

Annual Performance Report 2016/2017

The changes we have made

December 2018

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1.

Purpose of this document

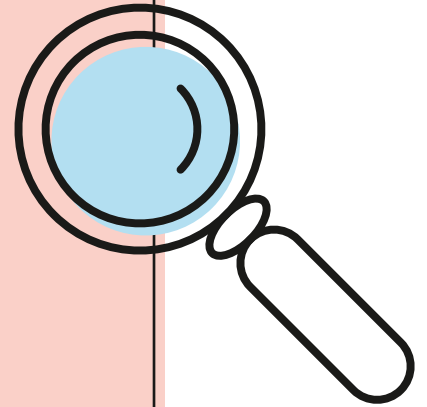
This document summarises the changes we have made to our Annual Performance Report (APR) since its first publication on 13th July 2018. You can find our updated APR on our reports page yorkshirewater.com/reports

For each change we have used the following format:

- Observation
- Description of the change
- What the section used to look like
- What it looks like now
- What are we doing differently to make sure it never happens again.

We have made a total of 20 changes to our APR this year. This is made up of:

- nine corrections,
- eight improvements, and
- three which are both correction and improvement.



The information in our APR goes through several checks before it reaches you, this is to reduce the risk of errors within it. Sometimes, despite our checks, minor errors find their way into our report. Rather than just correcting those errors in our APR, we thought it would be better to be open and transparent and tell you about them.

To achieve our aim of being more transparent and providing the information that is needed, we have expanded some of the explanations in our APR. These are the ‘improvements’ shown in this document.

Our objective is to have zero errors in our APR, so every correction we have had to make, even though it’s a fraction of the potential errors that could have been made, is one too many.

We want to make sure we deal with any changes appropriately and in a timely fashion. We want to be proactive with how we tell you about them at the earliest opportunity. That’s why we have produced this document.

We want to improve our performance in future years, so we will learn from these corrections and improvements, building the learning into our risks, strengths and weaknesses statement and our assurance plan for next year.

If you’d like to learn more about the process we use to check our reports and information, which we call our three levels of assurance, click here to view our reports page, where you can find our final assurance plan and data assurance summary.

yorkshirewater.com/reports



2.

Your thoughts on this document



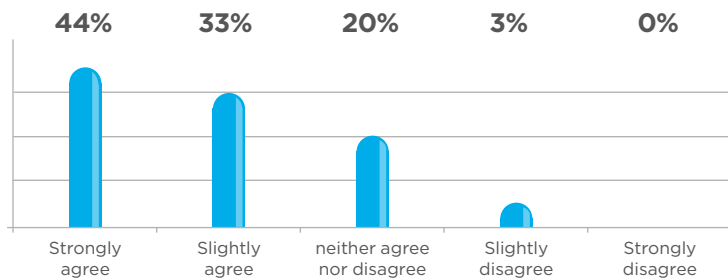
We asked our Your Water community of around 1000 customers their opinion on the change log and we also asked them whether they thought the change log has improved the transparency of Yorkshire Water.

We would like to thank all of our customers who participated in the questionnaire. We had 75 responses. The feedback we received has been overwhelmingly positive.

Our customers told us that it was important for us to publish a change log and that it improves the transparency of Yorkshire Water. Some of our customers told us that the change log was comprehensive but could be shorter.

This is what our customers told us

77% of our participants strongly or slightly agreed with the statement that the change log has improved the transparency of Yorkshire Water.



"Page 4 is rather well written"

"I think it's really respectable that YW publish this information. I think it makes them seem much more trustworthy as a company as I'm not sure that other companies would do this."

"I think it's important that Yorkshire Water publishes this document, even if only a few people read it. The document does indeed improve how transparent Yorkshire Water's annual reporting data is. I think a minor improvement would be to condense the document into a smaller one that still retains all the essential information."

"The only improvements I can think of would be to make it shorter, as it is a long read!"

"It shows that YW is a company of integrity and honesty and holds its hands up when it makes mistakes - and then it does something to improve the situation."

"It is important for YW to publish this document as it proves to customers and interested parties that the organisation is committed to providing correct and relevant information. Ofwat requires such reporting and I am convinced that publishing any corrections highlights YW's commitment to their customers as well as detailing overall transparency."

"Very important for transparency, builds up trust between consumer and provider."

3. **Summary of the things we will do differently**

What we have learnt and the action we will take

Data

Learning: There are still opportunities for us to prevent the small number of errors in the data we publish.

Action: We will share these cases with our reporting and assurance communities to make sure they are aware of the data checks they need to carry out to prevent errors from happening.

Data

Learning: On occasions our reported data can be out of line with the historical trend.

Action: Where data is materially different from previous years we will improve our explanation of the trend it is showing.

Reporting

Learning: Each year we seek to improve our reporting, which can lead to a change from previous years.

Action: We will explain clearly where we have made improvements to reporting and any material impacts this has on the data.

Reporting

Learning: We need to be confident that every piece of information is in the correct format.

Action: We will strengthen our internal processes to ensure that the data is reported in the correct format and is in line with the guidance.

4. Summary of the changes we made

Summary of the changes we made

We have made a total of 20 changes to our APR. We have grouped some of the changes together where they are closely related. All the changes to our APR have been made in Section 7. Regulatory Information. In summary, the changes are:

Change number	Page number in the updated APR	Table / Line	Observation	Description of the change and the action we have taken	Classification of change
1	244	Table 4Q, line 4Q.19	There has been a significant decrease in 4Q.19, 'Number of lead communication pipes replaced for water quality' reported, from 10,051 at 2016/2017 to 246 in 2017/2018.	We have provided additional narrative to explain the decrease in the number of lead communication pipes replaced for water quality, line 4Q.19, resulting from the successful completion of our improvement plan in 2016/2017.	Improvement
2	244	Table 4Q, lines 4Q.24 and 4Q.25	There has been a significant decrease in 4Q.25, 'Energy consumption - water resources' and increase in 4Q.24, 'Energy consumption - network plus' from the 2016/2017 figures.	We have provided additional narrative to explain the decrease in energy consumption - water resources and increase in energy consumption - network plus. The observed changes resulted from us making further improvements to our reporting this year. We carried out work with our technical optimisation engineers in both clean water and waste water to further refine the detailed understanding of the boundaries between price controls.	Improvement
3	190	Table 4H, lines 4H.6 and 4H.11	Dividends used to pay head office costs and Kelda Finance interest was deducted from gross dividend when calculating dividend yield and dividend cover values in table 4H.	We have provided additional narrative to explain why we deducted 'dividends used to pay head office costs and Kelda Finance interest' from our gross dividend when calculating dividend yield and dividend cover values. We have updated line 4H.6 'Dividend yield' from 0.00% to 1.73% and updated line 4H.11 'Dividend cover' from 0.00 to 2.39.	Correction and improvement
4	124	Table 1F	An older version of the financial flows table (table 1F) and associated guidance was used.	We have updated our financial flows table to include lines 1a and 1b and followed the updated guidance.	Correction
5	193	Table 4H, lines 4H.13	No formula or explanation was provided for how we calculated our interest cover (cash) in table 4H.	We have provided the precise formula used and additional narrative on how we calculated our interest cover (cash) in table 4H.	Improvement

Change number	Page number in the updated APR	Table / Line	Observation	Description of the change and the action we have taken	Classification of change
6	242	Table 4Q, lines 4Q.9, 4Q.10 and 4Q.11	<p>The following lines in table 4Q are unusually high:</p> <ul style="list-style-type: none"> Line 4Q.9, 'Number of residential meters renewed', Line 4Q.10, 'Number of business meters renewed' Line 4Q.11, 'Number of meters installed at request of optants' 	<p>We have updated our figures by aligning them to the table units for the following lines in table 4Q:</p> <ul style="list-style-type: none"> Line 4Q.9, 'Number of residential meters renewed' changed from 24957.000 to 24.957 Line 4Q.10, 'Number of business meters renewed' changed from 1866.000 to 1.866 Line 4Q.11, 'Number of meters installed at request of optants' changed from 27969.000 to 27.969 	Correction
7	249	Table 4R, line 4R.7	The table commentary for line 4R.7 referenced 60 total number of rising main bursts in 2016/2017.	We have corrected our commentary for line 4R.7 to reference 64 total number of rising main bursts in 2016/2017.	Correction
8	261	Table 4V, lines 4V.9, 4V.10, 4V.11 and 4V.12	The 'Employment costs' and equivalent full-time equivalents (FTE) figures reported in lines 4V.9 and 4V.11 have materially increased and those reported in lines 4V.10 and 4V.12 have materially decreased.	We have provided additional narrative to explain why the 'Employment costs' and equivalent FTE figures reported in lines 4V.9 and 4V.11 have materially increased and those reported in lines 4V.10 and 4V.12 have materially decreased. The observed changes resulted from using new technologies to record information.	Improvement
9	244	Table 4Q, lines 4Q.1 and 4Q.2	There have been significant changes between the 2016/2017 and 2017/2018 figures for; 4Q.1, Residential properties billed for measured water (external meter) which reduced from 738,863 to 691,583, and 4Q.2 Residential properties billed for measured water (not external meter) which increased from 305,401 to 394,464.	We have provided additional narrative to explain the changes in the figures for 4Q.1, Residential properties billed for measured water (external meter) and 4Q.2 Residential properties billed for measured water (not external meter) which increased from 305,401 to 394,464. The observed changes resulted from the work that was being undertaken on our billing file information in preparation for the opening of the non-household retail market in 2016/2017.	Improvement
10	249	Tables 4R and 4S, lines 4R.12 and 4S.8	There is a difference in the scale of reductions between 'Trade effluent volume' and 'Load received from trade effluent customers', lines 4R.12 and 4S.8 of tables 4R and 4S respectively.	We have provided additional narrative to explain the difference in the scale of reductions between 'Trade effluent volume' and 'Load received from trade effluent customers'.	Improvement
11	260	Tables 4V and 4W, lines 4V.7 and 4W.7	There was a negative Historical Cost Depreciation (HCD) figure in line 7 of tables 4V and 4W. This is expected to be entered as a positive number.	We have updated our HCD figure in tables 4V and 4W converting the negative depreciation figure to a positive figure.	Correction

