

# Appendix 20a: Accounting for Past Delivery

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## Overall Summary

We committed in FD14 for the period 2015-20 to delivering outcomes that reflected our customers' views. These are supported by 26 associated Performance Commitments (PCs) that identify the company's committed level of performance under each outcome. These outcomes reflect the priorities of our customers set out in research and engagement with the independent customer challenge group (CCG), the Yorkshire Forum for Water Customers (YFWC).

Annually our actual performance in terms of both service level performance against our 26 PC targets as well as our financial performance is reported through the Annual Performance Report (APR) to Ofwat which is externally assured by auditor Halcrow before receiving Board approval to be submitted.

The YFWC is given access to our performance data as well as access to our external auditor Halcrow throughout the year to support our transparency commitment to our customers.

The table below is a summary of our PC performance to date and our forecast position to the end of the reporting period 2015-20:

Performance Summary	Actual	Actual	Actual	F'cast	F'cast	Total
	15/16	16/17	17/18	18/19	19/20	
PCs Achieved / in reward	15	15	13	15	23	
PCs Failed (within deadband)	1	1	2	1	2	
PCs Failed in Penalty (outside deadband)	0	0	1	1	1	
PCs Failed (reputational only)	1	1	1	0	0	
PCs Not Applicable in Year	9	9	9	9	0	
<b>Total Reward (£m)</b>	<b>5.74</b>	<b>8.78</b>	<b>19.23</b>	<b>16.68</b>	<b>31.99</b>	<b>82.41</b>
<b>Total Penalty (£m)</b>	<b>0.00</b>	<b>0.00</b>	<b>(6.57)</b>	<b>(4.26)</b>	<b>(3.60)</b>	<b>(14.44)</b>
<b>Overall Net Reward / Penalty Position (£m)</b>	<b>5.74</b>	<b>8.78</b>	<b>12.66</b>	<b>12.41</b>	<b>28.39</b>	<b>67.97</b>

Overall business and operation performance has been strong to date with the company achieving an overall reward position in each year. This was despite the business and many of its customers being impacted by significant flooding in parts of Leeds, Bradford, York and the Calder Valley over the Christmas and New Year period in 2015-16. Water services were maintained to all customers, despite flooding of more than 100 works and pumping stations. The damaged assets were repaired, and work was completed with external agencies on surface water management to minimise the risk of similar events in the future.

Following the death of one of our colleagues in an accident at Tadcaster Waste Water Treatment Works on the 20 July 2015 the company has placed even more focus on the Health, Safety and Wellbeing of all colleagues and partners. An extensive colleague and partner engagement programme took place during 2016-17 and continued throughout 2017-18 with a focus on safety being at the heart of our culture.

We always want to provide customers with information that they can trust as, when we don't get it right, we risk losing trust and confidence. So when, as part of Ofwat's Company Monitoring Framework (CMF) for our 2015-16 reporting, Ofwat raised concerns regarding

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our ability to provide sufficient confidence and assurance about our delivery, monitoring and performance reporting we, in response, took a number of immediate steps to improve our 2016-17 reporting, including a review of the Annual Performance Report:

- We completed a thorough review of our approach to delivery, monitoring and reporting, including external consultation.
- We published our Assurance Plan in March 2017, which explained the process we have in place to give confidence that the information we publish is accurate, accessible and easy to understand.
- We tested a draft version of our Annual Performance Report with customer focus groups and our customer online community.
- We continued to work closely with the YFWC to make sure that our performance reporting met customer and stakeholder needs.

In 2016-17 Ofwat measured our performance as 'targeted' which was an improvement from 2015-16 and confirmed our ability to provide confidence and assurance through the delivery, monitoring and performance of our reporting.

In April 2017, the water retail market opened for 1.2 million businesses, charities and public-sector organisations who could choose their retailer for water and waste water services. Yorkshire Water separated into retail non-household and wholesale entities. Yorkshire Water Business Services was set up as a retailer to specifically manage business customers and Yorkshire Water continues to provide water and waste water services (the 'wholesaler').

When the extreme winter weather at the start of 2018 hit our region, we had to enact our internal Business Continuity Plans as travel around the region was extremely hazardous for over two weeks (end of February to start of March). These conditions made access to our operational and office sites and both networks very difficult, This did have an impact on some of our PC service levels in the short term but again we managed to maintain supply to our customers and then recover our service levels rapidly once we resumed business as usual.

In 2015-16 we met or exceeded 24 of our 26 PCs. The two in year commitments that were not met were (1) Drinking Water Compliance which achieved 99.954% compared to a target of 99.960% due to high nickel, lead and iron failures in the distribution system. Although we did not meet the target our performance was within the deadband of acceptable performance and therefore did not attract a penalty. And (2) Renewable Energy Generation which achieved 11.26% compared to our target of 12.00%. This was due to the damage to key energy generation equipment during the flooding over the Christmas and New Year period. Failure of this PC carries no financial penalty however, it could have a reputational impact with our customers and stakeholders. Our overall service performance was strong and met a net overall "Reward" position.

In 2016-17 we met or exceeded 24 out of the 26 PCs. The two commitments that were not met were (1) Drinking Water Contacts, where we reduced the number of customers who needed to contact us about drinking water quality from 10,007 to 9,093. Although this was not sufficient to meet our PC target of 8,120 contacts in the year our performance was within the deadband of acceptable performance and therefore didn't attract a penalty. And (2) renewable energy generation which achieved 10.00% compared to our 12.00% target but, as we explained previously, this was due to the damage to key energy generation

equipment during the flooding in 2015-16. Our overall service performance was strong and met a net overall “Reward” position.

In 2017-18 we met or exceeded 22 out of the 26 PCs. The two commitments that were not met but were within the deadband of acceptable performance, and therefore did not attract a financial penalty, were (1) Drinking Water Compliance which achieved 99.953% compared to a tightened target of 100.000% and (2) Leakage which achieved 300.3MI/d compared to a target of 297.1MI/d. Although performance within (3) Renewable Energy Generation improved we still missed the 12.00% target by only achieving 11.44% but this was despite key energy generation equipment still being out of service. Failure of this PC carries no financial reward or penalty however it could have a reputational impact with our customers and stakeholders. The commitment that was not met, and has resulted in a financial penalty, was (4) Drinking Water Quality Contacts, which, despite continuing to reduce the number of contacts from 9,093 to 8,100, missed the tightened target of 6,108 resulting in a financial penalty.

