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Introduction

We submitted our PR19 business plan to Ofwat in September 2018. Ofwat reviewed the plan and published its initial assessment of plans in January 2019. The assessment included a series of actions for Yorkshire Water to complete by 1 April 2019 along with several actions that required completion post 1 April 2019. This document summarises our response to IAP action YKY.PD.A7 'to refresh its PR14 reconciliations to replace its 2018-19 forecast performance with 2018-19 actual performance and update the evidence for its forecast 2019-20 performance taking into account the actual 2018-19 performance'.

This document provides a refresh of the PR14 reconciliations that were originally published in July 2018. The original submission for July 2018 remains on our website and can be viewed https://www.yorkshirewater.com/ourbusinessplan

The Yorkshire Water PR14 reconciliation July 2019 submission to Ofwat consists of:

- a high-level summary narrative explaining the context of the PR14 reconciliation and the resulting proposed adjustments as well as details of our past performance over the 2015 to 2020 period
- a suite of completed and audited data tables
- a document providing detailed commentaries for each data table (this document)
- three PR14 reconciliations models and two feeder models

The PR14 reconciliation submission to Ofwat includes 13 data tables that collect information specific to our performance during 2015 to 2020. These data tables have been completed in accordance with the data requirements set out in Ofwat's PR14 reconciliation rulebook and its PR19 data table guidance. The data tables have been subject to both internal and external assurance. Table 1.1 shows the tables contained within the PR14 reconciliation submission for July 2019.

Table 1.1. List of tables included in the PR14 reconciliation submission in July 2019

Purpose	Table	Content				
	ref:					
Past delivery:	App5	PR14 reconciliation – performance commitments				
Reconciling	App6	PR14 reconciliation - sub- measures				
2015 to 2020	App9	Adjustments to RCV from disposals of interest in land				
performance	App23	Inflation measures				
	App25	PR14 reconciliation adjustments summary				
	App27	PR14 reconciliation – financial outcome delivery incentives summary				
Water services	WS13	PR14 wholesale revenue forecast incentive mechanism for the water				
mechanisms		service				
	WS15	PR14 wholesale total expenditure outperformance sharing for the wa				
		service				
	WS17	PR14 water trading incentive reconciliation				
Wastewater services	WWS13	PR14 wholesale revenue forecast incentive mechanism for the				
mechanisms		wastewater service				
	WWS15	PR14 wholesale total expenditure outperformance sharing for the				
		wastewater service				
Household retail	R9	PR14 reconciliation of household retail revenue				
reconciliation and SIM	R10	PR14 service incentive mechanism				

This document contains commentary on each data table required to be submitted as part of the PR14 reconciliations and the assessment of past performance. This document should be read in conjunction with the other documentation issued as part of the PR14 reconciliation publication.

The aim of this document, and the other documents in the submission is to provide Ofwat with all the required information to assess our PR14 reconciliation proposals. It will also allow for proportionate scrutiny of past performance to have confidence in our PR19 business plan.









2. Data table variances

The table below presents a summary of the PR14 Reconciliation tables and lines where there are variances between the forecast information presented in the PR19 April submission and the July 2019 PR14 submission.

The table also provides the page number where further information is provided to explain the variance.

Table	Line	Title	Column	Unit	April Submission	July Submission	Variance	Explanation Page
App5	501	WA3: Drinking water contacts	2019-20 performance level - forecast	Nr.	7200	7500	300	Page 10
App5	501	WA3: Drinking water contacts	2019-20 forecast outperformance payment	£m	-3.6036	-4.5936	-0.9900	
			or underperformance penalty accrued at 31					
			March 2020					
App5	503	WB1: Leakage	2019-20 performance level - forecast	MI/d	235	269	34	Page 13
App5	503	WB1: Leakage	2019-20 forecast outperformance payment	£m	1.9698	0.2525	-1.7172	
			or underperformance penalty accrued at 31					
			March 2020					
App5	507	WC1: Length of river improved (note: PC	2019-20 performance level - forecast	Km	106.45	106.05	-0.40	Page 19
		is part of a total commitment at						
		Appointee level - see also SB4)		1				
App5	507	WC1: Length of river improved (note: PC	2019-20 forecast outperformance payment	£m	0.2646	0.2339	-0.0307	
		is part of a total commitment at	or underperformance penalty accrued at 31					
	500	Appointee level - see also SB4)	March 2020			40	_	5 20.
App5	508	WC2: Solutions delivered by working with	2019-20 performance level - forecast	Nr.	8	10	2	Pages 20 to
		others (note: PC is part of a total						21
		commitment at Appointee level - see also SB3)						
App5	508	,	2019-20 forecast outperformance payment	£m	0.0589	0.1014	0.0426	
Apps	308	others (note: PC is part of a total	or underperformance penalty accrued at 31	LIII	0.0383	0.1014	0.0420	
		commitment at Appointee level - see also						
		SB3)	17701 2020					
App5	515	Ź	2019-20 performance level - forecast	Nr.	0	3	3	Page 24
		2						8
App5	516	SA3b: Pollution incidents - category 3	2019-20 performance level - forecast	Nr.	155	162	7	
App5	516	SA3b: Pollution incidents - category 3	2019-20 forecast outperformance payment	£m	10.3674	9.0715	-1.2959	
			or underperformance penalty accrued at 31					
			March 2020					
App5	518	SB1: Number of Yorkshire's designated	2019-20 performance level - forecast	Nr.	18	16	-2	Page 39
		bathing waters that exceed the required						
		quality standard						
App5	520	SB3: Solutions delivered by working with	2019-20 performance level - forecast	Nr.	8	10	2	Pages 30 to
		others (note: PC is part of a total						31
		commitment at Appointee level - see also						
		WC2)						
App5	521	SB4: Length of river improved (against	2019-20 performance level - forecast	Km	357.00	356.96	-0.04	Pages 32 to
		WFD component measures) (note: PC is						33
		part of a total commitment at Appointee						
		level - see also WC1)	2010 201					
App5	521	SB4: Length of river improved (against	2019-20 forecast outperformance payment	£m	0.0767	0.0000	-0.0767	
		WFD component measures) (note: PC is	or underperformance penalty accrued at 31					
			March 2020					
AnnE	E2E	level - see also WC1)	2010 20 performance level forecast	Coore	97	01 F		Dago 40
App5	525	RA1: Service incentive mechanism (SIM) Water ~ NPV effect of 50% of proceeds	2019-20 performance level - forecast	Score	87 1 476	81.5	-5.5	Page 40
App9	11	· ·	2014-20	£m	-1.476	-1.519	-0.043	Page 44
		from disposals of interest in land at 2017- 18 FYA CPIH deflated price base						
	13	Actual and current forecast sales	2019-20	£000	137.500	-137.500	-275.000	
	22	Wastewater ~ NPV effect of 50% of	2014-20	£m	0.529	0.456	-0.073	
	22	proceeds from disposals of interest in	2014-20	L	0.329	0.430	-0.073	
		land at 2017-18 FYA CPIH deflated price						
		base						
		2000						









Table	Line	Title	Column	Unit	April Submission	July Submission	Variance	Explanation Page
App25	11	Water ~ CIS RCV inflation correction at	2015-20	£m	-45.807	-45.804	0.003	Page 45
		2017-18 FYA CPIH deflated price base		_				
	12	Wastewater ~ CIS RCV inflation correction	2015-20	£m	-70.039	-70.033	0.006	
		at 2017-18 FYA CPIH deflated price base						
App27	6	Net performance payment / (penalty)	2019-20	£m	12.520	10.815	-1.705	Page 43
		applied to revenue for end of period ODI						_
		adjustments ~ Wholesale water						
	6	Net performance payment / (penalty)	Total to be applied at PR19	£m	38.833	30.915	-7.918	
		applied to revenue for end of period ODI						
		adjustments ~ Wholesale water						
	7	Net performance payment / (penalty)	2019-20	£m	19.471	18.099	-1.372	
		applied to revenue for end of period ODI						
	7	adjustments ~ Wholesale wastewater Net performance payment / (penalty)	Total to be emplied at DD10	Con	42 570	46.703	2 125	
	/		Total to be applied at PR19	£m	43.578	46.703	3.125	
		applied to revenue for end of period ODI adjustments ~ Wholesale wastewater						
	22	Net performance payment / (penalty)	2019-20	£m	0.306	0.335	0.029	
		applied to revenue for end of period ODI	2013 20	2	0.500	0.555	0.023	
		adjustments ~ Water resources						
	22	Net performance payment / (penalty)	Total to be applied at PR19	£m	0.353	0.400	0.047	
		applied to revenue for end of period ODI						
		adjustments ~ Water resources						
	23	Net performance payment / (penalty)	2019-20	£m	12.214	10.479	-1.735	
		applied to revenue for end of period ODI						
		adjustments ~ Water network plus						
	23	Net performance payment / (penalty)	Total to be applied at PR19	£m	38.480	30.516	-7.964	
		applied to revenue for end of period ODI						
	24	adjustments ~ Water network plus	2040.20	C	10.474	10.000	4 272	
	24	Net performance payment / (penalty)	2019-20	£m	19.471	18.099	-1.372	
		applied to revenue for end of period ODI adjustments ~ Water resources						
	24	Net performance payment / (penalty)	Total to be applied at PR19	£m	43.578	46.703	3.125	
	2-7	applied to revenue for end of period ODI	Total to be applied at 1 K13	1	45.570	40.703	5.125	
		adjustments ~ Water resources						
	41	ODI end of period revenue adjustment ~	Total to be applied at PR19	£m	0.404	0.458	0.054	
		Water resources at 2017~18 FYA CPIH						
		deflated price base						
	42	ODI end of period revenue adjustment ~	Total to be applied at PR19	£m	44.064	34.935	-9.129	
		Water network plus at 2017~18 FYA CPIH						
		deflated price base						
	43	ODI end of period revenue adjustment ~	Total to be applied at PR19	£m	49.902	53.466	3.564	
		Wastewater network plus at 2017~18 FYA						
14/642	45	CPIH deflated price base	2040.20		472.027	405.005	44.470	5 45.
WS13	15	Water: Unmeasured ~ household	2019-20	£m	173.827	185.005	11.178	Pages 45 to
	16 17	Water: Unmeasured ~ non-household Water: Measured ~ household	2019-20 2019-20	£m £m	0.991 159.634	0.943 151.885	-0.048 -7.749	48
	18	Water: Measured ~ non-household	2019-20	£m	113.381	110.315	-3.066	
	22	Water: Grants and contributions	2019-20	£m	0.675	1.154	0.479	
	27	Main revenue adjustment as incurred ~	2019-20	£m	-3.436	-3.438	-0.002	
	,,	water						
	28	Penalty adjustment as incurred ~ water	2019-20	£m	-0.257	0.000	0.257	
	29	WRFIM adjustment as incurred ~ water	2019-20	£m	-3.436	-3.438	-0.002	
	30	WRFIM Total reward / (penalty) at the	2019-20	£m	-8.389	-17.530	-9.141	
		end of AMP6 ~ water						
	31	WRFIM Total reward / (penalty) at the	2019-20	£m	-8.265	-17.253	-8.988	
		end of AMP6 ~ water network plus						