Change number	Page number in the updated APR	Table / Line	Observation	Description of the change and the action we have taken	Classification of change
12	262	Table 4W, line 4W.21	The Traffic Management Act costs reported in table 4W have significantly increased in 2017/2018 and has been reported solely in network plus sewage treatment when previously they have been reported in network plus sewage transport.	We have provided additional narrative on why the Traffic Management Act costs reported in table 4W have significantly increased in 2017/2018, and why we have reported it in network plus sewage collection rather than network plus sewage treatment. We have updated line 4W.21 'Costs associated with Traffic Management Act' by reporting the figure under 'Network plus sewage collection'.	Correction and improvement
13	229	Table 4O, lines 4O.10 and 4O.15	For Brighthouse/Upper sewage treatment works (STW), line 4O.10 there was a >8-fold increase in Flow passed to full treatment (FFT) from 19,541 to 162,289m3/d. For Scarborough STW, line 4O.10 there was a >3-fold increase in FFT from 6,686 to 21,809m3/d. For Blackburn Meadows STW, line 4O.15 the estimated terminal pumping expenditure increased from £6,000 in 2016/2017 to £403,000 in 2017/2018.	We have updated the FFT figure for Brighthouse/Upper STW, line 4O.10 from 162,289 m3/d to 22,942 m3/d. We have provided additional narrative to explain the >3-fold increase in FFT for Scarborough STW which resulted from the transposing of figures for the 2016/2017 submission. We also explain why the estimated terminal pumping expenditure has increased from £6,000 in 2016/2017 to £403,000 in 2017/2018. This resulted from an increase in power costs to run terminal pumps and due to our ongoing improvement in cost allocation.	Correction and improvement
14	227	Table 4N	There are large percentage changes in many lines in table 4N from values submitted in 2016/2017 compared to 2017/2018. In particular, there is an increase of 88% in the Opex cost of size band 3 STWs and reduction of 51.8% in the Opex cost of size band 4 STWs.	We have provided additional narrative to explain the large percentage changes in table 4N. The observed changes resulted from our enhanced cost allocation process for 2017/2018.	Improvement
15	248	Table 4R, lines 4R.3 and 4R.4	There is an increase in lines 4R.3 and 4R.4 in 2017/2018 compared to previous years.	We have included historic data for lines 4R.3 and 4R.4 to avoid a step jump in the reported numbers from previous years and provided additional narrative to explain the observed increase.	Improvement
16	252	Table 4S, line 4S.22	There is a significant difference between the resident population equivalent reported in table WWn4 block I line 22 for 2017 in our PR19 data table and that reported in table 4S of our 2017/2018 APR (0 in our PR19 data table vs. 5,134 in our APR). Our PR19 data tables can be viewed here: yorkshirewater.com/appendices	We have updated the 'Current population equivalent served by STWs with tightened/new N consents' figure in table 4S of our APR, line 4S.22 from 5,134 to 0. This is due to a capital scheme being incorrectly categorised. This change causes lines 4M.15 and 4M.16 to change described in change 17 below.	Correction

Change number	Page number in the updated APR	Table / Line	Observation	Description of the change and the action we have taken	Classification of change
17	218	Table 4M, lines 4M.15 and 4M.16	In change 16, we updated the 'Current population equivalent served by STWs with tightened/new N consents' figure in table 4S, line 4S.22 from 5,134 to 0. This change affects lines 4M.15 and 4M.16 in table 4M.	<p>We have updated the Network Plus sewage collection - sewage treatment and disposal' figure in table 4M of our APR, line 4M.16 - 'NEP - Nutrients (N removal)' from £0.112m to £0m and updated line 4M.15, 'NEP - Investigations' from £0.499m to £0.611m.</p> <p>We have updated the 'Network Plus sewage treatment - sewage treatment and disposal' figure for line 4M.16, 'NEP - Nutrients (N removal)' from £0.308m to £0m and updated line 4M.15, 'NEP - Investigations' from £5.918m to £6.226m.</p>	Correction
18	259	Table 4U, line 4U.22	<p>There is a significant variance between table WWS4 line 10 of the PR19 data tables and table 4U line 22 in the APR 2017/2018.</p> <p>Our PR19 data tables can be viewed here: yorkshirewater.com/appendices</p>	We have updated the 'Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives' figure, line 4U.22 from 14,600 m ³ to 0 m ³ .	Correction
19	235	Table 4P, lines 4P.32 and 4P.33	<p>Lines 18 and 19 on table Wn1 of the PR19 data tables (GW2 and GW3 MI/d values for 2017/2018) do not match the figures in our APR table 4P, lines 4P.32 and 4P.33.</p> <p>Our PR19 data tables can be viewed here: yorkshirewater.com/appendices</p>	<p>We have updated the values for the following lines in table 4P:</p> <ul style="list-style-type: none"> Line 4P.32, 'Total water treated at all GW2 works' changed from 60.47 MI/d to 53.89 MI/d Line 4P.33, 'Total water treated at all GW3 works' changed from 43.12 MI/d to 49.71 MI/d <p>The variance is caused by a change in the classification of the Catterick water treatment works (WTW). Its status changed from GW2 status to GW3 due to an increase in the complexity of the treatment process. This classification change causes lines 4P.47 and 4P.48 to change described in change 20 below.</p>	Correction
20	235	Table 4P, line 4P.48	<p>Line 34 on table Wn1 of the PR19 data tables (number of GW3 works for 2017/2018) does not match APR table 4P, line 4P.48.</p> <p>Our PR19 data tables can be viewed here: yorkshirewater.com/appendices</p>	<p>We have updated the value in line 4P.48 'Total number of GW3 works' from 4 sites to 5 sites. This is because the classification of the Catterick water treatment works (WTW) changed from GW2 status to GW3 status.</p> <p>Line 4P.47, 'Total number of GW2 works' remains the same because we have included a previously excluded site called Littleworth WTW. This site whilst not in operation is not decommissioned and therefore we should have included this in line 4P.47.</p>	Correction

5. **The detail behind each change**

Change 1	Improvement
<p>Observation</p> <p>There has been a significant decrease in 4Q.19, ‘Number of lead communication pipes replaced for water quality’ reported, from 10,051 at 2016/2017 to 246 in 2017/2018.</p>	
<p>Description of the change</p> <p>We have provided additional narrative to explain the decrease in the number of lead communication pipes replaced for water quality, line 4Q.19, resulting from the successful completion of our improvement plan in 2016/2017.</p>	
<p>What the section used to look like</p> <p>We didn’t provide any narrative on this line.</p>	
<p>We have added the following narrative</p> <p>Line 19. Number of lead communication pipes replaced for water quality</p> <p>Line 19 shows a significant reduction when compared to previous years because most of the lead replacement work was completed in 2015/2016 and 2016/2017. A few jobs remained due to a Highways Agency embargo, which have been subsequently completed in 2017/2018 (Yr3 - 246). The reduced number of lead replacement work completed in Year 3 aligns with the Final Determination.</p>	
<p>What are we going to do differently?</p> <p>Where our figures significantly change from previous years, or do not follow a trend from previous years, we will explain clearly why the change has occurred.</p>	

Change 2**Improvement****Observation**

There has been a significant decrease in 4Q.25, 'Energy consumption - water resources' and increase in 4Q.24, 'Energy consumption - network plus' from the 2016/2017 figures.

Description of the change

We have provided additional narrative to explain the decrease in energy consumption - water resources and increase in energy consumption - network plus. The observed changes resulted from us making further improvements to our reporting this year. We carried out work with our technical optimisation engineers in both clean water and waste water to further refine the detailed understanding of the boundaries between price controls.

What the section used to look like**Line 25. Energy consumption – Water resources.**

This line is the Energy Consumed that falls within the water resources boundary split for water treatment. This covers everything from raw water pumping from rivers to boreholes and in some cases small holding reservoirs. It does not include energy that is used in WTW or grid pumping.

For collocated sites that contain both WTW and water resource assets, a percentage split is applied to the main incoming supply based upon the equipment located on the site and the knowledge of company experts.

Overall electrical consumption has increased this year. This is attributed to the need to pull from rivers and boreholes earlier than normally required.

Office electrical consumption has increased by 10% due to improvements in the way the data is reported. Annually there has been a 0.5GWh increase possibly due to occupancy levels.

We have added the following narrative

We have made further improvements to our reporting this year. Work has been carried out with our technical optimisation engineers in both clean water and waste water to further refine the detailed understanding of the boundaries between price controls. The refined process for allocating consumption resulted in an increase in assets falling within the water network plus boundary.

In summary:

- All major clean water sites are now broken out to a process level allowing better boundary splits to be reported. This has resulted in an individual percentage split for each large site depending upon what equipment is installed.
- Other refinements include the allocation of boreholes and raw water pumping stations.
- Office consumption is now based on the type of occupancy levels in the buildings as opposed to a generic 25% split.

The net result is an increase to energy consumption within water network plus and a decrease in energy consumption in water resources.

What are we going to do differently?

Where we have made improvements to our reporting processes and procedures which lead to a significant difference in the reported figures we will indicate this more clearly in our explanations.

Change 3**Correction and improvement****Observation**

Dividends used to pay head office costs and Kelda Finance interest was deducted from gross dividend when calculating dividend yield and dividend cover values in table 4H.

Description of the change

We have provided additional narrative to explain why we deducted ‘dividends used to pay head office costs and Kelda Finance interest’ from our gross dividend when calculating dividend yield and dividend cover values.

We have updated line 4H.6 ‘Dividend yield’ from 0.00% to 1.73% and updated line 4H.11 ‘Dividend cover’ from 0.00 to 2.39.

What the section used to look like**Table change**

Line description		Units	DPs	Metric
A - Financial indicators				
4H.1	Net debt	£m	3	4790.618
4H.2	Regulated equity	£m	3	1655.707
4H.3	Regulated gearing	%	2	74.32%
4H.4	Post tax return on regulated equity	%	2	2.16%
4H.5	RORE (return on regulated equity)	%	2	4.61%
4H.6	Dividend yield	%	2	0.00%
4H.7	Retail profit margin - Household	%	2	0.74%
4H.8	Retail profit margin - Non household	%	2	-0.54%
4H.9	Credit rating	Text	n/a	Baa2
4H.10	Return on RCV	%	2	4.20%
4H.11	Dividend cover	dec	2	0.00

We didn't provide any narrative on this line.

Change 3**Correction and improvement****What it looks like now****Table change****Table 4H: Financial metrics**

For the 12 months ended 31 March 2018

Line description		Units	DPs	Metric
A - Financial indicators				
4H.1	Net debt	£m	3	4790.618
4H.2	Regulated equity	£m	3	1655.707
4H.3	Regulated gearing	%	2	74.32%
4H.4	Post tax return on regulated equity	%	2	2.16%
4H.5	RORE (return on regulated equity)	%	2	4.61%
4H.6	Dividend yield	%	2	1.73%
4H.7	Retail profit margin - Household	%	2	0.74%
4H.8	Retail profit margin - Non household	%	2	-0.54%
4H.9	Credit rating	Text	n/a	Baa2
4H.10	Return on RCV	%	2	4.20%
4H.11	Dividend cover	dec	2	2.39

Narrative change**Lines 6 and 11: Dividend yield and Dividend cover**

For previous submissions, we elected to use the figure that transparently presents the dividend received by the ultimate shareholders, as an equity return, in the year in question. This year, we have updated our figures for dividend yield and dividend cover to remain unadjusted.