In total we are forecasting to invest £1,805m of regulatory capital in our assets to support both delivery of the PCs agreed with our customers in FD14 and our stretched aspirations to target upper quartile performance on the comparative measures in the next review period. The table below identifies the capital expenditure split by Water and Waste Water Wholesale in comparison to FD14:

	Final Determination (£m)	Forecast Outturn (£m)
Water Wholesale	713.7	731.2
Waste Water Wholesale	1,144.0	1074.2
<b>Total Programme</b>	<b>1857.7</b>	<b>1805.4</b>

Whilst we have seen delivery cost pressures in this reporting period we have managed to outperform our FD14 in each of the capital programme areas. This has allowed us to re-invest these savings and efficiencies back into the programme to support our ODI upper quartile plans for 2018-19 and into the PR19 period, as well as making a significant investment in our energy generation assets to ensure long term sustainability.

More detail of the performance and expenditure is shown below by service area and PC.

## Wholesale Water Programme

The table below identifies the Wholesale Water (WW) Programme actual expenditure to date and the investment forecast required in the remaining two years of the reporting period to support the delivery of the targeted levels of performance on the PCs identified in the performance summary table above:

	Actual 14/15	Actual 15/16	Actual 16/17	Actual 17/18	F'cast 18/19	F'cast 19/20	Total
Final Determination (Net) £m	18.1	169.3	151.5	123.2	123.2	128.4	713.7
Latest Approved Programme (Net) £m	9.7	103.1	142.0	161.6	170.0	144.8	731.2

As the latest approved programme profile in the above table shows we had a slower start to the delivery programme with actual capital expenditure to the end of 2017-18, against the WW Programme FD14 of £462.1m totalling £416.4m net of grants and contributions. This investment was sufficient to support the successful delivery of our water or cross business PCs in the first three years of the current reporting period.

In total FD14 for the WW Programme is £713.7m and as part of our internal annual business planning process we identified areas of efficiency and savings for business choices totalling over £56m. After reviewing performance to date against our agreed PC service level targets, a plan was approved at the Yorkshire Water Board to re-invest £73.6m of the total wholesale programme outperformance to target further service level improvements within the current reporting period. This is to support our aspirations to delivery upper quartile industry performance to our customers in the areas of Water Quality, Leakage and target frontier performance on Water Supply Interruptions.

Our Board approved re-investment plans, to target upper quartile performance, have been developed through consultation and agreement with our customers through our various customer forums and externally assured by the auditor Halcrow.

Re-investment of this outperformance will result in a forecast outturn on the Wholesale Water programme of £731.2m and further financial reward in the areas of Water Supply Interruptions and Leakage.

Actual income on the WW programme to date is higher than that allowed in FD14 even though requests for mains diversions and new domestic connections is at a lower level than that identified in FD14. The overall increase which offsets this reduction is due to the inclusion of Section 45 (s45) new water connections income not included within FD14. Forecast water income for the remaining two years of the current reporting period has been calculated by maintaining the same level of activity for mains diversion requests and keeping the level of s45 contributions at the current report year level.

The main change is due to the industry changes on the calculation of infra connection charges that take effect from 2018-19 onwards, where we have significantly reduced the domestic water connection charge from £380 as identified in FD14 to £75 per property to reflect the historic and forecast network reinforcement expenditure planned over the remainder of the reporting period.

This reduced charge and related income offsets the inclusion of any additional s45 income not included in FD14 and by the end of the current reporting period we are forecasting £58m in total in comparison to the £52m included in FD14.

A summary of service performance and total regulatory capital investment compared to that allowed in FD14 for each wholesale water PC is shown below.

### **Performance Commitment WA1: Drinking water quality**

The table below identifies the required service level as well as actual performance to date and forecast performance for the last two years of the 2015-20 period measuring mean zonal percentage compliance from the regulatory sampling programme, as calculated by the Drinking Water Inspectorate (DWI).

This PC is reported by calendar year and has a financial penalty only as a delivery incentive calculated annually at £8.920116m per 0.01% performance below the penalty deadband to the penalty collar.

	Unit	Starting level	Committed performance levels				
		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	99.960	99.960	99.960	100.000	100.000	100.000
Actual / Forecast	%		99.954	99.962	99.953	99.962	99.962
Penalty collar	%		99.929	99.929	99.939	99.939	99.939
Penalty deadband	%		99.940	99.940	99.950	99.950	99.950

There are sixteen defined regulatory quality investigations or solutions within FD14 to target Drinking Water Quality improvements as agreed with the DWI and the Environment Agency (EA). These regulatory defined outputs address water quality improvements under Nitrates, Pesticides, Raw Water Deterioration and THM investment drivers. To date four of these obligations have been delivered with the remaining 12 outputs in delivery and forecast to meet their corresponding compliance dates.

Although we are on target to deliver all these outputs we have seen significant cost pressures from our framework partners to deliver these quality improvements and we are forecasting to invest over £66m to ensure long term compliance at these sites compared to £42m originally allowed in FD14.

The continuation of the quality lead communication pipe replacement programme has not met the unit rate identified in FD14. We have been unable to fully utilise lining of these pipes as envisaged when we promoted the plan. This is due to the availability and reliability of the lining rigs.

To ensure we met our commitment to our customers to remove lead from our distribution systems by the end of 2017-18 we reverted to replacing these pipes with preferred material, leading to additional site costs associated with this more intrusive and disruptive programme of works. This has resulted in us having to invest a total of £18m over the 2015-20 period against £15m within FD14.

The additional investment over and above that allowed in FD14 to ensure compliance against our water quality regulatory outputs has been funded from outperformance reallocated from other areas of the wholesale water programme.

Although actual performance to date and future forecast performance is not forecast to achieve the 100% PC target we are forecasting to remain within the deadband of acceptable performance and therefore will not attract any financial penalty.

### **Performance Commitment WA2: Significant drinking water events which require corrective action**

The table below identifies 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. This PC is reported by calendar year and has no financial incentives but does have a reputational impact if we exceed the target for corrective actions.



		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	No.	6	6	6	6	6	6
Actual / Forecast	No.		5	3	4	5	5

Although we have met our PC targeted service level to date we have seen an increase in the total number of events (with or without corrective actions) shared with stakeholders as part of our transparent and more open approach to reporting events. The largest increase in events has been related to domestic fittings at customer properties, followed by an increase in the number of discolouration events that we have shared with stakeholders. Our actual number of discolouration contacts shows an overall reduction as covered under WA3: Drinking Water Complaints.

Of the total number of events very few have been classified as significant drinking water events with recommendations of corrective actions and a large proportion of the recommendations on these have not been considered corrective actions as many acknowledge commitments already made by YW.

Although there is no direct investment associated with this PC ensuring our water quality regulatory outputs are achieved and our current water treatment assets are maintained, this remains as a priority to ensure that any significant Water Quality Events with corrective actions will be minimised.

Actual performance to date and future performance is forecast to continue to meet or better the target number of corrective actions which will mean there should be no reputational impact to the company.