Table	Line	Title	Column	Unit	April Submission	July Submission	Variance	Explanation Page
WS15	9	Water: Actual Totex	2019-20	£m	412.691	456.148	43.457	Pages 49 to
	15	Water: Transition expenditure	2019-20	£m	0.000	12.735	12.735	50
	24	Water: revenue adjustment from totex menu model	2019-20	£m	3.338	5.987	2.649	
	25	Water: RCV adjustment from totex menu model	2019-20	£m	32.771	45.136	12.365	
	26	Water: Totex menu revenue adjustment at 2017-18 FYA CPIH deflated price base	2019-20	£m	3.822	6.854	3.032	
	27	Water: Totex menu RCV adjustment at 2017-18 FYA CPIH deflated price base	2019-20	£m	37.519	51.672	14.153	
WWS13	15	Wastewater: Unmeasured ~ household	2019-20	£m	213.220	224.674	11.454	Pages 50 to
	16	Wastewater: Unmeasured ~ non- household	2019-20	£m	2.390	2.322	-0.068	53
	17	Wastewater: Measured ~ household	2019-20	£m	217.583	209.571	-8.012	1
	18	Wastewater: Measured ~ non-household	2019-20	£m	131.671	128.690	-2.981	
	22	Wastewater: Grants and contributions	2019-20	£m	5.781	9.382	3.601	
	27	Main revenue adjustment as incurred ~ wastewater	2019-20	£m	5.271	5.274	0.003	
	29	WRFIM adjustment as incurred ~ wastewater	2019-20	£m	5.271	5.274	0.003	
	30	WRFIM Total reward / (penalty) at the end of AMP6 ~ wastewater	2019-20	£m	-14.272	-8.993	5.279	
	31	WRFIM Total reward / (penalty) at the end of AMP6 ~ wastewater network plus	2019-20	£m	-14.060	-8.851	5.209	
WWS15	9	Sewerage: Actual Totex	2019-20	£m	479.651	471.578	-8.073	Pages 53 to
	24	Wastewater: revenue adjustment from totex menu model	2019-20	£m	-5.599	-5.283	0.316	54
	25	Wastewater: RCV adjustment from totex menu model	2019-20	£m	-57.505	-62.158	-4.653	
	26	Wastewater: Totex menu revenue adjustment at 2017-18 FYA CPIH deflated	2019-20	£m	-6.412	-6.048	0.364	
	27	price base Wastewater: Totex menu RCV adjustment at 2017-18 FYA CPIH deflated price base	2019-20	£m	-65.837	-71.159	-5.322	
R9	7	Unmetered water-only customer	2019-20	Nr.	56875	54875	-2000	Page 55
11.5	8	Unmetered wastewater-only customer	2019-20	Nr.	61196	61196	0	l age 33
	9	Unmetered water and wastewater customer	2019-20	Nr.	831178	853177	21999	
	10	Metered water-only customer	2019-20	Nr.	50619	54619	4000	
	11	Metered wastewater-only customer	2019-20	Nr.	49462	49463	1	
	12	Metered water and wastewater customer	2019-20	Nr.	1145430	1121429	-24001	
	13	Unmetered water-only customer	2019-20	Nr.	56875	55052	-1823	
	14	Unmetered wastewater-only customer	2019-20	Nr.	61196	57806	-3390	
	15	Unmetered water and wastewater customer	2019-20	Nr.	831178	846026	14848	
	16	Metered water-only customer	2019-20	Nr.	50619	55585	4966	
	17	Metered wastewater-only customer	2019-20	Nr.	49462	55296	5834	
	18	Metered water and wastewater customer	2019-20	Nr.	1145430	1123073	-22357	
	19	Unmetered water-only customer	2019-20	£m	0.783	0.78	-0.003	
	20	Unmetered wastewater-only customer	2019-20	£m	0.972	0.871	-0.101	
	21	Unmetered water and wastewater customer	2019-20	£m	23.77	25.951	2.181	
	22	Metered water-only customer	2019-20	£m	0.742	0.789	0.047	
	23	Metered wastewater-only customer	2019-20	£m	0.993	0.785	-0.208	
	24	'	2019-20	£m	38.768	36.612	-2.156	
	45	Residential retail revenue adjustment at the end of AMP6	2019-20	£m	-3.304	-3.932	-0.628	
	46	Residential retail revenue adjustment at 2017-18 FYA CPIH deflated price base	2019-20	£m	-3.169	-3.756	-0.587	









Table	Line	Title	Column	Unit	April Submission	July Submission	Variance	Explanation Page
R10	1	1st survey score	2019-20	Nr.	4.51	8.61	4.10	Pages 56 to
	2	2nd survey score	2019-20	Nr.	4.51	8.61	4.10	57
	3	3rd survey score	2019-20	Nr.	4.51	8.61	4.10	l l
	4	4th survey score	2019-20	Nr.	4.51	8.61	4.10	
	5	Qualitative SIM score (out of 75)	2019-20	Nr.	65.81	64.58	-1.23	l l
	6	Quantitative composite score	2019-20	Nr.	71.00	63.16	-7.84	

Data table commentaries

Detailed over the following sections are table commentaries which explain the purpose of the data table and provide supporting information to assist Ofwat and stakeholders to understand and interpret the data submitted by Yorkshire Water as part of the PR14 reconciliation submission.

The commentaries are specific to each data table. Yorkshire Water has also prepared a high-level summary document of its PR14 reconciliation submission, called 'PR14 Reconciliation and Accounting for Past delivery - Summary Narrative'. The summary narrative explains how we are accounting for past delivery over the 2015-20 period.

3.1. App5 and App 6 PR14 reconciliation – performance commitments and sub-measures

Table App5 is used to capture actual performance and forecast performance for 2018-19 and 2019-20. Table App6 is used to capture actual performance and forecast performance for sub-measure performance levels for the 2018-19 and 2019-20 reporting years.

Following the guidance issued in May 2018, we have produced tables explaining the calculation steps we have followed for each of our financial ODIs when forecasting whether we expect them to result in an underperformance penalty or an outperformance payment.

We have shown both our original PR19 forecasts and the 2018-19 actuals and 2019-20 revised forecast, as well as any variances. We have provided explanation of any material variances from our original PR19 forecasts.

We can confirm that the forecast performance data used in App5 and App6 was audited by our external auditor Jacobs, as was the actual data for previous years that we reported in the APR tables 3a and 3b and which has been used in the total outperformance payment forecast entered in App27. An assurance statement provided by Jacobs on their audit activity for PR14 is provided as part of our PR14 reconciliation submission and can be found in Appendix A of the summary narrative document.

We can also confirm that the amount of underperformance penalty or outperformance payment being claimed matches that as determined by our reported performance except for SB4: Length of river improved which we explain in more detail later in this document.









3.1.1. WA1: Drinking water quality

Unit			Percentage	е						
Period	Calendar Year Measure									
Definition The	The mean zonal percentage compliance from the regulatory sampling programme, as calculated by the DWI.									
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance				
Performance Commitment Level	100.00%	100.00%		100.00%	100.00%					
Actual/Forecast Performance Level	99.962%	99.962%	0.000%	99.962%	99.962%	0.000%				
Performance Commitment Level Met?	No	No		No	No					
Underperformance Penalty Deadband	99.950%	99.950%		99.950%	99.950%					
Underperformance Within Deadband	Yes	Yes		Yes	Yes					
Underperformance Penalty Incentive Rate	£8.920m per 0.01% additional failure	£8.920m per 0.01% additional failure		£8.920m per 0.01% additional failure	£8.920m per 0.01% additional failure					
Underperformance Penalty	£0.000	£0.000	£0.000	£0.000	£0.000	£0.000				

- Our 2018-19 outturn matched our forecast.
- There are no changes to the 2019-20 forecast.









3.1.2. WA3: Drinking water contacts

Unit			N	lumber							
Period	Financial year measure										
Definition	The number of times customers contact Yorkshire Water about discolouration, taste and odour and illness each year, in line with DWI reporting.										
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance					
Performance Commitment Level	6,108	6,108		6,108	6,108						
Actual/Forecast Performance Level	7,400	7,964	564	7,200	7,500	300					
Performance Commitment Level Met?	No	No		No	No						
Underperformance Penalty Deadband	6,108	6,108		6,108	6,108						
Underperformance Within Deadband	No	No		No	Yes						
Underperformance Penalty Incentive Rate	£0.0033m per contact	£0.0033m per contact		£0.0033m per contact	£0.0033m per contact						
Underperformance Penalty	= 7,400 (Forecast Performance) – 6,108 (Deadband) = 1,292 * 0.0033 (Incentive Rate) =£4.264m	= 7,964 (Actual Performance) - 6,108 (Deadband) = 1,856 * 0.0033 (Incentive Rate) =£6.125m	£1.861m	= 7,200 (Forecast Performance) – 6,108 (Deadband) = 1,092 * 0.0033 (Incentive Rate) =£3.604m	= 7,500 (Forecast Performance) – 6,108 (Deadband) = 1,392 * 0.0033 (Incentive Rate) =£4.594m	£0.990m					
Outperformance Payment Deadband	6,108	6,108		6,108	6,108						
Outperformance Within Deadband	N/A	N/A		N/A	N/A						
Outperformance Payment Incentive Rate	£0.0030m per contact	£0.0030m per contact		£0.0030m per contact	£8.920m per 0.01% additional failure						
Outperformance Payment	N/A	N/A		N/A	£0.000						

- The variance in 2018-19 performance was due to the cold weather at the end of 2017-18 which meant DMA flushing was suspended on Health & Safety grounds. We did not restart this until after the hot summer had ended (October) which meant we missed out on 7/8 months of flushing activity. This meant we could not remove the sediment from the DMAs that we wanted to which resulted in an increase in the number of discolouration contacts. Also, due to the hot summer of 2018, an increase in demand meant an increase in flows through the distribution mains. This, in turn, mobilised more sediment than usual, causing more discolouration contacts from our customers.
- The variance in the 2019-20 forecast is down to the suspension of flushing for the majority of 2018-19. This has meant that we are behind where we expected to be in terms of removing sediment from DMAs and so the number of customer contacts will be higher than originally planned as we were expecting to flush 900 DMAs every year.









3.1.3. WA4: Water quality stability and reliability factor

Unit Assessment								
Period		Financial year	measure (s			alendar vea	ar measures)
Definition		An overall ass	sessment of indicators.	long-term st Assessment	tability and rel	iability for v	vater quality nistorical trer	, based on nd of the
Forecast Year		2018		y y		2019-20		<u>g</u>
Performance Comr	mitment Level	Stab	le			Stable		
Forecast Performa	nce Level	Stab	le			Stable		
Performance Comr Met?	mitment Level	Yes	3			Yes		
Underperformance	Penalty	£0.00	0m			£0.000m		
Sub-Measure Perfo	ormance							
		2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	ı	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance
	Upper Reference Level	0.070%	0.070%		Upper Reference Level	0.070%	0.070%	
WTW coliform	Reference Level	0.040%	0.040%		Reference Level	0.040%	0.040%	
non-compliance	Actual Performance	0.021%	0.021%	0.000%	Forecast Performance	0.021%	0.021%	0.000%
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	0.24%	0.24%		Upper Reference Level	0.24%	0.24%	
	Reference Level	0.00%	0.00%		Reference Level	0.00%	0.00%	
SRE coliform non-compliance	Actual Performance	0.00%	0.00%	0.000%	Forecast Performance	0.00%	0.00%	0.000%
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	4	4		Upper Reference Level	4	4	
	Reference Level	0	0		Reference Level	0	0	
Turbidity	Actual Performance	0	0	0	Forecast Performance		0	0
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
Enforcements	Upper Reference Level	1	1		Upper Reference Level	1	1	









	Reference Level	0	0		Reference Level	0	0	
	Actual Performance	0	0	0	Forecast Performance	0	0	0
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	8,380	8,380		Upper Reference Level	8,380	8,380	
Reactive	Reference Level	6,771	6,771		Reference Level	6,771	6,771	
equipment failures	Actual Performance	4,200	3,768	-432	Forecast Performance	4,200	4,200	0
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	

- As agreed at PR14 our AMP6 S&R performance has been assessed in Year 4 by our external auditor Jacobs. All sub-measures have been assessed as stable and the S&R factor has been assessed as stable overall, therefore there is no penalty to be applied.
- There is only one variance from forecast across all the sub-measures and this was for Reactive Equipment Failures, which outturned lower at 3,768 against a target of 4,200 for Year 4.