What are we going to do differently?

We improve our explanation of the difference between dividends paid from Yorkshire Water and how they are used to pay other legitimate costs of running the company before any remaining dividend is paid to shareholders.

Change 4

Correction

Observation

An older version of the financial flows table (table 1F) and associated guidance was used.

Description of the change

We have updated our financial flows table to include lines 1a and 1b and followed the updated guidance.

What the section used to look like

Annual Performance Report 2017/2018

Table 1F – Financial flows
For the 12 months ended 31 March 2018

Line description	Units	DR	%		
			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
A					
1F.1 Regulatory return on Equity	%	2	5.65%	3.87%	5.65%
1F.2 Regulatory Equity Base	£	0	2,309	2,309	1,445
B – Financing					
1F.3 Gearing	%	2	0.00%	0.96%	1.41%
1F.4 Variance in corporation tax	%	2	0.00%	-0.39%	-0.57%
1F.5 Group relief	%	2	0.00%	0.00%	0.00%
1F.6 Cost of debt	%	2	0.00%	2.35%	3.43%
1F.7 Hedging instruments	%	2	0.00%	-1.33%	-1.97%
1F.8 Sub total	%	2	5.65%	5.44%	7.94%
C – Operational Performance					
1F.9 Totex out / (under) performance	%	2	0.00%	-0.98%	-1.29%
1F.10 ODI out / (under) performance	%	2	0.00%	0.46%	0.79%
1F.11 Retail out / (under) performance	%	2	0.00%	-0.33%	-0.48%
1F.12 Sub total	%	2	0.00%	-0.73%	-0.64%
1F.13 Total earnings	%	2	5.65%	4.71%	6.88%
1F.14 RCV growth	%	2	3.74%	3.74%	3.74%
1F.15 Total shareholder return	%	2	9.39%	8.45%	10.62%
1F.16 Net dividend	%	2	4.00%	1.00%	1.76%
1F.17 Retained value	%	2	5.39%	7.25%	8.66%
D – Dividends reconciliation					
1F.18 Gross dividend	%	2	0.00%	3.75%	5.47%
1F.19 Interest receivable on intercompany loans	%	2	0.00%	-2.55%	-3.72%
1F.20 Net dividend	%	2	0.00%	1.20%	1.76%

		%		
		Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
		19.2	81.6	81.6
		0.0	20.3	20.3
		0.0	-8.3	-8.3
		0.0	0.0	0.0
		0.0	49.6	49.6
		0.0	-26.5	-26.5
		19.2	114.8	114.8
		0.0	-88.6	-88.6
		0.0	10.2	10.2
		0.0	-7.0	-7.0
		0.0	15.4	15.4
		19.2	99.4	99.4
		78.9	78.9	54.0
		198.0	178.3	153.4
		0.0	25.4	25.4
		198.0	152.9	128
		0.0	79.1	79.1
		0.0	-53.7	-53.7
		0.0	25.4	25.4

Key
 Input cell
 Calculated cell using the data in the RPI indices tab
 Linked or self calculating cells
 Totals

Level 3 assurance has been carried out by the internal audit team for Table 1F.

The internal audit team can confirm that:

- Figures in the commentary agree to those in Table 1F.
- The basis of calculations and completion of the table are in line with the guidance.
- The table agrees to the supporting records.

Line 1 – Regulatory return on equity

This value has been taken from the final determination nominal weighted average cost of capital, this is 5.65% for the period 2015-2020

Line 2 – Regulatory equity base

Notional
This has been calculated as 62.5% of the average RCV value which was published within our final determination, this value was given as at 2012/2013 average prices and therefore no conversion was required.

Actual

This has been calculated using the actual gearing level as published within Table 1E of the APR.

Line 3 – Gearing

This has been calculated in line with the Ofwat guidance, the variance between the actual gearing and the notional gearing has been multiplied by the variance in the cost of equity to debt.

Line 4 – Variance in corporation tax

This has been calculated in line with Ofwat guidance, the calculation is shown below:

	Price base	2015/2016	2016/2017	2017/2018
Taxation	2012/2013 avg	1.4	6.8	5.1
Tax payable on profits/loss	2012/2013 avg	0.4	(28.7)	(6.5)
Prior year adjustments - HMRC	2012/2013 avg	2.4	-	-
Accelerated CA	2012/2013 avg	-	-	-
Deferred CA	2012/2013 avg	(24.2)	(6.9)	(6.9)
Variance in corporation tax	2012/2013 avg	(21.8)	(28.9)	(8.3)
Average equity RCV		2.022	2.071	2.309
Variance in corporation tax		-1%	-1.4%	-0.4%

We have included within the calculation the amount of tax that would have been payable on our appointed activities prior to the adjustments made to capital allowances and the utilisation of group relief.

After the impact of group relief and capital allowances the amount within the accounts for 2015/2016 was shown as a receipt of £2.3m for prior years adjustments, 2016/2017 showed a nil tax payment and 2017/2018 was a payment of £15m which was for group relief.

Line 5 – Group relief

This has been calculated in line with Ofwat guidance, the calculation is shown below:

	Price base	2015/2016	2016/2017	2017/2018
Group relief utilised	2012/2013 avg	36.4	25.0	13
Group relief paid	2012/2013 avg	-	-	(15)
Group Relief		36.4	25.0	-

Up until a change in our accounting policy in 2017/2018 we did not show a payment for group relief within our accounts, the above table reflects the position.

Line 6 – Cost of debt

The total cost of debt impact has been calculated as per the letter on Regulated Equity (RORE) guidance within the APR and is reported post tax.

The nominal weighted average cost of interest as reported in Table 1E is adjusted for the average RPI within the year to calculate the actual real cost of debt.

The difference between the actual real cost of debt and the 2.59% that was included within the RRE WACC has been multiplied by the notional level of debt.

An adjustment is then made to include the element of this variance which is attributed to Hedging Instruments, reported in line 7.

Line 7 – Hedging instruments
The hedging instruments that we hold are accountable for a 1% increase on our real cost of debt.

Line 9 – Totex out/(under) performance
This is taken from the APR calculation for table 4H5 RORE and is reported post tax.

Line 10 – ODI out/(under) performance

This is taken from the APR calculation for table 4H5 RORE and is reported post tax.

Line 11 – Retail out/(under) performance

This is taken from the APR calculation for table 4H5 RORE and is reported post tax.

Line 18 – Gross dividend

We have included the gross dividend that was paid form the appointed company within the relevant years.

This has been restated at 2012/2013 average prices.

Line 19 – Interest receivable on intercompany loans

We have included the value that the appointed company receives in the year on inter-company loans.

This has been restated at 2012/2013 average prices.

Change 4

Correction

What it looks like now

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Table 1F - Financial flows
For the 12 months ended 31 March 2018 (Price Base - 2012-13 RPI Average)

Line description	Units	DPS	%			£		
			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
A								
1 Return on regulatory equity	%	2	5.60%	3.70%	5.60%	19.2	80.0	80.0
1a Actual performance adjustment 2010-2015	%	2	1.67%	1.12%	1.67%	35.2	25.6	25.6
1b Adjusted Return on regulatory equity	%	2	7.32%	4.91%	7.32%	154.4	105.6	105.6
2 Regulatory equity base	£	0	2,109	2,109	1,415			
B - Financing								
3 Gearing	%	2	0.00%	1.56%	2.32%	0.0	32.8	32.8
4 Variance in corporation tax	%	2	0.00%	-0.39%	-0.59%	0.0	-8.3	-8.3
5 Group relief	%	2	0.00%	0.00%	0.00%	0.0	0.0	0.0
6 Cost of debt	%	2	0.00%	2.08%	3.71%	0.0	43.8	52.5
7 Hedging instruments	%	2	0.00%	1.63%	-2.91%	0.0	-34.4	-41.2
8 Sub total	%	2	7.32%	6.52%	9.89%	154.4	117.6	139.4
C - Operational Performance								
9 Toxex out / (under) performance	%	2	0.00%	-1.09%	-1.63%	0.0	-23.0	-23.0
10 ODI out / (under) performance	%	2	0.00%	0.60%	0.89%	0.0	12.6	12.6
11 Retail out / (under) performance	%	2	0.00%	-0.4%	-0.61%	0.0	-8.6	-8.6
12 Sub Total	%	2	0.00%	-0.90%	-1.34%	0.0	-19.0	-19.0
13 Total earnings	%	2	7.32%	5.62%	8.51%	154.4	118.6	120.5
14 RCV growth	%	2	3.74%	3.74%	3.74%	78.8	78.8	52.9
15 Total shareholder return	%	2	11.06%	9.36%	12.25%	233.2	197.4	173.5
16 Net dividend	%	2	4.00%	1.20%	1.79%	84.4	25.4	25.4
17 Retained Value	%	2	7.06%	8.16%	10.45%	148.8	172.0	147.9
D - Dividends reconciliation								
18 Gross Dividend	%	2	4.00%	3.70%	5.59%	84.4	79.1	79.1
19 Interest Receivable on intercompany loans	%	2	0.00%	2.55%	3.80%	0.0	53.7	53.7
20 Net dividend	%	2	4.00%	1.20%	1.79%	84.4	25.4	25.4

Key
 Input cell
 Calculated cell using the data in the RPI indices tab
 Linked or self calculating cells
 Totals

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Line 1 – Regulatory return on equity
This value has been taken from the final determination weighted average cost of capital, this is 5.65% for the period 2015-2020.

Line 1A – Actual performance adjustment 2010-2015
This has been calculated by taking the 2010 out / (under) performance adjustments contained within our PR14 final determination, divided by our regulated equity.

Line 2 – Regulatory equity base
Notional
This has been calculated as 62.5% of the average RCV value which was published within our final determination, this value was given in 2012-2013 average prices and therefore no conversion was required.
Actual
This has been calculated using the actual average gearing level, using the opening and closing net debt as published within Table 1E of the APR.

Line 2 – Gearing
This has been calculated in line with the Ofwat guidance, the variance between the actual average gearing (using the opening and closing net debt as published within Table 1E of the APR) and the notional gearing has been multiplied by the variance in the cost of equity to debt.