### Performance Commitment WA3: Drinking Water Contacts

The table below identifies the number of times customers contact Yorkshire Water about discolouration, taste and odour and illness each year, in line with DWI reporting. This PC is reported by financial year and has both a financial penalty of £0.0033m per contact and a reward of £0.0027m per contact outside of the deadband of accepted performance up to the reward cap or penalty collar and this is calculated annually.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	No.	12,143	10,131	8,120	6,108	6,108	6,108
Actual / Forecast	No.		10,007	9,093	8,100	7,400	7,200
Penalty collar	No.		15,000	15,000	8,965	8,965	8,965
Penalty deadband	No.		12,143	12,143	6,108	6,108	6,108
Reward deadband	No.		6,108	6,108	6,108	6,108	6,108
Reward cap	No.		2,775	2,775	2,775	2,775	2,775

Water Quality (WQ) Complaints was one of the measures that, in FD14, Ofwat set all companies the target of upper quartile performance and therefore tightened the PC target from our proposed submission. This meant we had to change the way we had planned to invest in our business plan submission to target this increased reduction in water quality contacts without any further investment being allowed.

Our overall strategy remains the same which is to reduce the number of properties that are impacted by drinking water issues by the end of the 2020-25 period. Our original plan was to use the 2015-20 period to maintain the level of drinking water complaints in order for us to transition from a reactive process (investing through customer contacts) to a proactive process (investing through condition based sampling) as well as continuing to focus on looking into innovative solutions to reducing discolouration and other water quality failures in the future in order to minimise the impact of water quality issues on our customers.

We have reprioritised capital investment identified for renewal and relining of our water network to carry out systematic flushing of the network. The impact of changing our delivery plan has resulted in a year on year reduction to the number of WQ complaints, primarily as a result of the flushing programme. Although we believe it will be very difficult to meet the 6,108 target, we have reduced the number of WQ Complaints from 12,143 at the start of the review period to 8,100 by the end of 2017-18.

We have flushed more than 11,816km of main to date which equates to 1,806 DMAs out of our 2,800 DMAs and by the end of the review period it is estimated we will have flushed over 22,000km (71% of the network).

To do this we have used some of the £43m capital investment identified in the original plan for renewal and relining of the network to carry out systematic flushing of the network which has in turn allowed us to redirect the savings on this programme totalling over £16m to support the additional activity required to support the leakage upper quartile plan.

Although we have reduced water quality contacts significantly to date and plan to reduce these still further in the last two years of the 2015-20 period our performance following 2017-18 is forecast to be outside of the deadband of acceptable performance and

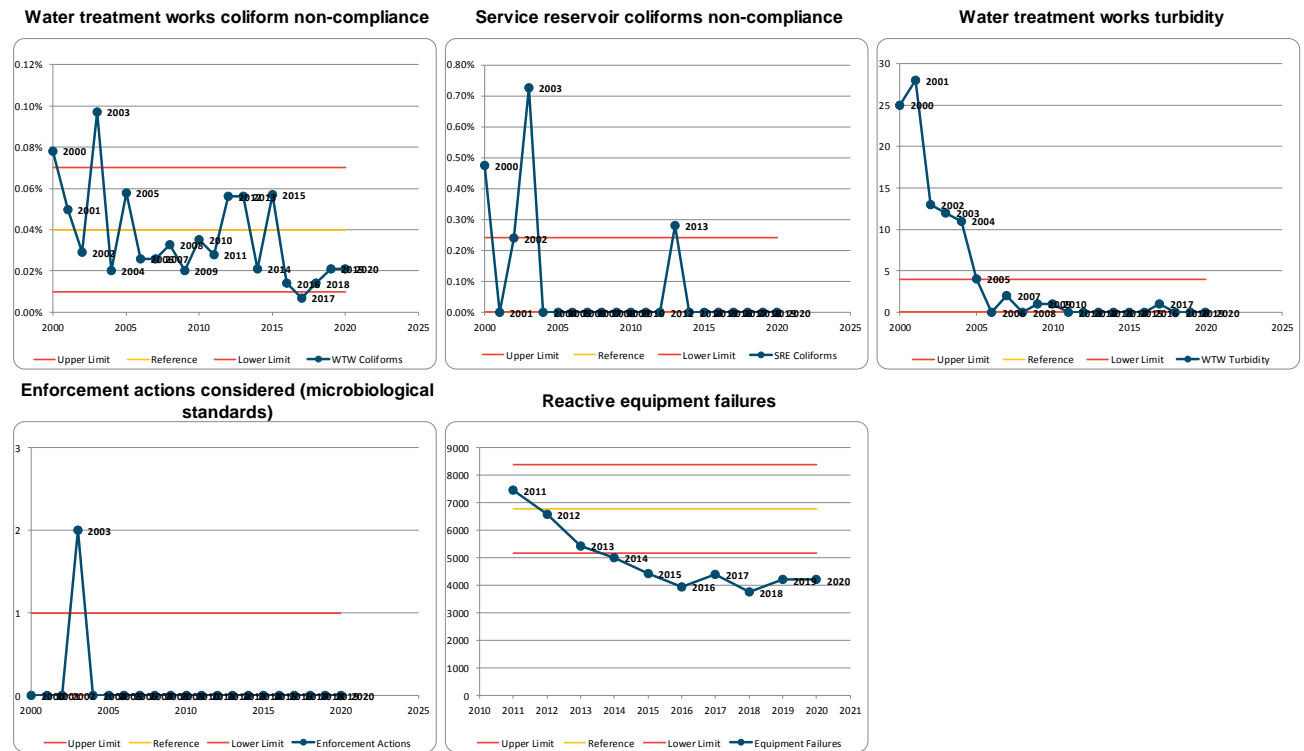
therefore will attract a financial penalty totalling £14.441m. This penalty will be held centrally and inflated by RPI as agreed and re-invested within three years with agreement of the YFWC on our highest priority risks in line with our commitment made in our business plan submission.

### Performance Commitment WA4: Water quality stability and reliability factor

The table below identifies the overall assessment of long-term stability and reliability (S&R) for water quality, based on a basket of indicators. Assessment is based on the recent historical trend of the indicators. An assessment in 2018-19 for 2019-20 outturn will give a classification of Improving, Stable or Deteriorating with only a financial penalty of up to 10% of the outcome totex for not meeting an overall stable assessment depending on the number of failing sub-measures and if these are persistent or non-persistent failures:

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Assessment	Stable	-	-	-	-	Stable
Actual / Forecast	Assessment		Stable	Stable	Stable	Stable	Stable
Penalty deadband			-	-	-	-	Deteriorating

The graphs below show the actual performance to date and the future forecast performance on the basket of sub measures used to assess the PC:



As can be seen from the data above all five sub-measures reported under S&R Water Quality have remained within or better than the reference level performance required to meet stable status.

Overall expenditure is £17m above the £100m identified in FD14 as we have driven additional activity to support our employee Health, Safety and Wellbeing improvement plan. This additional funding has been reallocated from savings made on other areas of the wholesale water programme.

