9.7	94.1	132.7	151.2	159.1	134.5	681.2
Less: Flood Recovery	0.0	(0.0)	(0.1)	(0.4)	(0.2)	(0.0)	(0.8)
Less: Other Financial Accounting adjustments	0.0	(0.7)	(0.3)	0.0	0.0	0.0	(1.0)
Add: Capital transfer to Operating expenditure (IAS16)	0.0	9.8	9.7	10.8	11.1	10.3	51.8
Regulatory Capital expenditure	9.7	103.1	142.0	161.6	170.0	144.8	731.2
Final Determination	0.0	187.4	151.5	123.2	123.2	128.4	713.7
Outperformance and (Underperformance)	(9.7)	84.3	9.5	(38.4)	(46.8)	(16.4)	(17.5)

Board approved reinvestment plans, to target UQ performance, have been developed through consultation and agreement with our customers through our various customer forums and externally assured by the auditor Halcrow.

Reinvestment for this outperformance will result in a forecast outturn on the WW programme of £731.2m and further financial reward in the areas of Water Supply Interruptions and Leakage.

Forecast water income for the remaining two years of the current reporting period has been calculated by maintaining the same level of activity for mains diversion requests and keeping the level of S45 contributions at the current report year level.

The main change is due to the industry changes on the calculation of infra connection charges that take effect from year 4 onwards where we have significantly reduced the water connection charge from £380 as identified in the original FD to £75 per property to reflect the historic and forecast network reinforcement expenditure planned over the remainder of the reporting period and the removal of income offsetting arrangements. A similar approach affects the wastewater programme also.

This reduced charge and related income offsets the inclusion of any additional s45 income not included in the original FD plan and by the end of the current reporting period we are forecasting in total £58m in total in comparison to the £52m included in the FD.

Our Outcome Delivery Incentive (ODI) upper quartile plans include investing more on additional leakage find and fix, as well as new leakage finding technologies to target further reductions beyond the 10MI/d identified in the FD and is aiming to drive down leakage to around 235MI/d in the next two years resulting in a 2019-20 forecast reward of £2.0m. We are also targeting better ways of working on planned interruptions to supply, in line with industry best practice, which we forecast will reduce our current interruption levels to below 4 minutes in the remaining two years of this period.

Our Management & General support programme continues to be proportionately allocated to the Water and Wastewater programmes in line with our FD with 48% of the overall £264m

programme being allocated over the reporting period to the WW programme, as reported in the APR 2017-18.

5.4.2. Wholesale Wastewater Programme

Gross regulated capital expenditure associated with the wholesale wastewater (WWW) programme in the current reporting year was in total £214.1m (2012-13 price base) against the FD in year of £239.4m. With the associated income totalling £8.5m in comparison to the £10.6m allowed in the FD the net outturn in the current reporting year was £205.6m against the FD of £228.8m.

Although there are timing differences in some areas of the WWW programme when compared to the FD profile, the additional investment over and above the original FD in year is the re-investment associated with the two new renewable energy and waste treatment facilities at Knostrop (Leeds) and Calder Valley (Huddersfield).

Actual income on the wastewater programme in the current year is lower than that allowed in the FD as requests for sewer diversions and new domestic wastewater connections is at a lower level than that identified in the FD.

Actual net capital expenditure to the end of 2017-18 against the WWW programme FD of £686.5m totals £537.4m. Whilst we have identified savings and efficiencies in the delivery of the overall WWW programme, expenditure to date has been re-profiled to reflect the post FD changes to the National Environment Programme (NEP) which removed and replaced regulatory obligations with new obligations to be completed later in the period. This has led to significant timing differences on this programme in comparison to the original planned profile.

This investment has supported the successful delivery of our wastewater or cross business performance commitments in the first three years of the current period. To date we have achieved and continue to forecast to achieve acceptable service level performance on all our performance commitments.

As part of the Annual Performance Report (APR) return, in line with FRS102, an accounting adjustment is made to the total regulated capital expenditure each year to ensure any costs associated with activities to maintain the operating capability of existing assets, such as repairs to existing structures, re-pointing, cleaning, flushing, jetting, and clearing major obstacles, is transferred to operating costs. These are identified to allow comparison of the total regulatory expenditure to that reported in the FD.