Line 4 – Variance in corporation tax
This has been calculated in line with Ofwat guidance, the calculation is shown below:

	Price base	2016/2016	2016/2017	2017/2018
Taxation	2012/2015 avg	14	6.8	5.1
Tax payable on profit/loss	2012/2015 avg	(12.2)	(8.1)	(6.5)
Prior year adjustments - HMRC	2012/2015 avg	2.4	-	-
Accelerated CA	2012/2015 avg	-	-	-
Deferred CA	2012/2015 avg	(24.2)	(6.9)	(6.9)
Average equity RCV		2,022.0	2,071.5	2,109.2
Variance in corporation tax	2012/2015 avg	(32.7)	(18.2)	(8.3)

We have included within the calculation the amount of tax that would have been payable on our appointed activities prior to the adjustments made to capital allowances and the utilisation of group relief.

After the impact of group relief and capital allowances the amount within the accounts for 2016-17 was shown as a receipt of £2.5m for prior year adjustments, 2016-17 showed a nil tax payment and 2017-18 showed a payment of £15m which was for group relief.

Line 5 – Group relief
This has been calculated in line with Ofwat guidance, the calculation is shown below:

	Price base	2016/2016	2016/2017	2017/2018
Group relief utilised	2012/2015 avg	36.4	25.0	13
Group relief paid	2012/2015 avg	-	-	(13)
Line 1F.5 Group Relief	2012/2015 avg	36.4	25.0	-

Up until a change in our accounting policy in 2017-18 we did not show a payment for group relief within our accounts, the above table reflects this position.

Change 4

Correction

What it looks like now

Annual Performance Report 2017/2018

Line 6 - Cost of debt
The total cost of debt impact has been calculated in line with Ofwat guidance.

The net actual interest paid as reported in table 1A has been adjusted for inter-company interest and then divided by our average net debt (using the opening and closing net debt as reported in table 1E) to calculate the actual nominal cost of debt.

Average RPI within the year has then been deducted from the actual nominal cost of debt to calculate the actual real cost of debt. (A simple deduction has been applied in line with Ofwat's guidance, rather than using the Fischer equation).

The difference between the actual real cost of debt and the 2.59% that was included within the PPI4 WACC is then calculated.

Notional
The difference calculated above is then multiplied by the average RCV and the notional level of gearing (62.5%). An adjustment is then made for corporation tax at the standard rate.

An adjustment is then made to exclude the element of this variance which is attributed to Hedging instruments, reported in line 7.

Actual
The difference calculated above is then multiplied by the average RCV and the actual average level of gearing (using the opening and closing net debt reported in table 1E).

An adjustment is then made for corporation tax at the standard rate.

An adjustment is then made to exclude the element of this variance which is attributed to Hedging instruments, reported in line 7.

Line 7 - Hedging Instruments
We have assessed the impact of our hedging instruments on our overall cost of debt. In the current year this impact has been assessed as 1.2%.

Line 9 – tax out/(under) performance
This is taken from the APR calculation for table 4H.5 RORE.

Line 10 – ODI out/(under) performance
This is taken from the APR calculation for table 4H.5 RORE.

Line 11 – Retail out/(under) performance
This is taken from the APR calculation for table 4H.5 RORE.

Line 15 - Gross Dividend
We have included the gross dividend that was paid from the appointed company within the relevant years.

This has been deflated to 2012-13 average prices.

Line 16 - Interest Receivable on Intercompany loans
We have included the value that the appointed company receives in the year on inter-company loans.

This has been deflated to 2012-13 average prices.

ii. Price control and additional segmental reporting
The information in this section comprises various financial analyses as required by Ofwat, with a brief description of significant variances compared to previous years:

Table 2A: Further analysis of the income statement by business segment
Table 2B: Analysis of totex (operating and capital expenditure) costs
Table 2C: Retail operating cost analysis
Table 2D: Historical cost analysis of fixed assets - wholesale and retail
Table 2E: Analysis of capital contributions and land sales - wholesale
Table 2F, 2G & 2H: Analysis of the household and non-household revenue by customer type
Table 2i: Revenue analysis and wholesale control reconciliation
Table 2j: Analysis of new connections - network reinforcement

Where further explanation of specific information is required, technical notes are included as appropriate.

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What are we going to do differently?

We will strengthen our internal processes for monitoring the release of updated material to us regardless of the route into Yorkshire Water.

Change 5**Improvement****Observation**

No formula or explanation was provided for how we calculated our interest cover (cash) in table 4H.

Description of the change

We have provided the precise formula used and additional narrative on how we calculated our interest cover (cash) in table 4H.

What the section used to look like

We didn't provide any narrative on this line.

We have added the following narrative and calculation formulas**Line 13: interest cover (cash)**

This is the formula we have used to calculate the interest cover (cash) in table 4H:

$$\text{Interest Cover (cash)} = \frac{\text{Funds from Operations (Table 4H Line 12)+Interest Paid on Borrowings}}{\text{Interest Paid on Borrowings}}$$

Interest paid on borrowings is made up of the following:

YW Net Interest Paid (Table 1D Line 10 of the APR)	£137.4m
Add back interest received on subordinated inter-company loans (see note 7 of Yorkshire Water Services Ltd ("YWS") annual report and financial statement for the year ended 31 March 2018, page 136) www.yorkshirewater.com/sites/default/files/730444_YWS_ARFS%202018%20FINAL.pdf	£51.1m
Add back a loan debt repayment from YWS to Yorkshire Water Services Odsal Finance Ltd ("YWSOFL" - a subsidiary of YWS) to pay the interest on bonds raised by YWSOFL which have previously been on-lent to YWS (see note 15 of YWSOFL annual report for the year ended 31 March 2018, page 23) www.keldagroup.com/media/4475/Yorkshire-Water-Services-Odsal-Finance-Limited.pdf	£6.0m
Interest Paid on Borrowings	£194.5m

Therefore, the calculation is as follows:

$$\text{Interest Cover (cash)} = \frac{£429.354+£194.5}{£194.5} = 3.21$$

What are we going to do differently?

We will improve the explanation of our calculations, especially where they are technically complex or relate to data that may not be immediately available in the APR.

Change 6**Correction****Observation**

The following lines in table 4Q are unusually high:

- Line 4Q.9, 'Number of residential meters renewed',
- Line 4Q.10, 'Number of business meters renewed'
- Line 4Q.11, 'Number of meters installed at request of optants'.

Description of the change

We have updated our figures by aligning them to the table units for the following lines in table 4Q:

- Line 4Q.9, 'Number of residential meters renewed' changed from 24957.000 to 24.957
- Line 4Q.10, 'Number of business meters renewed' changed from 1866.000 to 1.866
- Line 4Q.11, 'Number of meters installed at request of optants' changed from 27969.000 to 27.969

What the section used to look like**Table 4Q – Non-financial data - properties, population and other - wholesale water**

For the 12 months ended 31 March 2018

Line description		Unit	DPs	Current year
A - Properties and population				
4Q.1	Residential properties billed for measured water (external meter)	000	3	691.583
4Q.2	Residential properties billed for measured water (not external meter)	000	3	394.464
4Q.3	Business properties billed measured water	000	3	107.115
4Q.4	Residential properties billed for unmeasured water	000	3	968.051
4Q.5	Business properties billed unmeasured water	000	3	14.639
4Q.6	Total business connected properties at year end	000s	3	141.953
4Q.7	Total residential connected properties at year end	000s	3	2163.365
4Q.8	Total connected properties at year end	000	3	2305.318
4Q.9	Number of residential meters renewed	000	3	24957.000
4Q.10	Number of business meters renewed	000s	3	1866.000
4Q.11	Number of meters installed at request of optants	000	3	27969.000

Change 6**Correction****What the table looks like now****Table 4Q – Non-financial data - properties, population and other - wholesale water**

For the 12 months ended 31 March 2018

Line description		Unit	DPs	Current year
A - Properties and population				
4Q.1	Residential properties billed for measured water (external meter)	000	3	691.583
4Q.2	Residential properties billed for measured water (not external meter)	000	3	394.464
4Q.3	Business properties billed measured water	000	3	107.115
4Q.4	Residential properties billed for unmeasured water	000	3	968.051
4Q.5	Business properties billed unmeasured water	000	3	14.639
4Q.6	Total business connected properties at year end	000s	3	141.953
4Q.7	Total residential connected properties at year end	000s	3	2163.365
4Q.8	Total connected properties at year end	000	3	2305.318
4Q.9	Number of residential meters renewed	000	3	24.957
4Q.10	Number of business meters renewed	000s	3	1.866
4Q.11	Number of meters installed at request of optants	000	3	27.969

What are we going to do differently?

We will review the guidance we provide to our level 1 and level 2 assurance providers to make sure they thoroughly check the data unit requirements in the published table guidance. We will also embed a process to check back against previous years reported figures which would highlight any significant changes in the figures.

Change 7	Correction
<p>Observation</p> <p>The table commentary for line 4R.7 referenced 60 total number of rising main bursts in 2016/2017.</p>	
<p>Description of the change</p> <p>We have corrected our commentary for line 4R.7 to reference 64 total number of rising main bursts in 2016/2017.</p>	
<p>What the section used to look like</p> <p>Line 7. Total number of rising main bursts. There have been 94 bursts in 2017/2018 which is an increase compared to 60 failures in 2016/2017. A number of mains have suffered multiple failures and are included in a sewer rehabilitation programme.</p>	
<p>What it looks like now</p> <p>Line 7. Total number of rising main bursts. There have been 94 bursts in 2017/2018 which is an increase compared to 64 failures in 2016/2017. A number of mains have suffered multiple failures and are included in a sewer rehabilitation programme.</p>	
<p>What are we going to do differently?</p> <p>We will review and improve our assurance processes to make sure that our level 1 and level 2 assurance providers are aware of the need to check the numbers reported in the explanatory text are consistent with previous year's and are correct.</p>	

Change 8	Improvement
<p>Observation</p> <p>The ‘Employment costs’ and equivalent full-time equivalents (FTE) figures reported in lines 4V.9 and 4V.11 have materially increased and those reported in lines 4V.10 and 4V.12 have materially decreased.</p>	
<p>Description of the change</p> <p>We have provided additional narrative to explain why the ‘Employment costs’ and equivalent FTE figures reported in lines 4V.9 and 4V.11 have materially increased and those reported in lines 4V.10 and 4V.12 have materially decreased. The observed changes resulted from using new technologies to record information.</p>	
<p>What the section used to look like</p> <p>We didn’t provide any narrative on this line.</p>	
<p>We have added the following narrative</p> <p>Total direct and indirect employment costs within water networks plus have moved year-on-year by under 5%, but with a significantly increased proportion of directly attributed employment costs. We have included the main price control allocation changes within our Methodology Statement, which is included in this report. The main reasons for the increase in the proportion of directly attributed salary allocations (and vice versa, similarly for FTE numbers) are:</p> <ol style="list-style-type: none"> 1. By using a new Business Intelligence (BI) tool using data recorded from SAP, a new and more detailed view of staff time has been obtained. In addition, where managers or teams are not time scheduled on SAP (for example team leaders) we have challenged these teams to be specifically charged to a price control rather than as general and support expenditure categories. This has driven more directly attributable costs. 2. There has been an increase in directly allocated FTE’s and employment costs within water networks plus as a result of the enhanced programme to meet our leakage targets and deal with the severe weather experienced during 2017/2018, without increasing back office costs to the same proportion. <p>These changes are also reflected in table 4W which reports on our waste water employment costs and FTE’s.</p>	
<p>What are we going to do differently?</p>	
<p>Where we have made improvements to our reporting processes and procedures which lead to a significant difference in the reported figures we will describe this more clearly in our explanations.</p>	

Change 9

Improvement

Observation

There have been significant changes between the 2016/2017 and 2017/2018 figures for; 4Q.1, Residential properties billed for measured water (external meter) which reduced from 738,863 to 691,583, and 4Q.2 Residential properties billed for measured water (not external meter) which increased from 305,401 to 394,464.