Our current forecast assessment for 2019-20 outturn is to continue to be assessed as Stable, resulting in no financial penalty.

### Performance Commitment WB1: Leakage

The table below identifies the total sum of distribution losses and supply pipe losses and includes any uncontrolled losses between the treatment works and the customer's stop tap but does not include internal plumbing losses. This PC is reported by financial year and has both a financial penalty of £0.100948m per MI per day and a reward of £0.050507m per MI per day for performance outside the acceptable penalty and reward deadband with no reward cap or penalty collar and this is calculated annually:

	Unit	Starting level	Committed performance levels				
		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	MI/d	297.1	297.1	297.1	297.1	292.1	287.1
Actual / Forecast	MI/d		285.1	295.2	300.3	277.0	235.0
Penalty deadband			302.1	302.1	302.1	297.1	292.1
Reward deadband			274	274	274	274	274

As stated in our original business plan submission, we will reduce leakage from our network by increasing the number of people who find and fix leaks, by managing the pressure in the network and by relining or replacing pipes. We also invest in research and innovation. To ensure we meet our leakage target we will continue to use, and further develop, a range of capital and operational approaches, including:

- Optimising existing pressure management and identifying new pressure management opportunities. Replacing old pressure reducing valves,
- Enhancing our processes to find and fix leaks by targeting our resources using our advanced systems like Netbase,
- Replacing, repairing or relining mains that contribute significantly to leakage,
- Replacing old water meters and telemetry to ensure accurate pressure and flow readings to help target our activity.

We estimate that about two thirds of leaks are from our distribution mains and a third are from our customers' supply pipes. We help customers reduce supply pipe leakage by identifying leaks at properties and offering a free first-time fix on all domestic supply pipes which are not under buildings. We also offer assistance for detection and repair of any commercial supply pipe leaks.

We also raise awareness and offer advice and support to help customers understand how they can manage their supply pipes. These 'customer side' services are offered by the Retail part of Yorkshire Water.

Our original plan funded in FD14 was to promote all repairs but relies on active leakage control (ALC) in years 2018-19 and 2019-20 to achieve the reduction.

We have achieved or bettered our service level targets for leakage in the first two years of the review period and were on target to meet our 2017-18 service level target until the region was hit by extreme weather conditions at the end of February and start of March 2018. These conditions made access to our network for repairs difficult but, despite this, we outturned the year at 300.3 Ml/d and whilst this has not met our PC target this is within the deadband of acceptable performance.

To recover this position and ensure we can better manage future extreme weather impacts further investment has been allocated to target not only meeting our 2015-20 period PC service levels but targeting upper quartile performance by the end of the 2020-21.

We had already increased the original capital funding identified in FD14 of £12m by a further £64m to fund additional find and fix resource to drive down leakage over the remainder of the review period, which has been funded from outperformance in other areas of the wholesale water programme. To address the additional pressure on performance over the last report year we have also re-allocated over £16m of water network rehabilitation DOMS investment planned to balance, where affordable, the long-term sustainability of the mains rehabilitation programme with the more short-term customer benefits of driving a large cleaning / flushing programme.

Increasing our funding and activity for the remainder of the current report period means we are now forecasting to outturn with a service level that will attract a financial reward totalling £1.97m.

## **Performance Commitment WB2: Water supply interruptions**

The table below identifies the 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). This PC is reported by financial year and has both a financial penalty of £2.608882m per minute and a reward of £2.608882m per minute for performance outside the deadband but within the reward cap or penalty collar and this is calculated annually:

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Min	14.44	13.63	12.81	12.00	12.00	12.00
Actual / Forecast	Min		12.89	9.78	6.96	6.00	4.00
Penalty collar			18.44	18.44	16.00	16.00	16.00
Penalty deadband			14.44	14.44	12.00	12.00	12.00
Reward deadband			12.00	12.00	12.00	12.00	12.00
Reward cap			8.08	8.08	8.08	8.08	8.08

We have exceeded our PC service levels to date by investing in a balance of capital improvements to target some of our high-risk supply interruption areas to reduce the number of single source properties on our network, as well as ensuring the operational response to restore service on interruptions is swift, returning supply to our customers as soon as possible, as proposed in our plan.

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

Our service reservoir (SRE) and water towers programme totalling £31m has been re-prioritised to target fewer strategic rebuilds than identified in FD14 and to use some of this investment to promote a regional membrane replacement programme targeting more assets and supporting the overall target of SRE non-compliance. This has allowed us to re-allocate £11m of savings on this area of the programme to support our overall upper quartile performance plans on other service levels.

Our original plan for structural mains investment totalling £78m has been reviewed, as performance in this area has so far been strong during the 2015-20 period, leading to fewer issues meeting our criteria for investment. This has allowed us to reduce the scope required to meet this target sub-measure and re-allocated £30m to fund our upper quartile aspirations on this and other service levels within the wholesale water programme. Within the other investment drivers that support delivery of this PC a total of £56m of investment has been prioritised to target further savings of £16m to fund our ODI upper quartile plans on this measure and other water measures.

As part of our upper quartile plan to target sector leading performance on this measure we have increased the capital funding by a further £10m to fund additional pressure and flow monitoring on the distribution network, to allow for earlier event recognition and to improve the accuracy of reporting. Additional funds will also be required to offset the increase in capital costs to ensure all planned interventions are for a duration shorter than three hours. We will also be creating a "Supply Restoration" team - a change to our approach to incident response which focuses on the restoration of supplies through the deployment of continuous supplies techniques in a more pro-active manner. Capital funding will be required for the procurement of additional equipment, and for the

installation of additional network apparatus to increase resilience and provide more opportunities for continuous supplies deployment.

The current forecast outturn in the last two years of the review period will drive a financial reward totalling £36.47m.

### Performance Commitment WB3: Water use

The table below identifies the average daily water consumption per head of population (per capita consumption or PCC) in measured and unmeasured households in a dry year. This is only for household consumption. This PC is reported by financial year and has no financial incentives but would have reputational impact.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	l/hd/d	143.7	142.6	141.5	140.4	139.3	138.3
Actual / Forecast	l/hd/d		141.7	137.4	135.9	139.3	138.3

The numbers of meters to be replaced through base maintenance will always increase each review period as domestic meter optants and population growth continues. Our plan was to complete the final stage of our Automated Meter Reading (AMR) strategy initially instigated at PR09 to support our aspiration to be over 90% 'fully automated' and support the any requests from our customers to change to metered billing through our Domestic Meter Optant (DMO) programme.

We have continued to exchange meters that are asset life expired to complete our AMR strategy and have met our aspiration to be over 90% 'fully automated,' although we still have issues accessing all properties to complete full coverage in all areas.

We have seen far fewer requests from our customers to change to metered billing through our DMO programme in comparison to the approximation of 40,000 per annum in our original plan.