3.1.4. WB1: Leakage

Unit	Megalitres	s per day (MI/	d)							
Period	Financial	year measure								
Definition	The sum of distribution losses and supply pipe losses. This includes any uncontrolled losses between the treatment works and the customer's stop tap. It does not include internal plumbing losses									
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance				
Performance Commitment Level	292.1	292.1		287.1	287.1					
Actual/Forecast Performance Level	277.0	289.8	12.8	235.0	269.0	34.0				
Performance Commitment Level Met?	Yes	Yes		Yes	Yes					
Underperformance Penalty Deadband	297.1	297.1		292.1	292.1					
Underperformance Within Deadband	N/A	N/A		N/A	N/A					
Underperformance Penalty Incentive Rate	£0.101m per megalitre a day	£0.101m per megalitre a day		£0.101m per megalitre a day	£0.101m per megalitre a day					
Underperformance Penalty	N/A	N/A		N/A	N/A					
Outperformance Payment Deadband	274	274		274	274					
Outperformance Within Deadband	Yes	Yes		No	No					
Outperformance Payment Incentive Rate	£0.051m per megalitre a day	£0.051m per megalitre a day		£0.051m per megalitre a day	£0.051m per megalitre a day					
Outperformance Payment	£0.000m	£0.000m	£0.000m	= 274 (Deadband) – 235 (Forecast Performance) = 39 * 0.051 (Incentive Rate) =£1.970m	= 274 (Deadband) – 269 (Forecast Performance) = 5 * 0.051 (Incentive Rate) =£0.253m	-£1.717m				

Key messages

During the last 4 months of the 2017-18 financial year, two periods of cold weather, initially in December 2017 and then at the start of March 2018, had a significant impact on the leakage position. Company escalation processes were instigated in January 2018 to try and recover the leakage position to achieve the regulatory target of 297.1ml/d after the impact of the December 'breakout'. The focus of the escalation process was to increase the level of proactive find and fix leakage resources available. Despite the increased resources, the impact of the March 2018 cold period ('The Beast from the East') was the year-end target was not met and the daily leakage position starting the Upper Quartile three-year period (2018-19) was significantly higher than predicted.









- From May 2018 the weather in the UK was described as atypical, with an extended period of dry and warm weather. This initially impacted on the leakage position with higher levels of demand across the region not being fully accounted for in the daily leakage position, but more significantly since the end of June 2018 the conditions started to have an adverse impact on the distribution network assets. The cause of this has been a change in the soil moisture deficit, and conditions at the end of July 2018 were the driest since records began in 1993.
- To meet our ambitious targets for the current period, additional proactive resources were deployed, increasing our proactive mains repairs by 127%, proactive communication pipe repairs by 222% and proactive supply pipe repairs by 318% (April 2018 to Feb 2019 against the previous 3-year average), leading to additional leakage volume saved. However, during the same period the effects of the extreme weather events were causing additional 'reactive' leakage to occur that under an 'average year' would not normally be observed, meaning whilst additional volumes of leakage have been saved (compared to an average year), this was offset through the extreme weather-related impacts. This relationship has created difficulty for the company in achieving our stretching current outperformance targets.
- This relationship has created difficulty for the company in achieving our stretching current outperformance targets. Although, we did not meet the stretching outperformance targets we set ourselves in 2018-19, we remain committed to our leakage reduction ambitions. We have rephased our proposed target levels for the next six years and we are still committed to reducing leakage by 40%. We have committed to a 25% reduction in leakage across the five years of AMP7.
- We forecast to make improvements in the final year of AMP6, planning to achieve a performance of 269.0 Ml/d water lost from our network compared with a target of 287.1 Ml/d. Delivering to this forecast would represent a 10% leakage performance improvement over the last two years of AMP6. This performance is better than deadband of 274.0 Ml/d and therefore will attract a financial outperformance payment of £0.25m. We previously forecast that we would achieve a performance of 235.0 Ml/d as part of our July 2018 PR14 reconciliation submission.

3.1.5. WB2: Water supply interruptions

Unit	Minute									
Period	Financial year	Financial year measure								
Definition	Number of minutes lost per property served in the year with supply interruptions of three hours or longer (irrespective of whether it was planned, unplanned or caused by a third party).									
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance				
Performance Commitment Level	12	12		12	12					
Actual/Forecast Performance Level	6.00	10.46	4.46	4.00	4.00	0.00				
Performance Commitment Level Met?	Yes	Yes		Yes	Yes					
Underperformance Penalty Deadband	12	12		12	12					
Underperformance Within Deadband	N/A	N/A		N/A	N/A					
Underperformance Penalty Incentive Rate	£2.610m per minute	£2.610m per minute		£2.610m per minute	£2.610m per minute					
Underperformance Penalty	N/A	N/A		N/A	N/A					
Outperformance Payment Deadband	12	12		12	12					
Outperformance Within Deadband	No	No		No	No					
Outperformance Payment Incentive Rate	£2.610m per minute	£2.610m per minute		£2.610m per minute	£2.610m per minute					
Outperformance Payment Cap	8.08	8.08		8.08	8.08					
Outperformance Payment	= 12.00 (Deadband) – 8.08 (Payment Cap) = 3.92 * 2.610 (Incentive Rate) =£10.227m	= 12.00 (Deadband) – 10.46 (Actual Performance) = 1.54 * 2.610 (Incentive Rate) =£4.018m	-£6.209m	= 12.00 (Deadband) - 8.08 (Payment Cap) = 3.92 * 2.610 (Incentive Rate) =£10.227m	= 12.00 (Deadband) - 8.08 (Payment Cap) = 3.92 * 2.610 (Incentive Rate) =£10.227m	£0.000m				

- The variance in our 2018-19 performance was because of the extended hot and dry period during the summer, which meant there was an increase in the number of mains repairs we were carrying out. In July, August and September we were repairing almost double the number of mains repairs than we would usually. The increase was from both reactive (customer driven) and proactive (leakage driven) work. As there were more reactive mains repairs, this meant customers were impacted by the failures i.e. had no water or low pressure. An increase in the number of mains repairs where there is a customer impact is inevitably going to lead to an increase in the number of customers experiencing a loss of supply for greater than 3 hours, this has been reflected in the year end outturn being worse than our proposed outturn of 6 minutes.
- We are not proposing a change to our 2019-20 forecast.



3.1.6. WB4: Water network stability and reliability factor

Unit	Assessmer	nt							
Period	Financial v	ear measure	e (some su	b-measures	s are calendar	vear measu	res)		
Definition	An overall a	assessment ndicators. A	of long-ter	m stability a	and reliability fon the recent his bying, Stable or	or the water storical trend	network, bad of the indi		
Forecast Year			018-19	,	2019-20				
Performance Commitment Lev	el	(Stable			S	Stable		
Forecast Performance Lev	el	(Stable			S	Stable		
Performance Commitment Lev Met?	el		Yes				Yes		
Underperformand Penalty	e	£(0.000m			£0	.000m		
Sub-Measure Performance									
		2018-19 Original Forecast	2018-19 Actual	2018-19 Variance		2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
	Upper Reference Level	7,710	7,710		Upper Reference Level	7,710	7,710		
- Total bursts	Reference Level	6,000	6,000		Reference Level	6,000	6,000		
	Actual Performance	8,010	8,254	244	Forecast Performance	8,010	8,455	445	
	Performance Level Met?	No	No		Performance Level Met?	No	No		
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable		
	Upper Reference Level	659	659		Upper Reference Level	659	659		
	Reference Level	220	220		Reference Level	220	220		
Interruptions >12 hours	Actual Performance	220	414	194	Forecast Performance	220	220	0	
	Performance Level Met?	Yes	No		Performance Level Met?	Yes	Yes		
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable		
DG2 low pressure	Upper Reference Level	67	67		Upper Reference Level	67	67		









	Reference Level	15	15		Reference Level	15	15	
	Actual Performance	15	9	-6	Forecast Performance	15	9	-6
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	1.57	1.57		Upper Reference Level	1.57	1.57	
	Reference Level	1.18	1.18		Reference Level	1.18	1.18	
Customer contacts for discolouration	Actual Performance	0.700	0.699	0.001	Forecast Performance	0.700	0.700	0.000
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	0.34%	0.34%		Upper Reference Level	0.34%	0.34%	
Distribution index	Reference Level	0.20%	0.20%		Reference Level	0.20%	0.20%	
TIM (100 - mean zonal compliance)	Actual Performance	0.20%	0.13%	-0.07%	Forecast Performance	0.20%	0.20%	0
Соприансе	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	2,261	2,261		Upper Reference Level	2,261	2,261	
	Reference Level	1,825	1,825		Reference Level	1,825	1,825	
Reactive equipment failures	Actual Performance	1,100	911	-189	Forecast Performance	1,100	1,100	0
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	

- All sub-measures have been assessed as stable and the S&R factor has been assessed as stable overall, therefore there is no penalty to be applied.
- Our forecast shows an upward trend in Total Bursts. This is due to our programme of work to improve our leakage performance and does not reflect an anticipated deterioration in the condition of our assets. Overall, we are still assessing this sub-measure as stable.







- Variance in our 2018-19 performance for Total Bursts was because of the hot summer of 2018, which meant there was an increase in the number of mains repairs we were carrying out. In July, August and September we were repairing double the number of mains repairs than we would usually. The increase in mains repairs was from both reactive (customer driven) and proactive (leakage driven) work. The updated 2019-20 forecast for Total Bursts is due to our leakage reduction plans.
- The variance in our 2018-19 performance on Interruptions greater than 12 hours was because of the extended hot and dry period during the summer, which meant there was an increase in the number of mains repairs we were carrying out. In July, August and September we were repairing almost double the number of mains repairs than we would usually. The increase was from both reactive (customer driven) and proactive (leakage driven) work. As there were more reactive mains repairs, this meant customers were impacted by the failures i.e. had no water or low pressure. An increase in the number of mains repairs where there is a customer impact is inevitably going to lead to an increase in the number of customers experiencing a loss of supply for greater than 3 hours, this has been reflected in the year end outturn being worse than our proposed outturn of 6 minutes. None of the other sub-measures had material variances to our forecasts.
- We are forecasting an improved performance on DG2 Low Pressure and expect a similar outturn in year 5 to year 4.
- None of the other sub-measures had material variances to our forecasts.







3.1.7. WC1: Length of river improved

Unit	Kilometres	Kilometres (Km)									
Period	Financial y	ear measu	ıre								
Definition				e Water region impro onent measures.	ved during 2015-202	0 against					
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance					
Performance Commitment Level	-	-		100.00	100.00						
Actual/Forecast Performance Level	-	-		106.45	106.05	-0.40					
Performance Commitment Level Met?	-	-		Yes	Yes						
Underperformance Penalty Deadband	-	-		97	97						
Underperformance Within Deadband	-	-		N/A	N/A						
Underperformance Penalty Incentive Rate	-	-		£0.146m per km	£0.146m per km						
Underperformance Penalty	-	-		N/A	N/A						
Outperformance Payment Deadband	-	-		103	103						
Outperformance Within Deadband	-	-		No	No						
Outperformance Payment Incentive Rate	-	-		£0.077m per km	£0.077m per km						
Outperformance Payment	-	-		= 106.45 (Forecast Performance) – 103 (Deadband) = 3.45 * 0.077 (Incentive Rate) =£0.265m	= 106.05 (Forecast Performance) – 103 (Deadband) = 3.05 * 0.077 (Incentive Rate) =£0.234m	-£0.031m					

- The change in forecast is due to a marginal reduction in river length attributable to Kepwick scheme based on the final solution able to be delivered.
- We have calculated the reward based on the river length improved to reported 2 decimal places to ensure we are as accurate as possible, however in App 5, the performance is only reported to 1 decimal place as per the table requirements.