Description of the change

We have provided additional narrative to explain the changes in the figures for 4Q.1, Residential properties billed for measured water (external meter) and 4Q.2 Residential properties billed for measured water (not external meter) which increased from 305,401 to 394,464. The observed changes resulted from the work that was being undertaken on our billing file information in preparation for the opening of the non-household retail market in 2016/2017.

What the section used to look like

Technical notes

Lines 1-7. Provides information in respect of households and non- households for measured and unmeasured water, plus the number of connected properties at the end of the reporting year.

The 2017/2018 performance is in line with expectations. We continue to see a decrease in unmeasured customers and an increase in measured customers across both household and non-household customers.

We have added the following narrative and historic data

There have been significant changes on lines 4Q.1 and 4Q.2 between 2016/2017 and 2017/2018, due to the work that was being undertaken on the billing files in preparation for the opening of the non-household retail market in 2016/2017. The reported figure for this year is correct and in line with historical trend between 2011/2012 and 2016/2017 as shown in the table below.

Table	Description	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
4Q.1	Residential properties billed for measured water (external meter)	000's	538.372	564.460	592.087	620.875	648.892	738.863	691.583
4Q.2	Residential properties billed for measured water (not external meter)	000's	275.925	298.048	319.864	334.504	348.818	305.401	394.464
	Residential properties billed for measured water (external meter)	%	66%	65%	65%	65%	65%	71%	64%
	Residential properties billed for measured water (not external meter)	%	34%	35%	35%	35%	35%	29%	36%

What are we going to do differently?

Where we have made improvements to our reporting processes and procedures which lead to a significant difference in the reported figures we will describe this more clearly in our explanations.

Change 10	Improvement
<p>Observation</p> <p>There is a difference in the scale of reductions between ‘Trade effluent volume’ and ‘Load received from trade effluent customers’, lines 4R.12 and 4S.8 of tables 4R and 4S respectively.</p>	
<p>Description of the change</p> <p>We have provided additional narrative to explain the difference in the scale of reductions between ‘Trade effluent volume’ and ‘Load received from trade effluent customers’.</p>	
<p>What the section used to look like</p> <p>We didn’t provide any narrative on this line.</p>	
<p>We have added the following narrative</p> <p>Line 12: Volume of trade effluent (We have also included this narrative under table 4S.)</p> <p>Changes within industry have played a part in the reported reductions. We have observed that some traders have reduced the scale of their operations. Dependent upon the specific traders involved, volume and load can move differently.</p> <p>In addition, this has been the first year of operating the non-household retail market and the management of trade effluent has transferred from our internal billing system to the new Central Market Operating System, which is designed to cope with all wholesalers billing arrangements. During the year we have identified a number of required improvements in the billing of wholesale services including trade effluent. We observed some unexpected results which we have been working to understand throughout the year and continue to work on this year. This has accounted for some of the reduction in the volume of trade effluent.</p> <p>Our expectation is that these improvements to our reporting will be in place for next year’s reporting. We observe, that the load to flow ratio remains consistent with that of other companies.</p>	
<p>What are we going to do differently?</p> <p>Where we have made improvements to our reporting processes and procedures which lead to a significant difference in the reported figures we will indicate this more clearly in our explanations.</p>	

Change 11

Correction

Observation

There was a negative Historical Cost Depreciation (HCD) figure in line 7 of tables 4V and 4W. This is expected to be entered as a positive number.

Description of the change

We have updated our HCD figure in tables 4V and 4W converting the negative depreciation figure to a positive figure.

What the section used to look like

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Table 4V- Operating cost analysis - water resources
For the 12 months ended 31 March 2018

Line description	Unit	DPs	Imponding reservoir	Pumped storage	River abstractions
Water resources					
A - Opex analysis					
4V1 Power	£m	3	0.236	0.039	0.329
4V2 Income treated as negative expenditure	£m	3	-10.109	-0.061	0.000
4V3 Local authority and Carmarthen	£m	3	4.966	0.039	0.121
4V4 Other direct operating expenditure	£m	3	7.453	0.021	2.339
4V5 Other indirect operating expenditure	£m	3	0.897	0.000	0.407
4V6 Total operating expenditure (excluding 3rd party)	£m	3	11.392	0.050	5.398
4V7 Depreciation	£m	3	-2.815	-0.014	-0.625
4V8 Total operating costs (excluding 3rd party)	£m	3	10.577	0.036	2.773

Groundwater, including HAD water supply schemes	Artificial recharge (AR) water supply schemes	Aquifer storage and recovery (ASR) water supply schemes	Total
1.491	0.000	0.000	2.316
10.000	0.000	0.000	-0.808
3.789	0.000	0.000	6.926
2.851	0.000	0.000	12.664
3.153	0.000	0.000	4.377
9.284	0.000	0.000	26.125
2.350	0.000	-1.247	-6.860
7.125	0.000	-1.247	19.265

Line description	Unit	DPs	Water resources	Raw water distribution	Water treatment
B - Other expenditure - wholesale water					
4V9 Employment costs - directly allocated	£m	3	2.128	1.243	1.351
4V10 Employment costs - indirectly allocated	£m	3	1.111	0.517	3.485
4V11 Number FTEs consistent with 4V9 above	Nr	0	50	29	259
4V12 Number FTEs consistent with 4V10 above	Nr	0	27	12	81
4V13 Costs associated with Traffic Management Act	£m	3	0.000	0.000	0.000

Line description	Unit	DPs	Water resources	Raw water distribution	Water treatment
C - Service charges					
4V14 Canal & River Trust service charges and discharge consents	£m	3	0.000	0.000	0.000
4V15 Environment Agency service charges/ discharge consents	£m	3	4.978	0.514	0.025
4V16 Other service charges / permits	£m	3	0.000	0.000	0.000
4V17 Statutory water softening	£m	3	0.000	0.000	0.000

Treated water distribution	Total
21.655	36.577
11.658	16.769
579	397.000
273	393.000
1.437	1.437
0.000	0.000
0.001	5.518
0.000	0.000
0.000	0.000

This is a new table for 2017/2018, and is further disaggregation of water resources data contained within 4V, and reconciles to line 8 however, it does not reconcile with table 4J. To allocate these costs, all relevant assets were classified according to the tables in line with RAG 4.07. Of the total cost £378 have been directly allocated, given that most assets already had dedicated cost centres. The remaining £18 have been apportioned accordingly using management assessment.

To allocate employment costs and full-time equivalents (FTEs) into the wholesale water categories, we have used consistent manpower allocations (detailed by each FTE) which has provided the basis for lines 9 -13.

The Traffic Management Act (TMA) costs have been provided by our internal permitting team, and only include the direct costs of the permits, and exclude the on costs associated with Local Authority Charges.

Key
 Input cell Calculation cell

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Table 4W- Operating cost analysis - sludge treatment
For the 12 months ended 31 March 2018

Line description	Unit	DPs	Untreated sludge	Raw sludge mining	Conventional AD
Sludge treatment opex by treatment type					
A - Sludge treatment type					
4W1 Income treated as negative expenditure	£m	3	1.555	0.000	-0.308
4W2 Local authority and Carmarthen	£m	3	0.370	0.000	0.438
4W3 Other direct operating expenditure	£m	3	6.514	0.000	7.959
4W4 Other indirect operating expenditure	£m	3	4.443	0.000	4.897
4W5 Total operating expenditure (excluding 3rd party)	£m	3	12.879	0.000	13.797
4W6 Depreciation	£m	3	-3.810	0.000	-4.365
4W7 Total operating costs (excluding 3rd party)	£m	3	9.069	0.000	9.432

Advanced AD	Incineration of raw sludge	Incineration of digested sludge	Photo conditioning / composting	Other	Total
-0.106	0.000	0.000	0.000	0.000	-0.106
-0.861	0.000	0.000	0.000	0.000	-0.861
1.536	0.000	0.000	0.000	0.000	1.536
2.281	0.000	0.000	0.000	0.000	31.262
1.626	0.000	0.000	0.000	0.000	11.966
3.719	0.000	0.000	0.000	0.000	27.444
0.000	0.000	-3.599	0.000	-4.233	16.412
0.000	0.000	0.000	0.000	0.000	0.000

Line description	Unit	DPs	Untreated sludge	Raw sludge mining	Conventional AD
B - Sludge disposal route					
4W8 Income treated as negative expenditure	£m	3	0.000	0.000	0.000
4W9 Local authority and Carmarthen	£m	3	0.000	0.000	0.000
4W10 Other direct operating expenditure	£m	3	1.839	0.000	2.326
4W11 Other indirect operating expenditure	£m	3	0.847	0.000	1.175
4W12 Total operating expenditure (excluding 3rd party)	£m	3	2.687	0.000	3.501
4W13 Depreciation	£m	3	0.000	0.000	0.000
4W14 Total operating costs (excluding 3rd party)	£m	3	2.687	0.000	3.501

Line description	Unit	DPs	Network plus sewage collection	Sludge
Other expenditure - Wholesale wastewater				
C - Opex analysis				
4W15 Employment costs - directly allocated	£m	3	0.000	21.443
4W16 Employment costs - indirectly allocated	£m	3	3.562	3.439
4W17 Number FTEs consistent with 4W15 above	Nr	0	367	291
4W18 Number FTEs consistent with 4W16 above	Nr	0	187	86
4W19 Costs associated with Traffic Management Act	£m	3	0.000	0.285
4W20 Costs associated with Industrial Emissions Directive	£m	3	0.000	0.000

Line description	Unit	DPs	Untreated sludge	Raw sludge mining	Conventional AD
D - Service charges					
4W21 Canal & River Trust service charges and discharge consents	£m	3	0.212	0.000	0.000
4W22 Environment Agency service charges/ discharge consents	£m	3	1.135	1.009	0.288
4W23 Other service charges / permits	£m	3	0.000	0.000	0.000

Total
44.891
10.314
162
107
0.285
0.000
0.212
4.761
0.000

This is a new table for 2017/2018, with Sections A and B being a disaggregation of table 4E of sludge treatment costs, and reconciles to line 9 however, it does not reconcile with table 4E, with further opex and service charge analysis for wholesale waste water in Sections C and D.