Due to less meters being exchanged and the number of new meters being requested being lower than predicted this has resulted in savings of £19m against the total original funding of £68m identified in FD14 whilst we are still on target to meet our targeted reductions on water use in the review period.

This investment has been re-allocated to target areas of weaker performance within the overall wholesale water programme.

Actual performance to date and future performance is forecast to continue to meet our water usage targets which will mean there should be no reputational impact to the company.

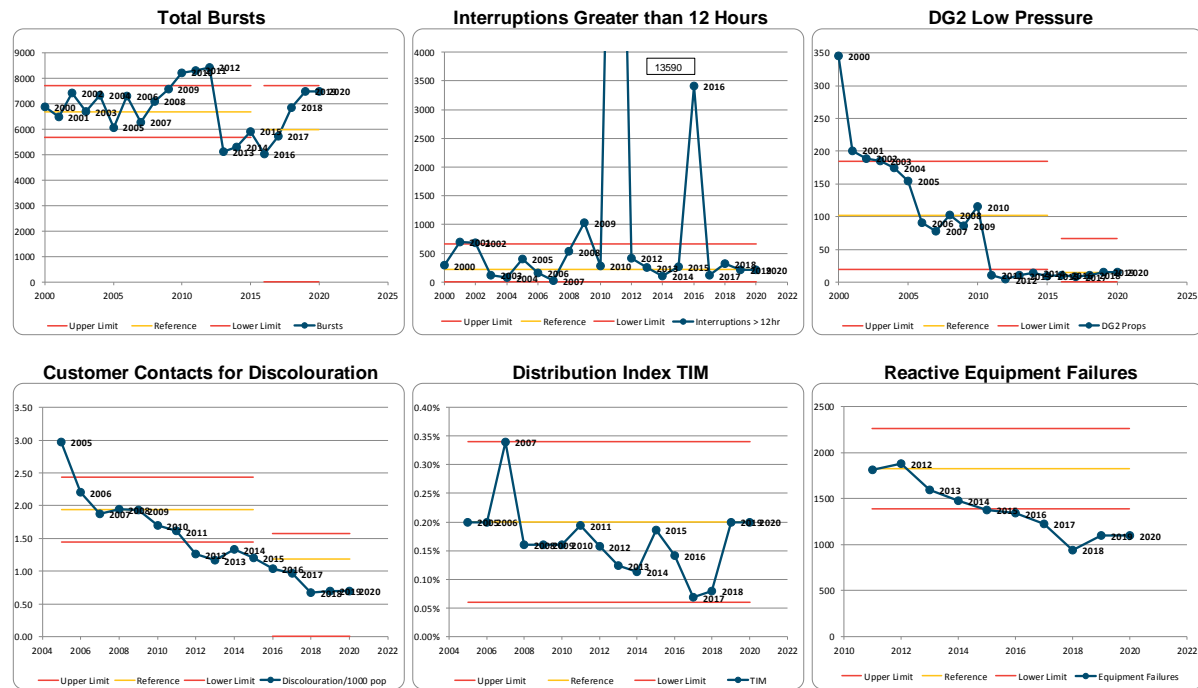
### Performance Commitment WB4: Water network stability and reliability factor

The table below identifies the overall assessment of long-term stability and reliability for the water network, based on a basket of indicators. Assessment is based on the recent

historical trend of the indicators. An assessment in year 2018-19 for 2019-20 outturn will give a classification of Improving, Stable or Deteriorating with only a financial penalty of up to 10% of the outcome totex for not meeting an overall stable assessment depending on the number of failing sub-measures and if these are persistent or non-persistent failures:

		Committed performance levels					
		Starting level					
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Assessment	Stable	-	-	-	-	Stable
Actual / Forecast	Assessment		Stable	Stable	Stable	Stable	Stable
Penalty deadband			-	-	-	-	Deteriorating

The graphs below show the actual performance to date and future forecast performance on the basket of sub-measures used to assess the PC:



All six sub-measures for Water Networks S&R have remained within or better than the reference levels to date within the 2015-20 period except for Total Bursts, which we are forecasting to show an upward trend in the final two years of the review period. This is due to our push to improve leakage performance and does not reflect an anticipated deterioration of our assets. As such we are still assessing the measure as Stable.

Programme efficiencies have been driven where possible within the overall £64m Reservoir Safety – Statutory programme by utilising Computational Fluid Dynamics (CFD) modelling to identify only the specific improvements required on spillways to meet Qualified Civil Engineer (QCE) compliance rather than total replacement of these assets.



This has allowed us to re-allocate £18m of savings on this area of the programme to support our overall upper quartile performance plans on other service levels.

We have also seen a significant reduction in the level of third party mains diversions and requisitions this review period to date compared to historic levels used to identify investment in FD14 which has also meant a reduction in the associated grant and contributions income which is collected from developers or infra connection charges. We forecast this level of expenditure to continue for the remainder of the review period but the overall net impact is minimal.

Our current forecast assessment for year 5 outturn is to continue to be assessed as Stable, resulting in no financial penalty.

### Performance Commitment WC1: Length of river improved

The table below identifies the length of river in the Yorkshire Water region improved during 2015-2020 against Environment Agency (EA) Water Framework Directive (WFD) component measures. This PC is reported by financial year and has both a financial penalty of £0.146238m per km and a reward of £0.076696m per km outside of the deadband performance with no reward cap or penalty collar which is calculated in year 4 for year 5 outturn:

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	km	-	-	-	-	-	100
Actual / Forecast	km		-	-	-	-	106
Penalty collar			-	-	-	-	-
Penalty deadband			-	-	-	-	97
Reward deadband			-	-	-	-	103
Reward cap			-	-	-	-	-

In total there are 28 defined regulatory quality EA WFD investigations identified in FD14 to target environmental benefits as agreed with the EA.

We have been able to realise delivery efficiencies on these quality investigations by using internal resources rather than external consultants or working with others to deliver time and cost efficiencies whilst still delivering these regulatory outputs.

Overall, we are forecasting to invest £7m to meet our regulatory obligations, with the reduction in investment of £3m from the £10m allowed in FD14 funding being reallocated to fund other areas of pressure within the wholesale water programme.

Delivery of these regulatory outputs will ensure that 106km of river length is improved in total driving a financial reward of £0.26m in the review period.

## Performance Commitment WC4: Recreational visitor satisfaction

The table below identifies an assessment of customer satisfaction with the current facilities, access and use of recreational sites and the recreational offer. This PC is reported by financial year and has no financial incentives but does have a reputational impact

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC (Appointee)	Qual	-	Qual	Qual	Qual	Qual	Qual
Actual / Forecast	Qual		Published	Published	Published	Achieved	Achieved

Actual performance to date and future performance is forecast to continue to meet our customer satisfaction targets with regards to our recreational facilities which will mean there should be no reputational impact to the company.