In total the FD for the WWW programme allowed was £1,144.0m and as part of our internal annual business planning process we identified areas of efficiency and savings for business choices totalling over £134m. After reviewing performance to date against our agreed performance commitment service level targets a plan was approved at the Yorkshire Water Board to re-invest £64.0m of the total wholesale programme outperformance to target further service level improvements within the current period. This is to support our plans to deliver upper quartile industry performance to our customers in the areas of internal flooding and pollution.

Reinvestment for outperformance will result in a forecast outturn on the Wholesale Wastewater programme of £1,074.2m and further financial reward in the areas of Internal Flooding and Pollution.

Table 5.11 - Wholesale wastewater programme capex (in 2012-13 price base)

Wholesale Wastewater Programme (£m) 2012-13 price base	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Annual Performance Report (Table 2B)	4.8	128.7	195.3	215.0	292.7	232.2	1,068.8
Less: Flood Recovery	0.0	(5.5)	(7.3)	(16.0)	(8.1)	(1.9)	(38.7)
Less: Other Financial Accounting adjustments	0.0	(3.2)	3.7	0.0	0.0	0.0	0.5
Add: Capital transfer to Operating expenditure (IAS16)	0.0	7.6	7.7	6.5	12.2	9.6	43.6
Regulatory Capital expenditure	4.8	127.6	199.4	205.6	296.9	239.9	1,074.2
Final Determination	0.0	229.0	228.8	228.8	228.8	228.8	1,144.0
Outperformance and (Underperformance)	(4.8)	101.4	29.4	23.2	(68.1)	(11.2)	69.8

Forecast wastewater income for the remaining two years of the current reporting period has been calculated by maintaining the same level of activity for sewer diversion and requisition requests.

The main change is again due to the industry changes on the calculation of infra connection charges that take effect from year 4 onwards where we have significantly reduced the domestic wastewater connection charge from £380 as identified in the original FD to £150 per property to reflect the historic and forecast network reinforcement expenditure planned over the remainder of the reporting period.

This reduced charge and reduced 3rd party diversion and requisition activity results in us forecasting in total £43m in comparison to the £51m included in the FD.

Our ODI upper quartile plans include investing more on additional sewer network rehabilitation and operational efficiency with regards to customer service and response times, ensuring we improve on the number of wastewater network escapes leading to internal flooding and environmental pollution.

As identified in the Wholesale Water Programme commentary our Management & General support programme continues to be proportionately allocated to the Water and Wastewater programmes in line with our FD with 52% of the overall £264m programme being allocated over the reporting period to the Wholesale Wastewater programme, as reported in the APR 2017-18.

6. Customer support for proposed adjustments to 2020-25 price controls

At PR14 customers determined their preferred approach to how rewards and penalties should operate, i.e. the true-up of performance related rewards and other reconciliation mechanisms at the end of the AMP6 period.

To confirm the continued support, we are undertaking current customer research and acceptability testing of the PR19 plan, including bill acceptability which incorporates the PR14 reconciliation proposed adjustments. The PR14 proposed adjustments in revenues and RCV equates to an approximate contribution of £4 on the average annual household combined bill.

Early feedback from the pilot customer testing is that customers remain supportive of the approach and the overall scale of the adjustments and how they impact bills. This initial view will be confirmed on Monday 9 July.

The final research output will be presented as evidence of the strength of customer support for our proposed adjustments to the 2020-25 price controls, as is required by the Ofwat initial assessment of plans (IAP) tests.

Yorkshire Water took the upper quartile plans for the remainder of this PR14 period to the Yorkshire Forum for Water Customers (YFWC) and gained its support. The PR14 reconciliation approach and proposed adjustment outcomes will be discussed with the YFWC ahead of submission of the PR19 business plan.

The evidence of customer support for the proposed adjustments and how we plan to improve services further will be incorporated into the PR19 business plan submission in September 2018.

Update for v2.0 - Customer testing has confirmed customer support for the proposed adjustments. Further details of the testing and support can be found within our PR19 plan submission

7. Assurance

7.1. Our assurance process

Our assurance process confirms compliance with the relevant guidance, and that the company has appropriate systems and processes in place to make sure the information contained within the reconciliation is accurate. The assurance for this submission has followed the three levels of assurance model which is in line with our draft assurance plan.