3.1.8. WC2: Solutions delivered by working with others

Unit	Number									
Period	Financial year me	easure								
	The number of into		ns delivered	d through working w	vith multi-agencies,					
Definition	The performance commitment is a total commitment, held at appointee level. It spans water and waste water controls and specific targets have not been allocated to the individual controls.									
Forecast Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance				
Performance Commitment Level	3 (12 Cumulative)	3 (12 Cumulative)		4 (16 Cumulative)	4 (16 Cumulative)					
Forecast Performance Level	10 (31 Cumulative)	11 (32 Cumulative)	1	8 (39 Cumulative)	10 (42 Cumulative)	2				
Performance Commitment Level Met?	Yes	Yes		Yes	Yes					
Outperformance Payment Deadband	12 (Cumulative number of Interventions Delivered in AMP)	12 (Cumulative number of Interventions Delivered in AMP)		16 (Cumulative number of Interventions Delivered in AMP)	16 (Cumulative number of Interventions Delivered in AMP)					
Outperformance Within Deadband	No	No		No	No					
Outperformance Payment Incentive Rate	5% of totex cost of Yorkshire Water cost for each eligible intervention.	5% of totex cost of Yorkshire Water cost for each eligible intervention.		5% of totex cost of Yorkshire Water cost for each eligible intervention.	5% of totex cost of Yorkshire Water cost for each eligible intervention.					
Outperformance Payment	= £0.060m (average cost of interventions in year) * 5% =£0.003m (Reward per intervention above target) =10 (Forecast Interventions) – 3 (Target) = 7 * £0.003m =£0.021m total outperformance payment =£0.021m * 64% (% of total cost of interventions that relate to clean water schemes) =£0.013m water only outperformance payment	= £0.039m (average cost of interventions in year) * 5% =£0.002m (Reward per intervention above target) =11 (Actual Interventions) – 3 (Target) = 8 * £0.002m =£0.016m total outperformance payment =£0.016m * 61% (% of total cost of interventions that relate to clean water schemes) =£0.009m water only outperformance payment	-£0.004m	= £0.294m (average cost of interventions in year) * 5% =£0.015m (Reward per intervention above target) =8 (Forecast Interventions) – 4(Target) = 4 * £0.015m =£0.059m total outperformance payment =£0.059m * 100% (% of total cost of interventions that relate to clean water schemes) = £0.059m water only outperformance payment	= £0.338m (average cost of interventions in year) * 5% =£0.017m (Reward per intervention above target) =10 (Forecast Interventions) – 4(Target) = 6 * £0.017m =£0.101m total outperformance payment =£0.101m * 100% (% of total cost of interventions that relate to clean water schemes) = £0.101m water only outperformance payment	£0.042m				









- There was some ambiguity about how the reward for this measure was calculated and how it should be distributed between water and waste water, specifically around what we classed as an eligible intervention. This has now been resolved and agreed with our auditors and via our internal assurance processes, and we are now calculating our outperformance payment by calculating 5% of the average cost of all interventions in the report year and then multiplying this be the number of interventions greater than our target for that year.
- We have further refined how we split the outperformance payment between the water (WC2) and waste water (SB3) Performance Commitments. Previously this was done using a percentage split based on the relative size of the two parts of the business. To ensure a more accurate split we are now assigning the outperformance payment based on the percentage of total cost of the interventions completed within the report year that relate to either water or waste water.
- The number of schemes delivered in 2018-19 has increased by one and the list of projects has changed slightly, with some projects being delayed and others completing early. This has also altered our 2019-20 forecast.
- We submitted a revised forecast for this measure in our IAP query response YKY.PD.A2 based on
 the information we had at that time, however, following year end there has been a small variance in
 our forecast reward for this measure, but this is not material in Year 4. The change in year 5 is more
 significant but is due to timing changes in the delivery of projects and changes to the projected
 costs.

Year	2018-19	2019-20
IAP Query Forecast	£0.002m	£0.046m
Actual/Latest Forecast	£0.009m	£0.101m
Variance	£0.007m	£0.055m

3.1.9. WC3: Amount of land conserved and enhanced

Unit	Hectares (Ha)									
Period	Financial year	measure								
Definition	The amount of land that the company conserves and enhances, for example Biodiversity 2020, Ancient Woodlands and Sites of Special Scientific Interest (SSSIs). This includes land within the region and includes both Yorkshire Water and non-Yorkshire Water land. The performance commitment is a total commitment, held at appointee level. It spans water and waste water controls and specific targets have not been allocated to the individual controls.									
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance				
Performance Commitment Level	-	-		11,736	11,736					
Actual/Forecast Performance Level	-	-		11,689	11,689	0				
Performance Commitment Level Met?	-	-		No	No					
Underperformance Penalty Deadband	-	-		11,501	11,501					
Underperformance Within Deadband	-	-		Yes	Yes					
Underperformance Penalty Incentive Rate	-	-		£0.020m per hectare	£0.020m per hectare					
Underperformance Penalty	-	-		£0.000m	£0.000m					
Outperformance Payment Deadband	-	-		11,971	11,971					
Outperformance Within Deadband	-	-		N/A	N/A					
Outperformance Payment Incentive Rate	-	-		£0.013m per hectare	£0.013m per hectare					
Outperformance Payment	_	_	-	N/A	N/A	N/A				

- There is no change to our forecast for this measure.
- Our forecast shows that we are expecting to fail this performance commitment, although we will be in the deadband and therefore there is no underperformance penalty to be applied.
- Our forecast underperformance is due to a 47 Ha area of SSSI land at Newton Dale that was sold just before the start of the AMP, which we had included when proposing our target for this measure and which had been agreed by Ofwat.
- As this change was marginal a business decision was taken that we would not request a formal change of target from Ofwat for this measure and would instead accept that we would not be able to meet the original target, although we still expect to meet our revised internal target of 11,689. This decision was agreed with the Yorkshire Forum for Water Customers and our auditors.









3.1.10. **SA1: Internal sewer flooding**

Unit	Number										
Period	Financial year meas	sure									
Definition	Total number of incidents of internal sewer flooding of homes and businesses in the year. The measure includes incidents due to other causes, including blocked and defective gullies and overloaded sewers in rainfall events up to and including 1 in 30-year return period. Incidents in exceptional rainfall events are excluded. The measure includes incidents arising from assets transferred to Yorkshire Water in October 2011.										
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance					
Performance Commitment Level	1,919	1,919		1,919	1,919						
Actual/Forecast Performance Level	1,796	1,692	-104	1,463	1,463	0					
Performance Commitment Level Met?	Yes	Yes		Yes	Yes						
Underperformance Penalty Deadband	2,029	2,029		2,029	2,029						
Underperformance Within Deadband	N/A	N/A		N/A	N/A						
Underperformance Penalty Incentive Rate	£0.220m per incident	£0.220m per incident		£0.220m per incident	£0.220m per incident						
Underperformance Penalty	N/A	N/A		N/A	N/A						
Outperformance Payment Deadband	1,808	1,808		1,808	1,808						
Outperformance Within Deadband	No	No		No	No						
Outperformance Payment Incentive Rate	£0.057m per incident	£0.057m per incident		£0.057m per incident	£0.057m per incident						
Outperformance Payment Cap	1,651	1,651		1,651	1,651						
Outperformance Payment	= 1,808 (Deadband) - 1,796 (Forecast Performance) = 12 * £0.057 (Incentive Rate) =£0.690m	= 1,808 (Deadband) – 1692 (Actual Performance) = 116 * £0.057 (Incentive Rate) =£6.670m	£5.980m	= 1,808 (Deadband) – 1,651 (Payment Cap) = 157 * £0.057 (Incentive Rate) =£9.027m	= 1,808 (Deadband) – 1,651 (Payment Cap) = 157 * £0.057 (Incentive Rate) =£9.027m	£0.000m					

- Our forecast performance is below the outperformance payment cap for 2019-20 and therefore we are forecasting to receive the maximum allowed outperformance payment for this measure.
- 2018-19 has seen a marginal increase compared to the previous year although it is well below our target.
 - A reduction has been seen in incidents with impact of overloaded sewer this is in line with performance on internal overloaded sewer incidents in 2018-19.
 - There was also an increase in the incidents of other causes with collapse as a sub category - 2018-19 has seen an increase in reportable collapses when compared to low reported figure in 2017-18.
- Our target for year 5 is unchanged and we are expecting the focus on improvement in performance on internal flooding, including proactive activity on the sewer network to reduce escapes, to yield benefits on performance. Initiatives for AMP7 Improvements are also expected to benefit the AMP6 performance.









3.1.11. **SA3: Pollution**

Unit	Number
Period	Calendar year measure
Definition	Total number of Category 1-3 pollution incidents caused by a discharge or escape from any Yorkshire Water waste water asset each year (this covers all consented and nonconsented intermittant events but not continuous discharges). This measure includes all waste water assets, that is, surface water assets are included and excludes impacts from private pumping stations that will transfer to Yorkshire Water in 2016 ¹ .

Forecast Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
Performance Commitment Level (Cat 3s Only)	211	211		211	211		
Forecast Performance Level (Cat 3s Only)	180	188	8	155	162	7	
Performance Commitment Level Met?	Yes	Yes		Yes	Yes		
Underperformance Penalty Deadband	211	211		211	211		
Underperformance Within Deadband	N/A	N/A		N/A	N/A		
Underperformance Penalty	£0.185m per	£0.185m per		£0.185m per	£0.185m per		
Incentive Rate	incident	incident		incident	incident		
Underperformance Penalty	N/A	N/A		N/A	N/A		
Outperformance Payment Deadband	147	147		147	147		
Outperformance Within Deadband	No	No		No	No		
Outperformance Payment	£0.185m per	£0.185m per		£0.185m per	£0.185m per		
Incentive Rate	incident	incident		incident	incident		
	= 211(Deadband)	= 211(Deadband)		= 211(Deadband)	= 211(Deadband)		
	- 180 (Forecast	- 188 (Actual		- 155 (Forecast	- 162 (Forecast		
Outo orformanaa Dayees and	Performance)	Performance)	-£1.481m	Performance)	Performance)	-£1.295m	
Outperformance Payment	= 31 * £0.185	= 23 * £0.185	-z.1.481M	= 56 * £0.185	= 49 * £0.185	-£1.295M	
	(Incentive Rate)			(Incentive Rate)	(Incentive Rate)		
	= £5.739m	= £4.258m		=£10.367m	= £9.072m		

- The ODI relates to Category 3s only, Category 1 & 2s are recorded as a reputational measure.
- Our performance in 2018 was an improvement on the previous year, although it was slightly above the forecast we submitted last year as we found ourselves in an escalated position from June to the end of the year in 2018 for pollution performance.
- Our original PR19 forecast had anticipated changes to our organisational design to be made in 2018-19 which involves a significant change to our front-line service on sewer escapes to support a delivery of improvements in performance with a focus on first time resolution and effective promotion of follow on activities. This business change has been delayed by over 6 months but is expected to support improved performance in 2019-20 which is reflected in our forecast.









¹ Final Determination stated transfer would occur in 2015 but official date for transfer of pumping stations is 1 October 2016

SA4: Sewer network stability and reliability factor 3.1.12.

Unit				Asse	ssessment				
Period	F	inancial yea	ar measure (some sub-	sub-measures are calendar year measures)				
Definition	basket (verall assessment of long-term stability and reliability for the sewer network, based on a ket of indicators. Assessment is based on the recent historical trend of the indicators. Assessment will give a classification of Improving, Stable or Deteriorating.							
Forecast Ye	ar	2018	-19			2019-20)		
Performance		Stab	ole			Stable			
Commitment Forecast	Commitment Level					0.00.0			
Performance	e Level	Stab	ole			Stable			
Performance Commitment Level Met?		Ye	S			Yes			
Underperforr	mance	£0.00	0m			£0.000m	า		
Penalty Sub-Measure Performance		20.00					•		
		2018-19 Original Forecast	2018-19 Actual	2018-19 Variance		2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
-	Upper Reference Level	369	369		Upper Reference Level	369	369		
	Reference Level	255	255		Reference Level	255	255		
Sewer collapses	Actual Performance	238	255	17	Forecast Performance	238	238	0	
•	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes		
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable		
	Upper Reference Level	251	251		Upper Reference Level	251	251		
Pollution	Reference Level	203	203		Reference Level	203	203		
incidents (CSO, RM,	Actual Performance	170	172	2	Forecast Performance	170	170	0	
FS and SPS)	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes		
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable		
Properties	Upper Reference Level	379	379		Upper Reference Level	379	379		
flooded due to other	Reference Level	302	302		Reference Level	302	302		
causes	Actual Performance	355	393	38	Forecast Performance	330	330	0	









	Performance Level Met?	No	No		Performance Level Met?	No	No	
	Sub-Measure Assessment	Stable	Deteriorating		Sub-Measure Assessment	Stable	Stable	
Properties flooded overloaded sewers, excluding severe weather	Upper Reference Level	110	110		Upper Reference Level	110	110	
	Reference Level	72	72		Reference Level	72	72	
	Actual Performance	72	8	-64	Forecast Performance	72	72	0
	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	22,936	22,936		Upper Reference Level	22,936	22,936	
	Reference Level	20,695	20,695		Reference Level	20,695	20,695	
Sewer blockages	Actual Performance	17,075	16,860	-215	Forecast Performance	17,075	17,075	0
J	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	
	Upper Reference Level	7,282	7,282		Upper Reference Level	238	238	
	Reference Level	5,869	5,869		Reference Level	5,869	5,869	
Reactive equipment	Actual Performance	3,510	3,537	27	Forecast Performance	3,510	3,510	0
failures	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes	
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable	

- All sub-measures, except properties flooded due to other causes, have been assessed as stable and the S&R factor has been assessed as stable overall, therefore there is no penalty to be applied.
- We have seen a significant reduction in the number of properties flooded due to overloaded sewers which continues the trend seen throughout the AMP:
 - The low level of incidents seen in 2018-19 has been influenced by the weather pattern, only 4 instances of overloaded flooding were excluded from this measure due to severe weather.
 - > 2019-20 performance is expected to follow the performance of the previous years in the AMP and achieve reference or below.