To allocate the sludge treatment costs, all relevant assets were classified according to the tables in line with RAG 4.07, with sludge treatment costs directly allocated by site where possible into the relevant treatment categories (Unlimited Sludge, Conventional & Advanced). Of the total cost £26 have been directly allocated, given that most assets already had dedicated cost centres. The remaining 35% non-site-specific costs were apportioned using the site-specific opex.

To allocate employment costs and full-time equivalents (FTEs) into the wholesale waste water categories, we have used consistent manpower allocations (detailed by each FTE) which has provided the basis for lines 17-20.

The Traffic Management Act (TMA) costs have been provided by our internal permitting team, and only include the direct costs of the permits, and exclude the on costs associated with Local Authority Charges.

Key
 Input cell Calculation cell

Change 11

Correction

What it looks like now

Table 4V- Operating cost analysis - water resources

For the 12 months ended 31 March 2018

Line description	Unit	DPs	Impounding reservoir	Pumped storage	River abstractions	
Water resources						
A - Opex analysis						
4V1	Power	£m	3	0.236	0.059	0.529
4V2	Income Treated as negative expenditure	£m	3	-0.109	-0.051	0.000
4V3	Local authority and Cumulo rates	£m	3	4.995	0.019	0.123
4V4	Other direct operating expenditure	£m	3	7.453	0.021	2.339
4V5	Other indirect operating expenditure	£m	3	0.817	0.000	0.407
4V6	Total operating expenditure (excluding 3rd party)	£m	3	13.392	0.050	3.398
4V7	Depreciation	£m	3	2.815	0.014	0.625
4V8	Total operating costs (excluding 3rd party)	£m	3	16.207	0.064	4.023

Line description	Unit	DPs	Water resources	Raw water distribution	Water treatment	
B - Other expenditure - wholesale water						
4V9	Employment costs - directly allocated	£m	3	2.128	1.243	11.351
4V10	Employment costs - indirectly allocated	£m	3	1.111	0.517	3.483
4V11	Number FTEs consistent with 4V9 above	Nr	0	50	29	259
4V12	Number FTEs consistent with 4V10 above	Nr	0	27	12	81
4V13	Costs associated with Traffic Management Act	£m	3	0.000	0.000	0.000
C - Service charges						
4V14	Canal & River Trust service charges and discharge consents	£m	3	0.000	0.000	0.000
4V15	Environment Agency service charges/ discharge consents	£m	3	4.978	0.514	0.025
4V16	Other service charges / permits	£m	3	0.000	0.000	0.000
4V17	Statutory water softening	£m	3	0.000	0.000	0.000

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Groundwater, excluding MAR water supply schemes	Artificial recharge (AR) water supply schemes	Aquifer storage and recovery (ASR) water supply schemes	Total
1.491	0.000	0.000	2.316
0.000	0.000	0.000	-0.159
1.789	0.000	0.000	6.926
2.851	0.000	0.000	12.664
3.153	0.000	0.000	4.377
9.284	0.000	0.000	26.125
2.159	0.000	1.247	6.860
11.443	0.000	1.247	32.985

Treated water distribution	Total
21.655	36.377
11.658	16.769
579	917.000
273	393.000
1.437	1.437

0.000	0.000
0.001	5.518
0.000	0.000
0.000	0.000

Key
 Input cell Calculation cell

This is a new table for 2017/2018, and is further disaggregation of water resources data contained within 4D, and reconciles to line 9 however, it does not reconcile with table 4J. To allocate these costs, all relevant assets were classified according to the tables in line with RAG 4.07. Of the total cost 83% have been directly allocated, given that most assets already had dedicated cost centres. The remaining 13% have been apportioned accordingly using management assessment.

To allocate employment costs and full-time equivalents (FTEs) into the wholesale water categories, we have used consistent manpower allocations (detailed by each FTE) which has provided the basis for lines 9-13.

The traffic management act (TMA) costs have been provided by our internal permitting team, and only include the direct costs of the permits, and exclude the on costs associated with Local Authority Charges.

Total direct and indirect employment costs within water networks plus have moved year-on-year by under 5%, but with a significantly increased proportion of directly attributed employment costs. We have included the main price control allocation changes within our Methodology Statement, included in this report. The main reasons for the increase in the proportion of directly attributed salary allocations (and vice versa, similarly for FTE numbers) are:

1) By using a new Business Intelligence (BI) tool using data recorded from SAP, a new and more detailed view of staff time has been obtained. In addition, where managers or teams are not time scheduled on SAP (for example team leaders) we have challenged these teams to be specifically charged to price control rather than as general and support expenditure categories. This has driven more directly attributable costs.

2) There has been an increase in directly allocated FTEs and employment costs within water networks plus as a result of the escalation to meet the leakage targets and deal with the severe weather experienced during 2017-18, without increasing back office costs to the same proportion.

These changes are also reflected in table 4W which looks at waste water employment costs and FTEs.

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Change 11

Correction

What it looks like now

Table 4W – Operating cost analysis - sludge treatment
For the 12 months ended 31 March 2018

Line description	Unit	DPs	Untreated sludge	Raw sludge liming	Conventional AD	
Sludge treatment opex by treatment type						
A - Sludge treatment type						
4W.1	Power	£m	3	1,124	0.000	-0.388
4W.2	Income treated as negative expenditure	£m	3	0.000	0.000	-1.627
4W.3	Local authority and Cumsulo rates	£m	3	0.730	0.000	0.438
4W.4	Other direct operating expenditure	£m	3	6.734	0.000	7.399
4W.5	Other indirect operating expenditure	£m	3	4.443	0.000	4.897
4W.6	Total operating expenditure (excluding 3rd party)	£m	3	13.031	0.000	10.719
4W.7	Depreciation	£m	3	3.655	0.000	8.555
4W.8	Total operating costs (excluding 3rd party)	£m	3	16.686	0.000	19.284
B - Sludge disposal route						
4W.9	Power	£m	3	0.000	0.000	0.000
4W.10	Income treated as negative expenditure	£m	3	0.000	0.000	0.000
4W.11	Local authority and Cumsulo rates	£m	3	0.001	0.000	0.001
4W.12	Other direct operating expenditure	£m	3	1.874	0.000	3.516
4W.13	Other indirect operating expenditure	£m	3	0.947	0.000	1.775
4W.14	Total operating expenditure (excluding 3rd party)	£m	3	2.821	0.000	5.292
4W.15	Depreciation	£m	3	0.000	0.000	0.000
4W.16	Total operating costs (excluding 3rd party)	£m	3	2.821	0.000	5.292
Other expenditure - Wholesale wastewater						
Line description	Unit	DPs	Network plus sewage collection	Network plus sewage treatment	Sludge	
C - Opex analysis						
4W.17	Employment costs - directly allocated	£m	3	13.130	21.443	10.337
4W.18	Employment costs - indirectly allocated	£m	3	5.662	5.409	2.712
4W.19	Number FTEs consistent with line 4W.17	Nr	0	367	505	239
4W.20	Number FTEs consistent with line 4W.18 above	Nr	0	127	119	60
4W.21	Costs associated with Traffic Management Act	£m	3	0.285	0.000	0.000
4W.22	Costs associated with Industrial Emissions Directive	£m	3	0.000	0.000	0.000
D - Service charges						
4W.23	Canal & River Trust service charges and discharge consents	£m	3	0.272	0.000	0.000
4W.24	Environment Agency service charges / discharge consents	£m	3	1.335	3.109	0.319
4W.25	Other service charges / permits	£m	3	0.000	0.000	0.000

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Advanced AD	Incineration of raw sludge	Incineration of digested Sludge	Photo-conditioning / composting	Other	Total
-0.106	0.000	0.000	0.000	0.000	0.630
-0.461	0.000	0.000	0.000	0.000	-2.088
0.156	0.000	0.000	0.000	0.000	1.324
2.319	0.000	0.000	0.000	0.000	16.652
1.626	0.000	0.000	0.000	0.000	10.966
3.734	0.000	0.000	0.000	0.000	27.484
0.000	0.000	3.599	0.000	0.233	16.052
3.734	0.000	3.599	0.000	0.233	43.536
0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000
0.001	0.000	0.000	0.000	0.000	0.002
2.599	0.000	0.000	0.000	0.000	7.991
1.264	0.000	0.000	0.000	0.000	3.986
3.766	0.000	0.000	0.000	0.000	11.879
0.000	0.000	0.000	0.000	0.000	0.000
3.766	0.000	0.000	0.000	0.000	11.879

Total This is a new table for 2017/2018, with Sections A and B being a disaggregation of table 4E of sludge treatment costs, and reconciles to line 9 however, it does not reconcile with table 4K, with further opex and service charge analysis for wholesale waste water in Sections C and D.

To allocate the sludge treatment costs, all relevant assets were classified according to the tables in line with RAG 4.07, with sludge treatment costs directly allocated by site where possible into the relevant treatment categories (Untreated Sludge, Conventional & Advanced). Of the total cost 65% have been directly allocated, given that most assets already had dedicated cost centres. The remaining 35% non-site-specific costs were apportioned using the site-specific splits.

To allocate employment costs and full-time equivalents (FTEs) into the wholesale waste water categories, we have used consistent manpower allocations (detailed by each FTE) which has provided the basis for lines 17- 20.

The traffic management act (TMA) costs have been provided by our internal permitting team, and only include the direct costs of the permits, and exclude the oncosts associated with Local Authority Charges. The Traffic Management Act costs reported in table 4W have significantly increased year on year based on the requirements from local authorities who are implementing permitting schemes and increasing their annual usage of permits across varying road types.

The costs for Traffic Management Act on table 4W has been reported in Network plus sewage collection.

Key
 Input cell Calculation cell

203

What are we going to do differently?

We will review our assurance processes to make sure our level 1 and level 2 assurance providers check that our reported numbers are in line with the guidance and raise specific awareness that the same number can be reported in more than one table but with a different sign.