## Wholesale Waste Water Programme

The table below identifies the Wholesale Waste Water (WWW) Programme actual expenditure to date and the investment forecast required in the remaining two years of the reporting period to support the delivery of the targeted levels of performance on the PCs identified in the performance summary table in the introduction section:

	Actual 14/15	Actual 15/16	Actual 16/17	Actual 17/18	F'cast 18/19	F'cast 19/20	Total
Final Determination (Net) £m	16.5	212.5	228.8	228.8	228.8	228.8	1,144.0
Latest Approved Programme (Net) £m	4.8	127.6	199.4	205.6	296.9	239.9	1,074.2

Actual capital expenditure to the end of Year 3 against the WWW Programme FD14 of £686.6m totals £537.4m net of grants and contributions.

Whilst we have identified savings and efficiencies in the delivery of the overall WWW Programme expenditure to date the programme has also been re-profiled to reflect the post FD14 changes to the National Environment Programme (NEP) which removed and replaced regulatory obligations with new obligations to be completed later in the reporting period. This has led to significant timing differences on this programme in comparison to the original planned profile.

This investment has supported the successful delivery of our waste water or cross business PCs in the first three years of the current reporting period. To date we have achieved and continue to forecast to achieve acceptable service level performance on all our PCs with all PC targets being met or bettered to date.

<sup>1</sup> The year on year figures add up to 1,144.2 but this difference is simply due to rounding

In total FD14 for the Wholesale Waste Water Programme allowed was £1,144.0m and as part of our internal annual business planning process we identified areas of efficiency and savings for business choices totalling over £134m. After reviewing performance to date against our agreed PC service level targets a plan was approved at the Yorkshire Water Board to re-invest £64.0m of the total wholesale programme outperformance to target further service level improvements within the current reporting period. This is to support our aspirations to delivery upper quartile industry performance to our customers in the areas of Internal Flooding and Pollution.

Our Board approved re-investment plans, to target upper quartile performance, have been developed through consultation and agreement with our customers through our various customer forums and externally assured by the auditor Halcrow.

Re-investment of this outperformance will result in a forecast outturn on the Wholesale Waste Water programme of £1,074.2m and further financial reward in the areas of Internal Flooding and Pollution.

Actual income on the WWW programme in the current year is lower than that allowed in FD14 as requests for sewer diversions and new domestic waste water connections is at a lower level than that identified in FD14.

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

The main change is again due to the industry changes on the calculation of infra connection charges that take effect from year 4 onwards where we have significantly reduced the domestic waste water connection charge from £380 as identified in FD14 to £150 per property to reflect the historic and forecast network reinforcement expenditure planned over the remainder of the reporting period.

This reduced charge and reduced third party diversion and requisition activity results in us forecasting £43m in comparison to the £51m included in FD14.

A summary of service performance and total regulatory capital investment compared to that allowed in FD14 for each wholesale waste water PC is shown below.

### **Performance Commitment SA1: Internal sewer flooding**

The table below identifies the 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 a defined return period. Incidents in exceptional rainfall events are excluded. The measure includes incidents arising from assets transferred to Yorkshire Water in October 2011.

This PC is reported by financial year and has both a financial penalty of £0.220242m per incident and a reward of £0.057497m per incident outside deadband performance but within the reward cap and penalty collar which is calculated annually.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	No.	1,857	1,877	1,898	1,919	1,919	1,919
Actual / Forecast	No.		1,842	1,769	1,682	1,796	1,463
Penalty collar			1,986	2,008	2,029	2,029	2,029
Penalty deadband			1,945	1,967	1,988	1,988	1,988
Reward deadband			1,808	1,808	1,808	1,808	1,808
Reward cap			1,651	1,651	1,651	1,651	1,651

During the 2015-20 period we have transferred investment between hydraulic and other causes internal flooding investment drivers to maximise the benefits to our customers by addressing the most cost beneficial resolutions. This means that we are not only forecasting to meet our 2015-20 PC service levels but targeting upper quartile performance by the end of 2020-21.

We have seen a significant reduction in the number of incidents of internal sewer flooding due to overloaded sewers to date in the current review period. Whilst we continuously review any possible solutions to address properties that have experienced internal flooding and promote those that are affordable, when reviewing the cost benefit we originally re-directed £30m of funding from the original £95m hydraulic flooding due to overloaded sewers to the much smaller original £25m programme to address internal flooding due to other causes. This has allowed us to promote solutions to resolve significantly more internal flooding issues and reduce the impact on customers of any cyclical cleaning programme that may have been in place.

As part of our plan to target upper quartile internal flooding performance we have further increased the level of repair and maintenance on our sewer network, by £35m, to drive down internal property flooding due to other causes over the remainder of the review period programme.

The current forecast outturn in the last two years of the current review period will drive a financial reward totalling £19.20m.

## Performance Commitment SA2: External sewer flooding

The table below identifies the total number of incidents of areas affected by external flooding in the year. The measure includes incidents arising from assets transferred to Yorkshire Water in October 2011.

This PC is reported by financial year and has no financial incentives but does have a reputational impact.

		Starting level	Committed performance levels				
	Unit		2014-15	2015-16	2016-17	2017-18	2018-19
PC	No.	10,125	10,125	10,363	10,487	10,487	10,487
Actual / Forecast	No.		9,037	9,145	9,296	10,487	10,487

Limited investment was allocated in FD14 to address known external flooding issues so investment in the 2015-20 period is targeted to address only high-profile SIM issues as most external flooding solutions require significant storage driving high cost solutions which, after consulting our customers, is not a priority.

The original £8m in FD14 was to address known external flooding issues that had been identified as cost beneficial. As additional issues arise we continually re-prioritise solutions by cost benefit and high-profile SIM impacts to ensure this limited funding delivers maximum benefit to our customers. This has allowed us to save £2.5m which has been re-allocated to fund our upper quartile aspirations within the wholesale waste water programme.

Actual performance to date and future performance is forecast to continue to meet or better our external flooding targets which will mean there is no risk of reputational impact to the company.

### Performance Commitment SA3: Pollution

The table below identifies the total number of Category 1-3 pollution incidents caused by a discharge or escape from any Yorkshire Water wastewater asset each year (this covers all consented and non-consented intermittent events, but not continuous discharges). This measure includes all wastewater assets, that is, surface water assets are included, and excludes impacts from private pumping stations that transferred to Yorkshire Water in 2015.