- **Level 1** assurance has been provided by our data providers. They have documented the steps to capture, analyse, process and report our information. They have signed an assurance statement to confirm the data they have reported for PR14 models is correct.
- **Level 2** assurance has been provided by our table owners and senior management. They have signed an assurance statement to confirm the data and overall submission are correct.
- **Level 3** assurance has been provided by our external technical assurance providers Deloitte and Halcrow. They have checked compliance with the Ofwat guidance, and the accuracy of our data and models, to ensure our submission is complete and accurate. They have provided written assurance statements to summarise their findings.

There have been no material issues outstanding on the PR14 reconciliation, and all actions have been closed before submission by the 15 July 2018.

The external independent financial auditors Deloitte and technical assurers Halcrow, have provided statements (attached within Appendix 1).

- Halcrow assured our processes and data for tables App5, App6, App31 and R10.
- Deloitte assured our processes and data tables App9, App23, App25, App27, R9, WS13 WWS13 WS15 WWS15, along with the reconciliation models.

8. Proposed PR14 Reconciliation Revenue and RCV Adjustments

Table 7.1 below provides a high level summary against the relevant price controls of the proposed adjustments as a result of the PR14 reconciliation exercise Yorkshire Water has undertaken as part of the PR19 business planning process in accordance with Ofwat's requirements and guidance.

Table 7.1 – Proposed PR14 reconciliation adjustments

Price Control	Revenue adjustment	RCV adjustment
	£m 2017-18 FYA (CPIH deflated)	£m 2017-18 FYA (CPIH deflated)
Total Wholesale Water adjustments	41.492	(6.096)
Total Wholesale Wastewater adjustments	32.457	(131.971)
Total Household Retail adjustments	(3.127)	
Total adjustments	70.822	(138.067)

9. Contact

For any contacts about this PR14 reconciliation submission document or the supporting information, please contact:

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Appendix 1 – Auditors reports for the PR14 Reconciliation submission

Auditor Deloitte provided the following statement on 12 July 2018 in conclusion of its audit and assurance activities in support of the population by Yorkshire Water of the relevant PR14 reconciliation submission models and data tables.

“YW engaged Deloitte to undertake defined procedures over the PR14 reconciliation, including assessing the controls exercised by management in the production, review and approval of the reconciliation and checking back to source data and re-performing calculations on a sample basis. Our work did not cover any of the pre-populated elements provided by Ofwat. The procedures were performed over the draft PR14 reconciliation as at 2 July 2018 and findings were raised regarding version control, dependent tables and updates to process documentation. The scope of work was limited to these defined procedures and other findings may have been raised if additional or alternative procedures were performed. Management has taken action to address the findings reported.”

PR19 Data Tables – PR14 Reconciliation

DATE: 13 July 2018

Assurance Statement

Halcrow Management Sciences has been appointed by Yorkshire Water Services to provide independent technical assurance of their regulatory submissions. Our work has included assurance of the following 'PR14 Reconciliation' tables, which form part of Ofwat's PR19 Business Plan Data Tables:

- App5 AMP6 Performance Commitments
- App6 AMP6 Performance Commitments - Sub-Measures
- App31 Past Performance
- R10 Service Incentive Mechanism (SIM)

Through a series of meetings and information exchanges, we have reviewed and tested the methodologies, processes and supporting evidence on which the data and statements are based, and we have considered the material accuracy of these statements, the data presented and the conclusions drawn by Yorkshire Water Services Limited.

Based on our assessment of Yorkshire Water Services' data and supporting information, we provided a number of comments on related matters that we recommend should be considered/resolved, but which we consider would not impact materially on the information presented in the tables.

Overall, we conclude that:

- the Company has followed Ofwat's guidance in preparing this information and/or explained their material assumptions and provided suitable clarifications
- the statements of numerical data are consistent with our audits of the supporting information, which is appropriately robust
- the Company's explanations of their activities and assumptions are reasonably based.

CWJ Turner

Director
Halcrow Management Sciences Limited



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