- Properties flooded due to other causes performance in 2018-19 has seen reported other causes increase from 387 to 393, an increase of 1.6%. This is breaching the upper threshold. The rate of increase in this measure has shown significant reduction from the beginning of AMP6.
 - ➤ In 2019-20 the expectation is that the trend in performance will see an improving position from previous years of AMP6. There is a significant program of initiatives which are targeting a step change in performance of internal sewer flooding. Upper Quartile improvement plans for both Pollution and Internal Sewer Flooding have 3 key themes of Proactive capability, Proactive Interventions and Repeat avoidance.
 - Alongside the Upper Quartile improvement plans there are changes in organisational design involving a significant change to our front-line service on sewer escapes. This is expected to support a delivery of improvements in performance with focus on first time resolution and effective promotion of follow on activities. This business change was originally anticipated to be made in 2018-19 but has been delayed by over 6 months but is expected to support improved performance in 2019-20.
- None of the other sub-measures had material variances to our forecasts.

SB2: Waste water quality stability and reliability factor 3.1.13.

Unit		Assessment									
Period		Finar	ncial year mo	easure (so	me sub-measur	res are calendar year measures)					
Definition		based on a	a basket of ir	ndicators.	Assessment is t	and reliability for waste water quality, s based on the recent historical trend of ssification of Improving, Stable or ng.					
Forecast Ye	ar		2018-	19		:	2019-20				
Performance Level	e Commitment		Stab	le			Stable				
Forecast Pe Level	rformance		Stab	le			Stable				
Performance Level Met?	e Commitment		Yes	3			Yes				
Underperfor	mance Penalty		£0.00	0m		:	£0.000m				
Sub-Measur	e Performance										
		2018-19 Original Forecast	2018-19 Actual	2018-19 Variance		2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance			
	Upper Reference Level	8	8		Upper Reference Level	8	8				
0	Reference Level	0	0		Reference Level	0	0				
Sewage Treatment Works non-	Actual Performance	5	6	1	Forecast Performance	5	5	0			
compliance	Performance Level Met?	No	No		Performance Level Met?	No	No				
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable				
	Upper Reference Level	0.60%	0.60%		Upper Reference Level	0.60%	0.60%				
Population	Reference Level	0.00%	0.00%		Reference Level	0.00%	0.00%				
equivalent non-	Actual Performance	0.00%	0.00%	0	Forecast Performance	0.00%	0.00%	0			
compliance	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes				
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable				
	Upper Reference Level	20,848	20,848		Upper Reference Level	20,848	20,848				
Reactive	Reference Level	15,651	15,651		Reference Level	15,651	15,651				
equipment failures	Forecast Performance	13,000	10,035	-2965	Forecast Performance	12,500	11,000	-1500			
Tallatos	Performance Level Met?	Yes	Yes		Performance Level Met?	Yes	Yes				
	Sub-Measure Assessment	Stable	Stable		Sub-Measure Assessment	Stable	Stable				







- All sub-measures have been assessed as stable and the S&R factor has been assessed as stable overall, therefore there is no penalty to be applied.
- Sewage Treatment Works Non-Compliance 2018-19: We forecast 5 failing works for 2018-19 but actually had 6 failing works. Please note one of these failures (Knostrop) remains under challenge with EA. Our forecast remains the same for 2019-20 at 5 failing works.
- Given the trend on Reactive Equipment Failures in the last few years we have revised our 2019-20 forecast downwards.

SB3: Solutions delivered by working with others 3.1.14.

Unit	Number					
Period	Financial year me	easure				
Definition	organisations or i	ndividuals.		through working wi		
		water controls		nmitment, held at a c targets have not		
Forecast Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance
Performance Commitment Level	3 (12 Cumulative)	3 (12 Cumulative)		4 (16 Cumulative)	4 (16 Cumulative)	
Forecast Performance Level	10 (31 Cumulative)	11 (32 Cumulative)	1	8 (39 Cumulative)	10 (42 Cumulative)	2
Performance Commitment Level Met?	Yes	Yes		Yes	Yes	
Outperformance Payment Deadband	12 (Cumulative number of Interventions Delivered in AMP)	12 (Cumulative number of Interventions Delivered in AMP)		16 (Cumulative number of Interventions Delivered in AMP)	16 (Cumulative number of Interventions Delivered in AMP)	
Outperformance Within Deadband	No	No		No	No	
Outperformance Payment Incentive Rate	5% of totex cost of Yorkshire Water cost for each eligible intervention.	5% of totex cost of Yorkshire Water cost for each eligible intervention.		5% of totex cost of Yorkshire Water cost for each eligible intervention.	5% of totex cost of Yorkshire Water cost for each eligible intervention.	







- There was some ambiguity about how the reward for this measure was calculated and how it should be distributed between water and waste water, specifically around what we classed as an eligible intervention. This has now been resolved and agreed with our auditors and via our internal assurance processes, and we are now calculating our outperformance payment by calculating 5% of the average cost of all interventions in the report year and then multiplying this be the number of interventions greater than our target for that year.
- We have further refined how we split the outperformance payment between the water (WC2) and
 waste water (SB3) performance commitments. Previously this was done using a percentage split
 based on the relative size of the two parts of the business. To ensure a more accurate split we are
 now assigning the outperformance payment based on the percentage of total cost of the
 interventions completed within the report year that relate to either water or waste water.
- The number of schemes delivered in 2018-19 has increased by one and the list of projects has changed slightly, with some projects being delayed and others completing early. This has also altered our 2019-20 forecast.
- We submitted a revised forecast for this measure in our IAP query response YKY.PD.A2 based on the information we had at that time, however, following year end there has been a small variance in our forecast reward for this measure, but this is not material:

Year	2018-19	2019-20
IAP Query Forecast	£0.008m	£0.000m
Actual/Latest Forecast	£0.006m	£0.000m
Variance	-£0.002m	£0.000m

3.1.15. **SB4: Length of river improved**

Unit	Kilometr	es (Km)							
Period	Financial year measure								
	The length of river in the Yorkshire Water region improved during 2015-2020 against Water Framework Directive component measures.								
Year		2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance		
Performance Commi Level	itment	-	-		340.00	340.00			
Actual/Forecast Performance Level		-	-		357.00	356.96	-0.04		
Performance Commi Level Met?		-	-		Yes	Yes			
Underperformance P Deadband	,	-	-		337.00	337.00			
Underperformance W Deadband		-	-		N/A	N/A			
Jnderperformance P ncentive Rate	enalty	-	-		£0.146m per km	£0.146m per km			
Jnderperformance P	enalty	-	-		N/A	N/A			
Outperformance Pay Deadband	ment	-	-		343.00	343.00			
Outperformance With Deadband	hin	-	-		No	No			
Outperformance Pay Incentive Rate	ment	-	-		£0.077m per km	£0.077m per km			
Outperformance Pay based on Forecast Performance	rment	-	-		= 357 (Forecast Performance) – 343 (Deadband) = 14 * £0.077 (Incentive Rate) =£1.073m	= 356.96 (Forecast Performance) – 343 (Deadband) = 13.96 * £0.077 (Incentive Rate) =£1.071m	-£0.002m		
Outperformance Pay being Claimed	rment	-	-	-	= 357 (Forecast Performance) – 356 (Internally Agreed Target) = 1 * £0.077 (Incentive Rate) =£0.077m	= 356.96 (Forecast Performance) – 356.96 (Internally Agreed Target) = 0.00 * £0.077 (Incentive Rate) =£0.000m	-£0.077m		

- There is no change in actual length forecast, the original forecast of 357.00 appears to be a result of rounding and should be 356.96.
- The reward we have claimed for length of river improved is less than that 'earned' based on forecast performance. This is due to an error in setting the original target which was identified after the Final Determination had been published.









- Our correspondence with Ofwat on this issue confirmed that the original target would not be changed but a business decision was made to only claim the outperformance payment greater than the revised internal target of 356.96km.
- This being the case we are not claiming any reward (as we are forecasting to achieve our revised internal target exactly) compared to £1.071m which we are forecasting to earn against our original target of 340km.
- Please note, in our previous submission we had stated that we expected to claim £0.077m of reward for this measure. Following further analysis of our forecast performance and the schemes which will deliver this outcome, we are no longer wanting to claim any reward associated with this measure.
- We have calculated the reward based on the river length improved to reported 2 decimal places to ensure we are as accurate as possible.







3.1.16. SB5: Amount of land conserved and enhanced

Unit	Hectares (Ha)								
Period	Financial year measure								
Definition	The amount of land that the company conserves and enhances, for example Biodiversity 2020, Ancient Woodlands and Sites of Special Scientific Interest (SSSIs). This includes land within the region and includes both Yorkshire Water and non-Yorkshire Water land. The performance commitment is a total commitment, held at appointee level. It spans water and waste water controls and specific targets have not been allocated to the individual controls.								
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance			
Performance Commitment Level	-	-		11,736	11,736				
Actual/Forecast Performance Level	-	-		11,689	11,689	0			
Performance Commitment Level Met?	-	-		No	No				
Underperformance Penalty Deadband	-	-		11,501	11,501				
Underperformance Within Deadband	-	-		Yes	Yes				
Underperformance Penalty Incentive Rate	-	-		£0.020m per hectare	£0.020m per hectare				
Underperformance Penalty	-	-		£0.000m	£0.000m				
Outperformance Payment Deadband	-	-		11,971	11,971				
Outperformance Within Deadband	-	-		N/A	N/A				
Outperformance Payment Incentive Rate	-	-		£0.013m per hectare	£0.013m per hectare				
Outperformance Payment	-	-	-	N/A	N/A	N/A			

- There is no change to our forecast for this measure.
- Our forecast shows that we are expecting to fail this Performance Commitment, although we will still be in the deadband and therefore there is no underperformance penalty to be applied.
- Our forecast underperformance is due to a 47 Ha area of SSSI land at Newton Dale that was sold just before the start of the AMP, which we had included when proposing our target for this measure and which had been agreed by Ofwat.
- As this change was marginal a business decision was taken that we would not request a formal change of target from Ofwat for this measure and would instead accept that we would not be able to meet the original target, although we still expect to meet our revised internal target of 11,689. This decision was agreed with the Yorkshire Forum for Water Customers and our auditors.









Reputational Performance Commitments (App 5) 3.2.

3.2.1. WA2: Significant Drinking Water Events

Unit	Numbers						
Period	Calendar year	measure					
Definition	The number of potentially significant events notified to the DWI under the Water Industry (Suppliers' Information) Direction 2009, that have the potential for negative impact on public confidence in the water supply, for which the DWI has subsequently required the company to take corrective action to maintain compliance or protect public health.						
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
Performance Commitment Level	6	6		6	6		
Actual/Forecast Performance Level	5	5	0	5	5	0	
Performance Commitment Level Met?	Yes	Yes		Yes	Yes		

Key messages

• There is no change to outturn for 2018-19 or forecast for 2019-20.