Change 12**Correction and Improvement****Observation**

The Traffic Management Act costs reported in table 4W have significantly increased in 2017/2018 and has been reported solely in network plus sewage treatment when previously they have been reported in network plus sewage transport.

Description of the change

We have provided additional narrative on why the Traffic Management Act costs reported in table 4W have significantly increased in 2017/2018, and why we have reported it in network plus sewage collection rather than network plus sewage treatment.

We have updated line 4W.21 'Costs associated with Traffic Management Act' by reporting the figure under 'Network plus sewage collection'.

What the section used to look like

The traffic management act (TMA) costs have been provided by our internal permitting team, and only include the direct costs of the permits, and exclude the oncosts associated with Local Authority Charges.

See change 11 to view table 4W prior to the change.

We have added the following narrative

The traffic management act (TMA) costs have been provided by our internal permitting team, and only include the direct costs of the permits, and exclude the oncosts associated with Local Authority Charges. The Traffic Management Act costs reported in table 4W have significantly increased year on year based on the requirements from local authorities who are implementing permitting schemes and increasing their annual usage of permits across varying road types.

The costs for Traffic Management Act on table 4W has been reported in Network plus sewage collection.

What are we going to do differently?

We will review our assurance processes to make sure our level 1 and level 2 assurance providers check that our reported numbers are in line with the guidance.

Change 13**Correction and Improvement****Observation**

For Brighouse/Upper sewage treatment works (STW), line 4O.10 there was a >8-fold increase in Flow passed to full treatment (FFT) from 19,541 to 162,289m³/d.
For Scarborough STW, line 4O.10 there was a >3-fold increase in FFT from 6,686 to 21,809m³/d.

For Blackburn Meadows STW, line 4O.15 the estimated terminal pumping expenditure increased from £6,000 in 2016/2017 to £403,000 in 2017/2018.

Description of the change

We have updated the FFT figure for Brighouse/Upper STW, line 4O.10 from 162,289 m³/d to 22,942 m³/d.

We have provided additional narrative to explain the >3-fold increase in FFT for Scarborough STW which resulted from the transposing of figures for the 2016/2017 submission.

We also explain why the estimated terminal pumping expenditure has increased from £6,000 in 2016/2017 to £403,000 in 2017/2018. This resulted from an increase in power costs to run terminal pumps and due to our ongoing improvement in cost allocation.

What the section used to look like**Table**

STWNAMED04	STWNAMED05	STWNAMED06	STWNAMED07	STWNAMED08	STWNAMED09	STWNAMED10
Bolton on Dearne/ STW	Bradford Esholt/ NO 2 STW	Bridlington STW	Brighouse/Upper STW	Calder Vale/STW	Castleford/STW	Denaby/NO 2 STW
	TA2	TA2	SAS	SAS	SAS	SAS
0.00	481.68	38.40	54.29	121.53	31.19	32.33
0	20	60	30	30	65	35
0	10	0	20	20	45	25
0	3	0	5	3	10	9
0	0	0	0	0	0	0
0	0	20	0	0	0	0
0	28901	2304	3257	7292	1871	1940
0	133,213	13,473	162,289	35,644	12,195	7,389
0	4821	509	658	1343	240	422
0	654	69	89	182	33	57
0	5475	578	747	1526	273	480
0	256	27	35	71	13	22
0	170	0	0	0	16	46

Change 13**Correction and Improvement****What the section used to look like****Commentary**

This table follows on from 4N, lines 7-10 inclusive. All the sites above are separately costed within Yorkshire Water's accounting systems.

This table (Lines 1-10) contains detailed information relating to the large WWTWs with a population equivalent greater than 25000. Each of the 36 Yorkshire Water sites is listed together with its treatment type, population equivalent, consent information for common parameters, and flow and load received in 2017/2018.

Clarification received from Ofwat confirms this table should reconcile to line 7 and 8 in table 4N and follows the same principles explained in table 4N.

What the section looks like now**Table change**

STWNAMED04	STWNAMED05	STWNAMED06	STWNAMED07	STWNAMED08	STWNAMED09	STWNAMED10
Bolton on Dearne/ STW	Bradford Esholt/ NO 2 STW	Bridlington STW	Brighouse/Upper STW	Calder Vale/STW	Castleford/STW	Denaby/NO 2 STW
	TA2	TA2	SAS	SAS	SAS	SAS
0.00	481.68	38.40	54.29	121.53	31.19	32.33
0	20	60	30	30	65	35
0	10	0	20	20	45	25
0	3	0	5	3	10	9
0	0	0	0	0	0	0
0	0	20	0	0	0	0
0	28901	2304	3257	7292	1871	1940
0	133,213	13,473	22,942	35,644	12,195	7,389
0	4821	509	658	1343	240	422
0	654	69	89	182	33	57
0	5475	578	747	1526	273	480
0	256	27	35	71	13	22
0	170	0	0	0	16	46

Change 13**Correction and Improvement****What the section used to look like****We have included the following additional narrative****Line 10: Scarborough STW**

The >3-fold increase in FFT from 6,686 to 21,809m³/d for line 10 Scarborough STW from last year to this year is due to the transposing of figures for the 2016/2017 submission. Last year, the figure for Selby No2 STW was used for Scarborough STW and vice versa. This has been corrected for this submission.

Line 15: Blackburn Meadows STW

The terminal pumping expenditure has increased for Blackburn Meadows STW because of the power costs to run terminal pumps. The costs for estimated terminal pumping expenditure have been reviewed for 2017/2018 submission with operational colleagues in much more detail than before as part of our ongoing improvement in cost allocation.

What are we going to do differently?

Where our figures significantly change from previous years, or do not follow a trend from previous years, we will explain clearly why the change has occurred.

Change 14	Improvement
<p>Observation</p> <p>There are large percentage changes in many lines in table 4N from values submitted in 2016/2017 compared to 2017/2018. In particular, there is an increase of 88% in the Opex cost of size band 3 STWs and reduction of 51.8% in the Opex cost of size band 4 STWs.</p>	
<p>Description of the change</p> <p>We have provided additional narrative to explain the large percentage changes in table 4N. The observed changes resulted from our enhanced cost allocation process for 2017/2018.</p>	
<p>What the section used to look like</p> <p>This is a new table in 2017/2018 which analyses the costs of different size sewage treatment works. We have allocated all direct costs to site where possible, with nearly all large works separately costed. For minor works, which are grouped into areas for materiality reasons, the costs were sub-divided into the following categories for optimum allocation.</p> <ul style="list-style-type: none"> • Site specific. • Area site costs. • Employee direct costs. • Maintenance. • Facilities and Business Rates. • General and support. <p>The requirement of the table is to have all the above costs directly /indirectly allocated in Bands 1-6 which are defined in the RAGs 4.07. The information to split the sites into bands and STW loads was supplied from the asset inventory system. Estimated terminal pumping percentages were supplied by energy experts within the business.</p> <p>Clarity received from Ofwat on line 7 to include service charges and terminal pumping costs therefore lines 9 and 10 in this table are shown as disclosure items. These costs exclude business rates but include any atypical costs which is consistent with table 4E.</p>	
<p>We have added the following narrative</p> <p>We have enhanced the cost allocation process for 2017/2018, following Ofwat feedback at a cost assessment meeting that showed Yorkshire Water sites showed few economies of scale as band size increased. Other companies reflected economies of scale, with average unit costs of a band 3 STW higher than a band 4 STW. Our current submission brings our unit price data in line with industry norms, and the data in table 4N should remain as submitted. Our intention has been to make our data more useful when combined / compared with that of other companies.</p> <p>Examples of cost allocation improvements made this year includes:</p> <ul style="list-style-type: none"> • Maintenance - we have worked with the maintenance team and asset inventory team to determine maintenance costs by site, so they can be allocated to bands accurately. • Power – each site has been reviewed to ensure accurate consumption and costs are reflected for sewage treatment. <p>In the future, as stated in the accounting separation methodology, we are refreshing our corporate SAP systems, whereby each site will have a separate cost centre therefore separating costs.</p>	
<p>What are we going to do differently?</p> <p>Where we have made improvements to our reporting processes and procedures which lead to a significant difference in the reported figures, we will indicate this more clearly in our explanations.</p>	

Change 15**Improvement****Observation**

There is an increase in lines 4R.3 and 4R.4 in 2017/2018 compared to previous years.

Description of the change

We have included historic data for lines 4R.3 and 4R.4 to avoid a step jump in the reported numbers from previous years and provided additional narrative to explain the observed increase.

What the section used to look like**Line 3. Total pumping station capacity.**

Total pumping station capacity in 2017/2018 is 70,022Kw, an increase of 13.4% from 61,740Kw in 2016/2017. The majority of the increase is due to the inclusion of inlet pumping after clarification from OFWAT and a revision of the 'average Kw' capacity value used for transferred sites. There were 21 private sewage pumping stations transferred to our network in 2017/2018 which have contributed to the increase in capacity.

Line 4. Number of Network Pumping Stations.

There has been a 6.7% increase in the number of network pumping stations to 2,488 in 2017/2018. This increase is related to the inclusion of inlet pumping after clarification from Ofwat. There have been 21 private sewage pumping stations identified for transfer in 2017/2018 which have also contributed to the reported increase.

We have added the following narrative and historic data

The table below shows the historic data for lines 4R.3 and 4R.4 for the period 2011-2012 to 2016-2017.

Line number	Line Description	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
4R.3	Total pumping station capacity	66221	66190	66592	67281	67391	69757	70022
4R.4	Number of network pumping stations	1975	1993	2007	2042	2058	2463	2488

The introduction of the Water Act 2011 on 1/10/2016, resulted in a transfer of approximately 370 eligible private pumping stations to Yorkshire Water in 2016/2017, this increase can be observed on line 4R.4 in the table above.

Where pumping station kW capacity was unknown, due to being recently transferred under the Water Act 2011, we used the 2017/2018 post audit average values (5.4kW for pumping stations transferred 1/10/2016; 29.9kW for network SPS; 69.1kW for inlet pumping stations) were applied historically to prevent variation in the average calculation.

Due to the replacement of pumps at pumping stations, there may be some variation in the total pumping station capacity. This is due to slight differences in pump kW ratings.

What are we going to do differently?

Where we have made improvements to our reporting processes and procedures which lead to a significant difference in the reported figures, we will indicate this more clearly in our explanations.

Change 16**Correction****Observation**

There is a significant difference between the resident population equivalent reported in table WWn4 block I line 22 for 2017 in our PR19 data table and that reported in table 4S of our 2017/2018 APR (0 in our PR19 data table vs. 5,134 in our APR).