This PC is reported by financial year and has both a financial penalty of £0.185133m per category 3 incident and a reward of £0.185133m per category 3 incident for performance outside of the deadband accepted performance but within the reward cap and penalty collar and this is calculated annually.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	No. (Cat1-2/Cat3)	10/250	8/237	6/224	4/211	2/211	0/211
Actual / Forecast	No. (Cat1-2/Cat3)		5/180	4/207	3/202	7/180	0/155
Penalty collar	No. (Cat 3 only)		303	303	264	264	264
Penalty deadband	No. (Cat 3 only)		250	250	211	211	211
Reward deadband	No. (Cat 3 only)		211	211	211	211	211
Reward cap	No. (Cat 3 only)		147	147	147	147	147

Please note that when we submitted our Pollution data as part of the PR14 reconciliation and accounting for past delivery on 13<sup>th</sup> July we were forecasting 2 category 1 & 2 incidents for 2018-19. This was based on the information that we had available at that time. Since then we had a series of incidents in July and August that have led us to reforecast our 2018-19 performance and we are now expecting to outturn at 7 incidents this year. App5 has now been updated to reflect our new forecast for this PC.

Throughout the 2015-20 period we have been targeting our investment to minimise environmental pollution from our assets. Further investment has been allocated to target not only meeting our 2015-20 PC service levels but to achieve upper quartile performance by the end of 2020-21. Our investment plans to target upper quartile performance for pollution have been assured by Halcrow to ensure our plans are both affordable and deliverable.

In the original £42m (FD14) to reduce pollution were outputs associated with improvements at two intermittent discharges at Woodhouse Mill and Salterhebble that have subsequently been removed from the programme as part of the NEP5 final revisions. This has removed both defined regulatory outputs from the FD14 and re-allocated £37m of funding from within this PC to support the delivery of additional improvements identified to deliver the total length of river improved impacting on the wider environment.

As part of our plan to target upper quartile pollution performance we have increased the level of repair and maintenance on our sewer network as well as adding additional telemetry to our sewer network to allow us to target failing assets before they impact the environment by spilling and therefore polluting. This additional £30m of investment has been funded from outperformance in other areas of the wholesale wastewater programme.

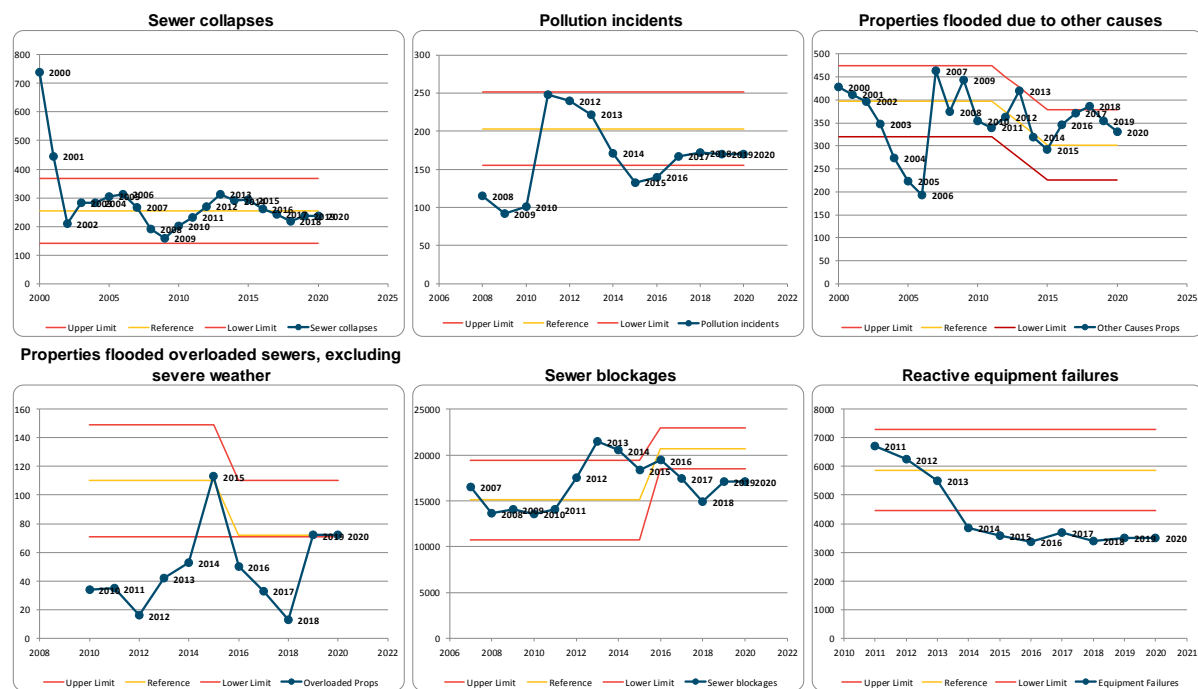
The current forecast outturn in the last two years of the review period will drive a financial reward totalling £24.25m.

## Performance Commitment SA4: Sewer network stability and reliability factor

The table below identifies the overall assessment of long-term stability and reliability for the sewer network, based on a basket of indicators. Assessment is based on the recent historical trend of the indicators. An assessment in 2018-19 for 2019-20 outturn will give a classification of Improving, Stable or Deteriorating with only a financial penalty of up to 10% of the outcome totex for not meeting an overall stable assessment depending on the number of failing sub-measures and if these are persistent or non-persistent failures:

		Committed performance levels					
		Starting level					
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Assessment	Stable	-	-	-	-	Stable
Actual / Forecast	Assessment		Stable	Stable	Stable	Stable	Stable
Penalty collar			-	-	-	-	-
Penalty deadband			-	-	-	-	Deteriorating

The graphs below show the actual performance to date and the future forecast performance on the basket of sub-measures used to assess the PC:



All six sub-measures for Sewer Networks S&R have remained within or better than the reference levels this review period to date except for properties flooded due to other causes.

The overall basket has been assessed as stable as three sub-measures are below the lower limit and two sub-measures are between the lower limit and the reference level. Of these, four sub-measures are showing a generally reducing trend. Only one sub-measure is significantly above reference level and slightly above the upper limit, properties flooded due to other causes and this is only forecast to be above the upper limit in 2017-18. To drive future improvement the two sub-measures that have increased in the year, pollution and other causes, are both included in the PR19 Upper Quartile performance plans.

The pollution and properties flooded due to other causes sub-measures will gain around £30m additional funding from our upper quartile investments and customers will benefit from a step change in sewerage escapes.

The transfer of private assets into Yorkshire Water ownership has continued this review period on the sewer network as well as the new adoptions of any private sewage pumping stations. Whilst we have seen less pumping station adoptions to date than anticipated, the cost of bringing these assets up to a safe and serviceable standard in line with our internal asset standards has been significantly more than predicted. More of these adopted sites are requiring new electric supplies and significant civils improvements than previously envisaged which has led to delivery cost pressures on this programme. We are forecasting to invest in total £49m compared to the £39m allowed for in FD14. This is funded from savings made within other investment drivers within this PC.

We have also seen a significant reduction in the level of third party sewer diversions and requisitions this review period to date compared to historic levels used to identify investment in FD14, which has also meant a reduction in the associated grants and contributions income which is collected from developers or infra connection charges. We forecast this level of expenditure to continue for the remainder of the review period but, unlike within the water programme, there is an overall net reduction of £20m on the programme. This investment has been re-allocated to support other areas of pressure and our upper quartile plans within the wholesale waste water programme.