3.2.2. WB3: Water Use

Unit	Litres per household per day (l/hd/d)									
Period	Financial year measure									
Definition	The average daily in measure and un consumption.									
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance				
Performance Commit Level	tment 139.3	139.3		138.3	138.3					
Actual/Forecast Performance Level	139.3	133.5	-5.8	138.3	138.3	0				
Performance Commit Level Met?	tment Yes	Yes		Yes	Yes					

- A slight improvement to outturn for 2018-19 has been achieved.
- There is no change to forecast for 2019-20.







3.2.3. WC4: Recreational visitor satisfaction

Unit	Qualitative assess	ment							
Period	Financial year measure								
Definition	An assessment of customer satisfaction with the current facilities, access and use of recreational sites and the recreational offer.								
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance			
Performance Commitm Level	ent Published	Published		Published	Published				
Actual/Forecast Performance Level	Published	Published	-	Published	Published	-			
Performance Commitm Level Met?	ent Yes	Yes		Yes	Yes				

Key messages

• There is no change to outturn for 2018-19 or forecast for 2019-20.

3.2.4. WD1, SC1 & RC1: Proportion of energy use generated by renewable technology

Unit	Percentage (%)	Percentage (%)							
Period	Financial year n	Financial year measure							
	The amount of expressed as a				renewable tech	nology			
Definition	The performance commitment is a total commitment, held at appointee level. It spans water, waste water controls and retail controls and specific targets have not been allocated to the individual controls.								
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance			
Performance Commitmen Level	t 12%	12%		12%	12%				
Actual/Forecast Performance Level	12%	11%	-1%	17%	17%	0%			
Performance Commitmen Level Met?	t Yes	No		Yes	Yes				

- We did not deliver our forecast performance for 2018-19 due to a significant increase in energy consumption within clean production. Resulting from network pumping required to alleviate local water supply issues owing to prolonged dry summer weather.
- There is no change to forecast for 2019-20.

3.2.5. WD2, SC2 & RC2: Proportion of waste diverted from landfill

Unit	Percentage (%)					
Period	Financial year measu	re				
	The amount of waste is recycled or re-used				erational or con	struction) that
Definition	The performance co water, waste water c allocated to the indiv	ontrols and r	etail controls	•	• •	•
	2018-19	2040 40	2040 40	2019-20	2019-20	2040 20

Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance
Performance Commitment Level	95%	95%		95%	95%	
Actual/Forecast Performance Level	99%	100%	1%	99%	99%	0%
Performance Commitment Level Met?	Yes	Yes		Yes	Yes	

Key messages

- We outturned slightly higher than forecast at 99.6% for year 4, this has been reported as 100% in the table due to rounding.
- There is no change to outturn for 2018-19 or forecast for 2019-20.

3.2.6. SA2: External sewer flooding incidents

Unit	Number						
Period	Financial year	measure					
	Total number	of incidents of	areas affected l	by external floo	ding in the year	۲.	
Definition	The measure includes incidents arising from assets transferred to Yorkshire Water in October 2011.						
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
Performance Commitment Level	10,487	10,487		10,487	10,487		
Actual/Forecast Performance Level	10,487	9,116	-1,371	0	10,487	0	
Performance Commitment Level Met?	Yes	Yes		Yes	Yes		

- During 2018-19, we saw a reduction in overloaded sewer incidents, in line with the performance on internal overloaded sewer flooding.
- There is no change to the Year 5 forecast.







3.2.7. SA3: Pollution - Cat 1 & 2

Unit	Number						
Period	Calendar year	r measure					
Definition	Total number of Category 1-3 pollution incidents caused by a discharge or escape from any Yorkshire Water waste water asset each year (this covers all consented and non consented intermittant events but not continuous discharges). This measure includes all waste water assets, that is, surface water assets are included and excludes impacts from private pumping stations that will transfer to Yorkshire Water 2016 ² .						
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
Performance Commitment Level	2	2		0	0		
Actual/Forecast Performance Level	7	11	4	0	3	3	
Performance Commitment Level Met?	No	No		Yes	No		

- There was an increase in Cat 1 and 2 pollution incidents in 2018 from 3 incidents in 2017 to 11 in 2018. Of the 11 serious (Cat 1 and 2) incidents, 6 were incurred during a period where the watercourses were either "notably" or "exceptionally low" (source: EA Hydrology Situation Report).
- Our forecast for 2019-20 has been revised to 3. This reflects the number of incidents which have occurred to date. We do not anticipate any more occurring.









² Final Determination stated transfer would occur in 2015 but official date for transfer of pumping stations is 1 October 2016

3.2.8. SB1: Number of designated bathing waters that exceed the required quality standard

Unit	Number					
Period	Per Bathing Se	ason				
Definition	Directive are ex	ceeded, based	thing waters who don EA bathing of bathing water	water samples	taken at design	nated bathing
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance
Performance Commitment Level	15	15		15	15	
Actual/Forecast Performance Level	18	17	-1	18	16	-2
Performance Commitment Level Met?	Yes	Yes		Yes	Yes	

- The 2018 bathing season has seen a reduction from 18 beaches at Good or Excellent to 17. Scarborough South remains Poor and Bridlington South is the beach that has dropped from Good to Sufficient.
- The reduction of Bridlington South from Good to Sufficient is believed, at this stage, to be related to pollutants entering via the Gypsy Race. Preliminary investigations indicate that this is due to a variety of contributors; including some minor misconnections, leaching of an unlined landfill, farming practices and horses in adjacent fields. Investigation work is ongoing, and Yorkshire Water are continuing to work with the Yorkshire Bathing Water Partnership in order to investigate and put in place actions to improve and maintain bathing water quality.
- The change to the 2019-20 forecast is due to the Bridlington South designation of sufficient and due to Tunstall beach not being sampled during the 2019 season. This change is the result of safety concerns in relation to access. The beach will therefore be 'unclassified' in 2019 and therefore not be counted in the total as 'Excellent', as it would have been previously.







3.2.9. RA1: Service incentive mechanism - overall score

Unit	Score						
Period	Financial year i	measure					
Definition	A full definition of this measure is in 'Service incentive mechanism (SIM) fo — conclusions', as published on Ofwat's website in April 2014. http://www.ofwat.gov.uk/wp-content/uploads/2013/10/Service-incentive-methor-2015-onwardsconclusions.pdf						
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
Performance Commitment Level	>2017-18	>2017-18		>2018-19	>2018-19		
Actual/Forecast Performance Level	87.0	84.0	-2.9	87.0	81.5	-5.5	
Performance Commitment Level Met?	Yes	No		Yes	N/A		

- We marginally failed to achieve our SIM target for 2018-19 as we outturned at 84.0, against a 2017-18 outturn of 84.27. Customer satisfaction with resolution times and keeping customers informed was affected by the impacts of dry weather. These improved by the end of year but were affected in the summer.
- Our performance compared to the other water companies is assessed as average and so we do not anticipate receiving an underperformance penalty for this measure.
- It is not possible to compare our latest 2019-20 forecast with our previously supplied one as the methodology has changed for calculating the SIM. The new score is based on the C-mex customer service survey.

3.2.10. **RA2: Service commitment failures**

Unit	Number					
Period	Financial year n	neasure				
Definition	The total number GSS events, ea	•	aranteed Standa	ards of Service)	events, includir	ng enhanced
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance
Performance Commitment Level	Average of 20 performance	15-20 perform	ance to be less	than average of	last 3 years of	2010-15
Actual/Forecast Performance Level	12,000	14,221	2,221	12,000	12,000	0
Performance Commitment Level Met?	Yes	Yes		Yes	Yes	

Key messages

- While our 2018-19 outturn was higher than originally forecast given that the measure is calculated across the AMP we are still forecasting to meet the PC, with a forecast average for AMP6 of 11,869 against a target of 12,522.
- There is no change to our 2019-20 forecast.

3.2.11. **RA3: Overall customer satisfaction**

Unit	Percentage						
Period	Financial year r	neasure					
Definition	The reported value for overall customer satisfaction determined by the annual CCW tracking survey.						
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
Performance Commitment Level	Average of 20	15-20 performa	ance to be bette	r than average	of 2010-15 perf	ormance	
Actual/Forecast Performance Level	95.0	91.5	-3.5	95.0	95.0	0	
Performance Commitment Level Met?	Yes	Yes		Yes	Yes		

- While our 2018-19 outturn was higher than originally forecast given that the measure is calculated across the AMP we are still forecasting to meet the PC, with a forecast average for AMP6 of 93% against a target of 92%
- There is no change to our 2019-20 forecast.









3.2.12. RB1: Cost of bad debt to customers expressed as proportion of bill

Unit	Percentage					
Period	Financial year r	neasure				
Definition	The cost to bill paying customers to cover the cost of interest on revenue that is collected, debt written off and debt management costs, expressed as a percenta average annual bill. This includes the collection and revenue activities for managed debt.					
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance
Performance Commitment Level	3.16	3.16		3.16	3.16	
Actual/Forecast Performance Level	3.16	3.02	-0.14	3.16	3.16	0
Performance Commitment Level Met?	Yes	Yes		Yes	Yes	

Key messages

- Slight improvement to outturn for 2018-19.
- No change to forecast for 2019-20.

3.2.13. RB2: Number of people who we help to pay their bill

Unit	Number						
Period	Financial year r	neasure					
Definition	The number of customers who are assisted to pay their bill. This includes, but is not to WaterSure, Resolve and the Community Trust, plus the number of those who ta water meter as a result of targeted advice following identification of an affordability (customers should not be double counted).						
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance	
Performance Commitment Level	To publish dat	a annually on t	he number of po	eople who have	been helped		
Actual/Forecast Performance Level	29,000	31,606	2,606	40,000	40,000	0	
Performance Commitment Level Met?	Yes	Yes		Yes	Yes		

- Slight improvement to outturn for 2018-19.
- No change to forecast for 2019-20.

3.3. App27 – Financial outcome delivery incentives summary

App27 does not include any penalties relating to WA3: Drinking water contacts. Yorkshire Water's are Shareholder funded only and penalties relating to underperformance in this area have been reinvested within AMP6. As such there is no correct place to populate this in the App27, as a result this table does not fully reconcile to APR table 3A and PR19 table App5. We contacted Ofwat to query this in April 2018 and were told the shareholder funded penalty should not be included in table App27.

In line with our query response (YKY-DD-OC-003) sent on the 11th April 2019 an adjustment, equivalent to the inflated penalty reinvestment which has taken place in AMP6, has been included as part of table WS15 (Block D line 14 Water: Disallowables). This excludes this investment from the totex sharing mechanism and ensures that our shareholders bear the full financial responsibility for this penalty.

We have chosen to input the claimed reward, not the earned reward (please see the section for Length of River Improved Waste).

We have updated the years 1 to 3 data for section E to match the update made by Ofwat in the Initial Assessment Models, which was confirmed as correct in the query response YKY_6.

App27 data provided has been audited by our external financial auditor Deloitte.

The assurance statement from auditors Deloitte is provided as part of the PR14 reconciliation submission. See Appendix 1 in the summary narrative document.

3.3.1. RB3: Value for money

Unit	Percentage								
Period	Financial year r	neasure							
Definition	The reported va	alue for money	determined by t	he annual CCV	Vater tracking s	urvey.			
Year	2018-19 Original Forecast	2018-19 Actual	2018-19 Variance	2019-20 Original Forecast	2019-20 Revised Forecast	2019-20 Variance			
Performance Commitment Level	Average of 20	Average of 2015-20 performance to be better than average of 2010-15 performance							
Actual/Forecast Performance Level	80	78	-2	80	80	0			
Performance Commitment Level Met?	Yes	Yes		Yes	Yes				

- While our 2018-19 outturn was lower than originally forecast given that the measure is calculated across the AMP we are still forecasting to meet the PC, with a forecast average for AMP6 of 80% against a target of 75%.
- There is no change to our 2019-20 forecast.

3.4. **App23 – Inflation measures**

Actual figures up to March 2018 have been pre-populated by Ofwat. Monthly figures for the two years ending March 2020 have been calculated as the average of the forecasts provided by six different Banks, following publication of the March 2018 actual data.