Our PR19 data tables can be viewed here:
yorkshirewater.com/appendices

Description of the change

We have updated the 'Current population equivalent served by STWs with tightened/new N consents' figure in table 4S of our APR, line 4S.22 from 5,134 to 0. This is due to a capital scheme being incorrectly categorised. This change causes lines 4M.15 and 4M.16 to change described in change 17 below.

What the table used to look like

Line description	Unit	DPs	Current Year	
C - Population equivalent				
4S.16	Current population equivalent served by STWs	000	3	5729.451
4S.17	Current population equivalent served by discharge relocation schemes	000s	3	0.000
4S.18	Current population equivalent served by filter bed STWs with tightened/new P consents	000s	3	160.893
4S.19	Current population equivalent served by activated sludge STWs with tightened/new P consents	000s	3	0.000
4S.20	Current population equivalent served by groundwater protection schemes	000s	3	0.000
4S.21	Current population equivalent served by STWs with a Flow1 driver scheme	000s	3	0.000
4S.22	Current population equivalent served by STWs with tightened/new N consents	000s	3	5.134
4S.23	Current population equivalent served by STWs with tightened/new sanitary parameter consents	000s	3	16.049
4S.24	Current population equivalent served by STWs with tightened/new UV consents	000s	3	0.000
4S.25	Population equivalent treatment capacity enhancement	000s	3	0.000

What the table looks like now

Line description	Unit	DPs	Current Year	
C - Population equivalent				
4S.16	Current population equivalent served by STWs	000	3	5729.451
4S.17	Current population equivalent served by discharge relocation schemes	000s	3	0.000
4S.18	Current population equivalent served by filter bed STWs with tightened/new P consents	000s	3	160.893
4S.19	Current population equivalent served by activated sludge STWs with tightened/new P consents	000s	3	0.000
4S.20	Current population equivalent served by groundwater protection schemes	000s	3	0.000
4S.21	Current population equivalent served by STWs with a Flow1 driver scheme	000s	3	0.000
4S.22	Current population equivalent served by STWs with tightened/new N consents	000s	3	0.000
4S.23	Current population equivalent served by STWs with tightened/new sanitary parameter consents	000s	3	16.049
4S.24	Current population equivalent served by STWs with tightened/new UV consents	000s	3	0.000
4S.25	Population equivalent treatment capacity enhancement	000s	3	0.000

What are we going to do differently?

We will review our assurance processes to make sure our level 1 and level 2 assurance providers check that our reported numbers are in line with the guidance.

Change 17**Correction****Observation**

In change 16, we updated the 'Current population equivalent served by STWs with tightened/new N consents' figure in table 4S, line 4S.22 from 5,134 to 0. This change affects lines 4M.15 and 4M.16 in table 4M.

Description of the change

We have updated the Network Plus sewage collection - sewage treatment and disposal' figure in table 4M of our APR, line 4M.16 - 'NEP - Nutrients (N removal)' from £0.112m to £0m and updated line 4M.15, 'NEP - Investigations' from £0.499m to £0.611m.

We have updated the 'Network Plus sewage treatment - sewage treatment and disposal' figure for line 4M.16, 'NEP - Nutrients (N removal)' from £0.308m to £0m and updated line 4M.15, 'NEP - Investigations' from £5.918m to £6.226m.

What the table used to look like

Line description	Units	DPs	Expenditure in report year									Total
			Network Plus sewage collection			Network Plus sewage collection		Sludge				
			Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal		

A - Enhancement expenditure by purpose

4M.15	NEP - Investigations	£m	3	0.001	0.001	0.000	0.499	0.000	0.000	0.000	0.000	0.501
4M.16	NEP - Nutrients (N removal)	£m	3	0.000	0.000	0.000	0.112	0.000	0.000	0.000	0.000	0.112

Cumulative expenditure on schemes completed in the report year

Network Plus sewage collection			Network Plus sewage treatment		Sludge			Total
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	

0.004	0.004	0.002	5.918	0.000	0.000	0.000	0.000	5.928
0.000	0.000	0.000	0.308	0.000	0.000	0.000	0.000	0.308

Change 17

Correction

What the table looks like now

Line description	Units	DPs	Expenditure in report year								
			Network Plus sewage collection			Network Plus sewage collection		Sludge			Total
			Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	

A - Enhancement expenditure by purpose

4M.15	NEP - Investigations	£m	3	0.001	0.001	0.000	0.611	0.000	0.000	0.000	0.000	0.613
4M.16	NEP - Nutrients (N removal)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Cumulative expenditure on schemes completed in the report year

Network Plus sewage collection		Network Plus sewage treatment		Sludge			Total
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	

0.004	0.004	0.002	6.226	0.000	0.000	0.000	0.000	6.236
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

What are we going to do differently?

We will review our assurance processes to make sure our level 1 and level 2 assurance providers check that our reported numbers are in line with the guidance.

Change 18**Correction****Observation**

There is a significant variance between table WWS4 line 10 of the PR19 data tables and table 4U line 22 in the APR 2017/2018.

Our PR19 data tables can be viewed here:
yorkshirewater.com/appendices

Description of the change

We have updated the 'Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives' figure, line 4U.22 from 14,600 m³ to 0 m³.

What the table used to look like

Line description	Unit	DPs	Current year	
B - Other				
4U.13	Energy consumption - network plus	MWh	3	323836569.048
4U.14	Energy consumption - sludge	MWh	3	98379392.044
4U.15	Energy consumption - wholesale	MWh	3	422215961.092
4U.16	Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs)	000s	3	70.036
4U.17	Total sewerage catchment area	km2	0	1693
4U.18	Designated bathing waters	nr	0	19
4U.19	Number of intermittent discharge sites with event duration monitoring	nr	0	174
4U.20	Number of monitors for flow monitoring at STWs	Nr	0	0
4U.21	Number of odour related complaints	nr	0	3004
4U.22	Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives	m3	0	14600
4U.23	Total volume of network storage	m3	0	4081786

What the table looks like now

Line description	Unit	DPs	Current year	
B - Other				
4U.13	Energy consumption - network plus	MWh	3	323836569.048
4U.14	Energy consumption - sludge	MWh	3	98379392.044
4U.15	Energy consumption - wholesale	MWh	3	422215961.092
4U.16	Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs)	000s	3	70.036
4U.17	Total sewerage catchment area	km2	0	1693
4U.18	Designated bathing waters	nr	0	19
4U.19	Number of intermittent discharge sites with event duration monitoring	nr	0	174
4U.20	Number of monitors for flow monitoring at STWs	Nr	0	0
4U.21	Number of odour related complaints	nr	0	3004
4U.22	Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives	m3	0	0
4U.23	Total volume of network storage	m3	0	4081786

What are we going to do differently?

We will review our assurance processes to make sure our level 1 and level 2 assurance providers check that our reported numbers are in line with the guidance.

Change 19**Correction****Observation**

Lines 18 and 19 on table Wn1 of the PR19 data tables (GW2 and GW3 MI/d values for 2017/2018) do not match the figures in our APR table 4P, lines 4P.32 and 4P.33.

Our PR19 data tables can be viewed here:

yorkshirewater.com/appendices

Description of the change

We have updated the values for the following lines in table 4P:

- Line 4P.32, 'Total water treated at all GW2 works' changed from 60.47 MI/d to 53.89 MI/d
- Line 4P.33, 'Total water treated at all GW3 works' changed from 43.12 MI/d to 49.71 MI/d

The variance is caused by a change in the classification of the Catterick water treatment works (WTW). Its status changed from GW2 status to GW3 due to an increase in the complexity of the treatment process. This classification change causes lines 4P.47 and 4P.48 to change described in change 20 below.

What the table used to look like

Line description		Unit	DPs	Current year
B - Water treatment				
4P.23	Total water treated at all SW simple disinfection works	MI/d	2	0.00
4P.24	Total water treated at all SW1 works	MI/d	2	0.00
4P.25	Total water treated at all SW2 works	MI/d	2	0.00
4P.26	Total water treated at all SW3 works	MI/d	2	460.07
4P.27	Total water treated at all SW4 works	MI/d	2	159.96
4P.28	Total water treated at all SW5 works	MI/d	2	413.78
4P.29	Total water treated at all SW6 works	MI/d	2	0.00
4P.30	Total water treated at all GW simple disinfection works	MI/d	2	0.00
4P.31	Total water treated at all GW1 works	MI/d	2	0.00
4P.32	Total water treated at all GW2 works	MI/d	2	60.47
4P.33	Total water treated at all GW3 works	MI/d	2	43.12

Change 19

Correction

What the table looks like now

Line description		Unit	DPs	Current year
B - Water treatment				
4P.23	Total water treated at all SW simple disinfection works	MI/d	2	0.00
4P.24	Total water treated at all SW1 works	MI/d	2	0.00
4P.25	Total water treated at all SW2 works	MI/d	2	0.00
4P.26	Total water treated at all SW3 works	MI/d	2	460.07
4P.27	Total water treated at all SW4 works	MI/d	2	159.96
4P.28	Total water treated at all SW5 works	MI/d	2	413.78
4P.29	Total water treated at all SW6 works	MI/d	2	0.00
4P.30	Total water treated at all GW simple disinfection works	MI/d	2	0.00
4P.31	Total water treated at all GW1 works	MI/d	2	0.00
4P.32	Total water treated at all GW2 works	MI/d	2	53.89
4P.33	Total water treated at all GW3 works	MI/d	2	49.71

What are we going to do differently?

We will review our assurance processes to make sure our level 1 and level 2 assurance providers check that our reported numbers are in line with the guidance.

Change 20**Correction****Observation**

Line 34 on table Wn1 of the PR19 data tables (number of GW3 works for 2017/2018) does not match APR table 4P, line 4P.48.

Our PR19 data tables can be viewed here:

yorkshirewater.com/appendices

Description of the change

We have updated the value in line 4P.48 'Total number of GW3 works' from 4 sites to 5 sites. This is because the classification of the Catterick water treatment works (WTW) changed from GW2 status to GW3 status.

Line 4P.47, 'Total number of GW2 works' remains the same because we have included a previously excluded site called Littleworth WTW. This site whilst not in operation is not decommissioned and therefore we should have included this in line 4P.47.

What the table used to look like

Line description		Unit	DPs	Current year
B - Water treatment				
4P.48	Total number of GW3 works	nr	0	4

What the table looks like now

Line description		Unit	DPs	Current year
B - Water treatment				
4P.48	Total number of GW3 works	nr	0	5

What are we going to do differently?

We will review our assurance processes to make sure our level 1 and level 2 assurance providers check that our reported numbers are in line with the guidance.

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