Annual inflation for the period from April 2020 onwards is forecast to be 3.0% for RPI and 2.0% for CPIH, which is in accordance with the long-term inflation assumptions used by Ofwat within their assessment of the cost of capital

3.5. App9 - Adjustments to RCV from disposals of interest in land

2014-15 - The forecast for the 2014-15 land sales that was used in PR14 has been taken from the Yorkshire Water regulatory capital value midnight adjustment spreadsheet, this can be found on Ofwat website following the link below:

https://www.ofwat.gov.uk/publications/legacy-populated-feeder-models-at-final-determinations/

The actual value for 2014-15 was reported at a company level within our 2014-15 regulatory accounts, a split between the water and wastewater price controls has been provided by our internal records.

2015-16, 2016-17, 2017-18 and 2018-19 - The actuals for these years have been taken directly from our published APR documents, table 2E shows the values by price controls. The variance between the forecast for 2018-19 submitted in July 2018 is £0.2m across the wholesale price controls. The analysis is included below:

	2018-19 forecast	2018-19 actual	Variance
	£000s	£000s	£000s
Wholesale Water	137.5	232.0	94.5
Wholesale Wastewater	137.5	282.9	145.4
Wholesale	275.0	514.9	239.9

2019-20 - This forecast was provided by our internal Land Development team. The forecast is in line with our internal business plan number and has not been updated from our original forecast submitted in July 2018.

The forecast is currently held at a business level, so the forecasts have been split on a 50:50 basis between the two price controls. We are not currently forecasting any large values being realised within the next two years

Adjustments to sources of inputs for modelling purposes

We have made no adjustments to the values shown in App9.

Land sales modelling

This is calculated using the Ofwat published PR19 table App9, all values are shown on the table.









The adjustments that are required to the opening RCV values are (£1.52m) for water and £0.46m for wastewater.

PR19 adjustment for land sales

The outputs from table App9 are taken into the financial model via App8.

3.6. App25 - PR14 reconciliation adjustments summary

Table App25 provides a summary of all the further adjustments arising from the 2010-15 reconciliation updated for 2014-15 actual performance and from each of the PR14 reconciliations of performance in the period ending 31 March 2020.

The table copies values entered in the tables for each of the PR14 reconciliation mechanisms.

The following data sources are required to complete the App25 data table.

- Ofwat pre-populated data
- Revenue Adjustments Feeder Model •
- RCV Adjustments Feeder Model
- Completed PR14 business data tables
- Ofwat Blind Year F_Outputs
- Ofwat CIS reconciliation calculations

These legacy adjustments from PR14 have been calculated and published by Ofwat. These adjustments relate to the 2014-15 blind year performance on revenue and capital expenditure, they have been included within the PR19 table App25, the 2012-13 average price values are pre-populated in company specific versions of the data tables.

There is also an adjustment required for the amendment in indexation that Ofwat used to calculate the original RCV log down for the CIS outperformance, these values have also been provided in App25.

We have accepted all of the proposed adjustments, these will be included within our PR19 submission.

3.7. WS13 - PR14 wholesale revenue forecast incentive mechanism for the water service

Table WS13 contains the water service inputs used for populating the PR14 WRFIM model and the revenue adjustment arising as calculated by the WFRIM model. The WRFIM model calculates in outturn prices and is converted to 2017-18 prices in the revenue adjustments feeder model.

The inputs to the model are entered on the 'Data' worksheet. The inputs cover customer numbers, revenue collected and adjustments. The data includes results for six customer types and five years from 2015-20.

WS13 data has been audited by our external financial auditor Deloitte. The assurance statement from Deloitte is provided as part of the PR14 reconciliation submission and can be found at Appendix A.

We have submitted our populated WRFIM models with associated explanation.







The submission has been calculated using the model that was provided by Ofwat in line with the PR14 reconciliation rulebook.

WS13 Source of inputs

Year	Sources of inputs	Comment
2015-16	The total revenue governed by wholesale price control values	The variance between our forecast
2016-17	have been taken from our published APR table 2I.	2018-19 and actual 2018-19 is an
2017-18		increase of £12m. £8m is due to an
2018-19		increase in main charges received
		and £3m due to an increase in
		grants and contributions.
2019-20	The forecast wholesale revenue recovered from households	We have used the forecast values
	and non-households has been included in line with the	for grants and contributions which
	anticipated revenues allowances for these years. Our tariffs for	has been updated for 2019-20 in
	2019-20 have been set to recover the revenue allowance, this	relation to our current Capital
	also includes the wholesale revenue element of the WRFIM	expenditure forecast which has
	adjustment from 2017-18.	been used in the calculation of
		2019-20 performance in tables
		WS15 and WWS15.
		These values are shown within
		section E of table WS13 and
		WWS13.

Adjustments to sources of inputs for modelling purposes

Due to inconsistencies between the categories of revenue and capital contributions within the APR table 2I and PR19 table WS13, which we are asked to report by Ofwat, and those which were included within our wholesale revenue price controls at the Final Determination, this means that we have to adjust the input information before it is modelled within the WRFIM calculation.

As agreed with Ofwat we make full disclosures within the APR commentary for Table 2I, the adjustments are to exclude the s45 grants and contributions from wholesale water and the s104 income received in wholesale waste water.

We also submitted further evidence within our IAP response to Ofwat on the 1 April which detailed the adjustments and the reason behind them. These adjusted inputs have been used within our published WRFIM model, they can be seen on the inputs tab, rows 36 and 37.

WRFIM modelling

This is calculated using the Ofwat published model.

Our reported performance for 2015-16, 2016-17, 2017-18 and 2018-19 have been included within our commentary for table 2I within our published APR.









Water		2015-16	2016-17	2017-18	2018-19
£m 3dp	Over (+) / Under (-) recovery versus adjusted allowed revenue	6.220	4.204	2.988	3.342
% 2dp	% (under) / over recovered versus adjusted allowed revenue	1.55%	1.02%	0.71%	0.76%

The modelling shows the following anticipated performance for 2019-20.

Water		2019-20
£m 3dp	Over (+) / Under (-) recovery versus adjusted allowed revenue	(11.931)
% 2dp	% (under) / over recovered versus adjusted allowed revenue	(2.59%)

Within the Water WFRIM the performance in 2018-19 against the allowed revenues is due to an over recovery in main charges income and an under recovery in capital grants and contributions. The under recovery in 2019-20 is due to the anticipated reduction in capital grants and contributions against the FD14 forecast. The reduction in G&Cs can be seen in section E of Table WS13.

The model indicates that there should be a £0.3m penalty included within the PR19 table WS13 for the true up of 2018-19, 2019-20 and AMP5 blind year.

PR19 adjustment for WFRIM

As stated above the modelling output from the WRFIM model shows an anticipated reward of £12m for wholesale water and a penalty of £4m for wastewater. This is based on our performance in 2018-19 and the current forecast for 2019-20.

As stated above the rewards and penalties are impacted by the actual and forecast G&Cs are not wholly due to any anticipated under or over recovery on wholesale revenue from household and non-household revenue.

As changes in grants and contributions are offset by changes within capital expenditure, we have amended the reward and penalty values to zero in WS13 to exclude the impact of G&Cs and to reflect the impact of the main charges revenues only.

As stated in our July 2018 submission we have analysed the split of main charges and capital contributions for 2018-19 and retained our main charges forecast to be in line with the allowed revenues for 2019-20 with the under and over recovery in this final year being driven by the G&Cs.







Description	2018-19	2019-20 (F)
Allowed Wholesale water - Customer	430.14	448.15
Allowed Wholesale water - Capital	11.73	12.93
Allowed forecast billed revenue	441.87	461.08
Wholesale water - customer (2I)	438.49	448.15
Wholesale water - capital	6.82	1.15
Actual/Forecast revenue	445.30	449.30
Wholesale water - customer	8.35	-
Wholesale water - capital	(4.92)	(11.78)
Variance - revenue to billed	3.43	(11.78)

We have included a duplicate set of the WFRIM calculations which have been amended to show the performance of Main Charges income for 2018-19 and 2019-20. The values of the adjustments for PR19 shown within section G of table WS13 have therefore be adjusted to exclude the impact of the G&Cs in 2018-19 and 2019-20 and the PR09 RCM. The new values are shown as (£18m) for water and (£9m) for wastewater.

Description	No adjustment for	Adjusted to exclude	Variance in PR19
	G&Cs	G&Cs	adjustment
	£m	£m	
Wholesale Water	(0.246)	(17.530)	(17.284)
Wholesale Wastewater	(17.116)	(8.992)	8.124
Total Wholesale	(17.362)	(26.522)	(9.16)









WS15 - PR14 wholesale total expenditure outperformance sharing for the water service 3.8.

This table contains the water service inputs used for populating the totex menu model and the total outperformance / (underperformance) adjustments arising as calculated by the totex menu model. The totex menu model calculates in 2012-13 prices and the adjustments are converted to 2017-18 prices in the revenue adjustments feeder model and the RCV adjustments feeder model.

The submission has been calculated using the model that was provided by Ofwat in line with the PR14 reconciliation rulebook.

WS15 Source of inputs

Year	Sources of inputs
2015-16	The actual totex and adjustments to totex values have been taken from our
2016-17	published APR table 4B.
2017-18	
2018-19	
2019-20	The actual totex forecast for this year has been sourced from an updated
	forecast for PR19 tables WS1 and WWS1.

Adjustments to sources of inputs for modelling purposes

The actual totex numbers in 2018-19 and within the forecast numbers for 2019-20 includes the reinvestment of a penalty that has arisen due to our performance against "WA3: Drinking water contacts". To ensure that the reinvestment of penalty has been excluded from the totex calculation we have included the values in the disallowable line.

	Price base	2018-19	2019-20	Total
		£m	£m	£m
Water: Disallowable	Outturn	7.612	12.735	20.347

Totex modelling

This is calculated using the Ofwat published model. The forecast outperformance that we have calculated from the model is shown below:

Outperformance	Price base	2015-16	2016-17	2017-18	2018-19	2019-20	2015-20
Outp - water	2012-13	75	8	(44)	(86)	(81)	(127)
Outp - Waste	2012-13	99	51	17	(62)	(3)	103
Outp	2012-13	174	59	(27)	(148)	(83)	(24)

The underperformance in wholesale Water results in the following PR19 adjustment:











Totex menu adjustments	Price base	£m
Water: revenue adjustment from totex menu model	2012-13 FYA (RPI)	5.987
Water: RCV adjustment from totex menu model	2012-13 FYA (RPI)	45.136
Water: Totex menu revenue adjustment at 2017-18 FYA CPIH deflated price base	2017-18 FYA (CPIH deflated)	6.854
Water: Totex menu RCV adjustment at 2017-18 FYA CPIH deflated price base	2017-18 FYA (CPIH deflated)	51.672

3.9. WS17 - PR14 water trading incentive reconciliation

This table contains the water service inputs used for populating the water trading incentive reconciliation model and the incentive payments arising as calculated by the water trading incentive reconciliation model. The water trading incentive reconciliation model calculates in 2012-13 prices and is converted to 2017-18 prices in the revenue adjustments feeder model.

WS17 is a retrospective view of any new trades that we have put in place during AMP6. During the period, Yorkshire Water has not identified any new WR trades either as part of its Water Resources Management Plan 2014 option appraisal or subsequent market reviews. No neighbouring water companies or other abstractors are requesting new trades and therefore, there is strong WR justification for not planning any new trades at this stage. However, Yorkshire Water is providing market information on its website and our Trading and Procurement Code was approved by Ofwat in 2018. A Bid Assessment Framework has also been produced inviting third party bids for both water resource trades and demand management services, including leakage reduction. Although no new trades are currently planned, Yorkshire Water is committed to developing its processes for assessing trades to ensure they are fully considered in future water resource strategies.

Please note, the correct response for lines 37, 24 and 47 should be 'False' however, the WS17 table does not present the option in the drop-down cell menu.

3.10. WWS13 - PR14 wholesale revenue forecast incentive mechanism for the wastewater service

This table contains the wastewater service inputs used for populating the PR14 WRFIM model and the revenue adjustment arising as calculated by the WFRIM model. The WRFIM model calculates in outturn prices and is converted to 2017-18 prices in the revenue adjustments feeder model.

The submission has been calculated using the model that was provided by Ofwat in line with the PR14 reconciliation rulebook.

WWS13 data has been audited by our external financial auditor Deloitte. The assurance statements from Deloitte is provided as part of the PR14 reconciliation submission.

We have submitted our populated WRFIM models with associated explanation. The submission has been calculated using the model that was provided by Ofwat in line with the PR14 reconciliation rulebook.









WWS13 Source of inputs

Year	Sources of inputs	Comment
2015-16	The total revenue governed by wholesale price	The variance between our forecast 2018-19 and
2016-17	control values have been taken from our published	actual 2018-19 is a reduction of £8m. £5m
2017-18	APR table 2I.	under recovery of main charges and a reduction
2018-19		in grants and contributions than forecast.
2019-20	The forecast wholesale revenue recovered from	We have used the forecast values for grants
	households and non-households has been included	and contributions which has been updated for
	in line with the anticipated revenues allowances for	2019-20 in relation to our current Capital
	these years. Our tariffs for 2019-20 have been set	expenditure forecast which has been used in
	to recover the revenue allowance, this also	the calculation of 2019-20 performance in tables
	includes the wholesale revenue element of the	WS15 and WWS15. These values are shown
	WRFIM adjustment from 2017-18.	within section E of table WWS13.

Adjustments to sources of inputs for modelling purposes

Due to inconsistencies between the categories of revenue and capital contributions within the APR table 2I and PR19 table WWS13, which we are asked to report by Ofwat, and those which were included within our wholesale revenue price controls at the Final Determination, this means that we have to adjust the input information before it is modelled within the WRFIM calculation.

As agreed with Ofwat we make full disclosures within the APR commentary for Table 2I, the adjustments are to exclude the s45 grants and contributions from wholesale water and the s104 income received in wholesale waste water.

We also submitted further evidence within our IAP response to Ofwat on the 1 April which detailed the adjustments and the reason behind them. These adjusted inputs have been used within our published WRFIM model, they can be seen on the inputs tab, rows 36 and 37.

WRFIM modelling

This is calculated using the Ofwat published model.

Our reported performance for 2015-16, 2016-17, 2017-18 and 2018-19 have been included within our commentary for table 2I within our published APR.

Waste		2015-16	2016-17	2017-18	2018-19
£m 3dp	Over (+) / Under (-) recovery versus adjusted allowed revenue	1.182	1.971	(4.584)	(0.672)
% 2dp	% (under) / over recovered versus adjusted allowed revenue	0.24%	0.39%	(0.88%)	(0.12%)









The modelling shows the following anticipated performance for 2019-20.

Waste		2019-20
£m 3dp	Over (+) / Under (-) recovery versus adjusted allowed revenue	3.552
% 2dp	% (under) / over recovered versus adjusted allowed revenue	0.62%

Within the Waste WFRIM the under recovery in 2018-19 is due to an over recovery of grants and contributions and an under recovery of main charges income. The over recovery in 2019-20 calculations is due to the anticipated increase in capital grants and contributions against the FD14 forecast.

The increase in G&Cs can be seen in section E of Table WWS13.

The model indicates that there should be a £17m penalty that should be included within the PR19 table WWS13 for the true up of 2018-19, 2019-20 and AMP5 blind year

PR19 adjustment for WFRIM

As stated above the modelling output from the WRFIM model shows an anticipated reward of £12m for wholesale water and a penalty of £4m for wastewater. This is based on our performance in 2018-19 and the current forecast for 2019-20.

As stated above the rewards and penalties are impacted by the actual and forecast G&Cs are not wholly due to any anticipated under or over recovery on wholesale revenue from household and non-household revenue.

As changes in grants and contributions are offset by changes within capital expenditure, we have amended the reward and penalty values to zero in WWS13 to exclude the impact of G&Cs and to reflect the impact of the main charges revenues only.

As stated in our July 2018 submission we have analysed the split of main charges and capital contributions for 2018-19 and retained our main charges forecast to be in line with the allowed revenues for 2019-20 with the under and over recovery in this final year being driven by the G&Cs.

Description	2018-19	2019-20 (F)
Allowed Wholesale wastewater - Customer	535.72	565.26
Allowed Wholesale wastewater - Capital	7.22	7.87
Allowed forecast billed revenue	542.95	573.12
Wholesale wastewater - customer (2I)	530.77	565.26
Wholesale wastewater - capital	11.50	9.38
Actual/Forecast revenue	545.19	567.83
Wholesale wastewater - customer	(4.95)	-
Wholesale wastewater - capital	4.28	1.52
Variance - revenue to billed	(0.67)	1.52









We have included a duplicate set of the WFRIM calculations which have been amended to show the performance of Main Charges income for 2018-19 and 2019-20. The values of the adjustments for PR19 shown within section G of table WWS13 have therefore be adjusted to exclude the impact of the G&Cs in 2018-19 and 2019-20 and the PR09 RCM. The new values are shown as (£18m) for water and (£9m) for wastewater.

Description	No adjustment for	Adjusted to exclude	Variance in PR19
	G&Cs	G&Cs	adjustment
	£m	£m	
Wholesale Water	(0.246)	(17.530)	(17.284)
Wholesale Wastewater	(17.116)	(8.992)	8.124
Total Wholesale	(17.362)	(26.522)	(9.16)

3.11. WWS15 - PR14 wholesale total expenditure outperformance sharing for the wastewater service

This table contains the wastewater service inputs used for populating the totex menu model and the total outperformance / (underperformance) adjustments arising as calculated by the totex menu model. The totex menu model calculates in 2012-13 prices and the adjustments are converted to 2017-18 prices in the revenue adjustments feeder model and the RCV adjustments feeder model.

The submission has been calculated using the model that was provided by Ofwat in line with the PR14 reconciliation rulebook.

WWS15 Source of inputs

Year	Sources of inputs
2015-16	The actual totex and adjustments to totex values have been taken from our
2016-17	published APR table 4B.
2017-18	
2018-19	
2019-20	The actual totex forecast for this year has been sourced from an updated
	forecast for PR19 tables WS1 and WWS1.

The actual wastewater totex numbers that were reported within table 4B of the APR for 2015-16 and 2016-17 included expenditure that was incurred in relation to the major floods that our region suffered on the 26 December 2016, however what we were unable to report within the totex tables was the insurance payment that we received in 2015-16 and 2016-17.









This insurance payment was paid in two instalments, £10m in 2015-16 and £46m in 2016-17, we have included these two payments within the disallowable line within the sewerage inputs for 2015-16 and 2016-17.

Line description		Item reference	Units	DPs	Price base	2014-15	2015-16	2016-17
14	Sewerage: Disallowables	WWS15014	£m	3	Outturn (nominal)		10.000	46.000

Totex modelling

This is calculated using the Ofwat published model. The forecast outperformance that we have calculated from the model is shown below:

Outperformance	Price base	2015-16	2016-17	2017-18	2018-19	2019-20	2015-20
Outp - water	2012-13	75	8	(44)	(86)	(81)	(127)
Outp - Waste	2012-13	99	51	17	(62)	(3)	103
Outp	2012-13	174	59	(27)	(148)	(83)	(24)

PR19 adjustment for Totex

The over performance in wholesale Wastewater results in the following PR19 adjustment:

Totex menu adjustments	Price base	£m
Wastewater: revenue adjustment from totex menu model	2012-13 FYA (RPI)	(5.283)
Wastewater: RCV adjustment from totex menu model	2012-13 FYA (RPI)	(62.158)
Wastewater: Totex menu revenue adjustment at 2017- 18 FYA CPIH deflated price base	2017-18 FYA (CPIH deflated)	(6.048)
Wastewater: Totex menu RCV adjustment at 2017-18 FYA CPIH deflated price base	2017-18 FYA (CPIH deflated)	(71.159)







3.12. R9 - PR14 Reconciliation of household retail revenue

This table contains the inputs used for populating the household retail revenue reconciliation model and the revenue adjustments arising as calculated by the household retail revenue reconciliation model. The household retail revenue reconciliation model calculates in outturn (nominal) prices and is converted to 2017-18 prices in the revenue adjustments feeder model.

The submission has been calculated using the model that was provided by Ofwat in line with the PR14 reconciliation rulebook.

R9 Source of inputs

Year	Sources of inputs
2015-16	Actual customer numbers and retail revenues collected have been sourced from
2016-17	our published APR table 2F. Reforecast customer numbers and the revenue
2017-18	sacrifice inputs have been sourced from our annual tariff setting model.
2018-19	
2019-20	We have updated the inputs using the final version of the 2019-20 tariff model to
	provide the reforecast customer numbers, revenue sacrifice and forecast retail
	revenues collected for 2019-20. We have included our latest forecast for the 2019-
	20 actual customer numbers, this reflects the guidance that we received on the 26
	June 2019 in the PR19 query YKY-DD-PD-001.

Adjustments to sources of inputs for modelling purposes

We have not made any adjustments to the inputs

Retail household revenue modelling

This is calculated using the Ofwat published model.

	2015-16	2016-17	2017-18	2018-19	2019-20
Adjusted revenue control	59.25	61.06	62.69	64.37	66.24
Actual revenue	60.88	61.21	64.02	65.18	66.29
(over)/under recovery	(1.63)	(0.15)	(1.33)	(0.80)	(0.05)

The forecast impact of the over recovery in revenue is a penalty of £3.96m.

PR19 adjustment for retail household revenue

The penalty of £3.96m will be phased over the 2020-25 price control within the Retail household price control.







3.13. R10 - PR14 Service incentive mechanism

Ofwat require companies to forecast their SIM score in 2019-20 in their business plans because this impacts on companies' bill forecasts. In addition, Ofwat have requested final results for 2018-19 to be available and included in the PR14 Reconciliation submission.

Table R10 provides confirmation of SIM score for 2018-19 along with our forecast for our expected SIM score in 2019-20. The following paragraphs provides a summary of how the table has been completed;

Lines 1 to 8

All the information for these lines is taken from the "Ofwat SIM Calculator spreadsheet" and used to complete tables 5B & 3D within the Annual Performance Reporting Data. They are then manually input into the relevant line in this table. See Table 5b Annual Performance Report Procedure for a comprehensive process summary of the data used to complete the "Ofwat SIM Calculator spreadsheet".

Block A - Lines 1, 2, 3 and 4

Ofwat's nominated research company and the Household Retail Team within Regulation carry out quality checks on interviews that have taken place to ensure that the answers reflect the customers response and that the interviewer has followed the correct procedure for carrying out and recording the interview. The scores of the respective qualitative survey's for the current reporting year are as provided by Ofwat's nominated research company.

Block A - Line 5

The qualitative score is calculated as follows:

```
[(S - LS) / (HS - LS)] * WS
```

where:

S = qualitative survey annual average score (unrounded).

LS = minimum survey score possible (set at 1).

HS = maximum survey score possible (set at 5).

WS = survey weighting (set at 75)."

Block B - Line 6

The information required for this table is externally assured through the annual reporting process by the technical auditor, currently Jacobs, and signed off by the responsible senior data manager.

The quantitative composite score is calculated as follows:

[(unwanted phone contacts x 1) + (written complaints x 5) + (escalated written complaints x 100) + (CCWater investigated complaints x 1000)] / (connected household properties /1000)"

Block B - Line 7

The quantitative score is calculated as follows:

[1 - [(C - CL) / (CH - CL)]] * WC

where:









C = total contact score (see above).

CL = contact score minimum (set at 0).

CH = contact score maximum (set at 500).

WC = contact score weighting (set at 25)."

Block C - Line 8

The total annual SIM score is the addition of R10 lines 5 and 7.

Block D - Line 9

SIM high performance payment / (low performance penalty) revenue adjustment at end of period for retail. Output item from revenue adjustments model. The value entered is prior to profiling.

The Service Incentive Mechanism ended in 2018/19. In order to calculate the equivalent score in 2019/20 the C-Mex shadow survey for telephone calls is to be applied. This survey uses a satisfaction score ranging from 0 to 10 rather than 1 to 5 used in the SIM. Our forecast of performance is based on the new scale to calculate the average level of satisfaction in lines 1-4. The formula for calculating the overall qualitative score remains the same.