Our current forecast assessment for 2019-20 outturn is to continue to be assessed as Stable, resulting in no financial penalty.

### **Performance Commitment SB1: Number of designated bathing waters that exceed the required quality standard**

The table below identifies the number of designated bathing waters where the requirements of the EU Bathing Water Directive (BWD) are exceeded, based on EA bathing water samples taken at designated bathing beaches; that is, the number of bathing waters which are good or excellent (better than sufficient).

This PC is reported by bathing season in the following year, that is, bathing season 2015 reported in 2015-16, has no financial incentives but does have a reputational impact.



		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	No.	15	15	15	15	15	15
Actual / Forecast	No.		18	17	18	18	18

One of the solutions in FD14 totalling £34m has been removed from the delivery programme as the solution proposed was not affordable or appropriate for the long-term resolution of the risk identified. We are confident that our significant investment on the rBWD in the previous review period has allowed us to exceed our PC target on the number of high quality bathing beaches. The forecast savings totalling £25m have been re-allocated to support our upper quartile aspirations in other areas of the wholesale programme.

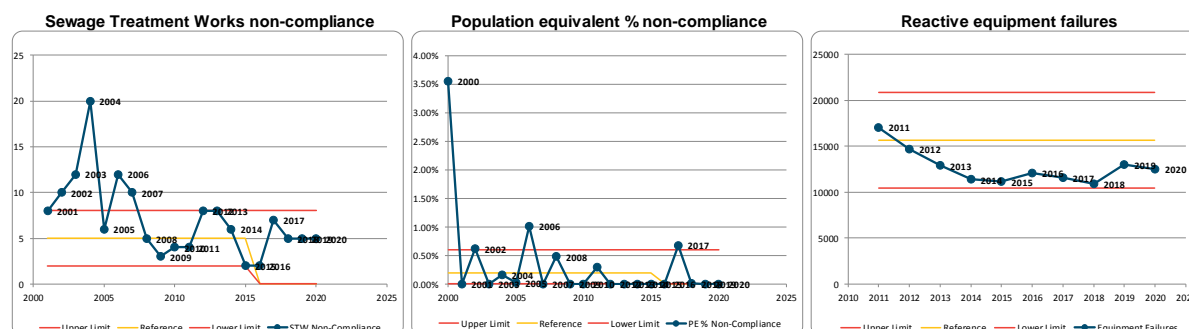
Actual performance to date and future performance is forecast to continue to meet or better our bathing water targets which will mean there is no risk of reputational impact to the company.

### Performance Commitment SB2: Wastewater quality stability and reliability factor

The table below identifies the overall assessment of long-term stability and reliability for waste water quality, based on a basket of indicators. Assessment is based on the recent historical trend of the indicators. An assessment in 2018-19 for 2019-20 outturn will give a classification of Improving, Stable or Deteriorating with only a financial penalty of up to 10% of the outcome totex for not meeting an overall stable assessment depending on the number of failing sub-measures and if these are persistent or non-persistent failures:

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Assessment	Stable	-	-	-	-	Stable
Actual / Forecast			Stable	Stable	Stable	Stable	Stable
Penalty deadband			-	-	-	-	Deteriorating

The graphs below show the actual performance to date and future forecast performance on the basket of sub-measures used to assess the PC:



All three sub-measures for Wastewater Quality S&R have remained within or better than the reference levels during this review period to date except for Population Equivalent Non-Compliance in 2016-17 which outturned above the upper reference level. This was due to a failure at one works, Beverley WWTW. Subsequent mitigation was put in place and a capital works scheme is currently in delivery to rectify any past issues and to deliver a site that will remain fit for purpose in the future. We believe this to be a one-off failure and still assess the sub-measure as Stable.

Our overall expenditure in the period has benefited from approximately £72m investment above FD14 in the capacity and renewable energy generation capabilities at our Knostrop wastewater treatment works.

Our current forecast assessment for 2019-20 outturn is to continue to be assessed as Stable, resulting in no financial penalty

### Performance Commitment SB4: Length of river improved

The length of river in the Yorkshire Water region improved during 2015-20 against Water Framework Directive (WFD) component measures.

This PC is reported by financial year and has both a financial penalty of £0.146238m per km and a reward of £0.076696m per km calculated in 2018-19 for 2019-20 outturn outside the acceptable deadband performance with no reward cap or penalty collar.

		Starting level		Committed performance levels			
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	km	-	-	-	-		340
Actual / Forecast	Km		-	-	-	-	357
Penalty deadband	km		-	-	-	-	337
Reward deadband	km		-	-	-	-	343

In total there are 52 defined regulatory quality investigations or solutions identified in FD14 to target environmental benefits as agreed with the Environment Agency (EA). These

regulatory defined outputs address environmental quality improvements under the EA WFD. To date 16 of these obligations have been delivered with the remaining 36 outputs in delivery and forecast to meet their corresponding compliance dates.

The FD14 funding totalling £193m included outputs that have since been revised as part of the NEP5 final review. Whilst this has led to timing differences to the investment originally identified in FD14 we have been able to target delivery and procurement efficiencies by grouping similar solutions to remove phosphorus at multiple sites.

We have also been able to realise delivery efficiencies on the quality investigations by grouping any modelling required within the quality programme to any base modelling to avoid duplication of costs as well as using internal resources rather than external consultants or working with others to deliver time and cost efficiencies whilst still delivering these regulatory outputs.

In total we are now forecasting to invest £148m to meet our regulatory obligations with the reduction in investment of £5m being reallocated to fund other areas of pressure within the wholesale waste water programme.

Delivery of these regulatory outputs will ensure that 357km of river length is improved in total meeting our PC target and would reflect a reward position following the reward rules identified above. However, an error with our target was identified after FD14 had been published, the correct target should have been 356km not 340km. Further to our correspondence with Ofwat on this issue it was advised that the original target would not be changed but a business decision was made to only claim reward greater than the revised, internal, target. As such we are forecasting to achieve 1km greater than the revised target, earning a reward of £77k.

### Performance Commitments WC2 & SB3: Solutions delivered by working with others

The table below identifies the number of intervention solutions delivered through working with multi-agencies, organisations or individuals. The PC is a total commitment, at Appointee level. It spans water and wastewater controls and specific targets have not been allocated to the individual controls.

This PC is assessed in 2018-19 for 2019-20 outturn and has a financial reward only of 5% of totex cost of Yorkshire Water cost for each eligible intervention which is calculated in 2018-19 for 2019-20 outturn for performance outside acceptable deadband performance with no reward cap.

		Starting level	Committed performance levels (Water and wastewater combined)				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC (Appointee)	No.	-	3	3	3	3	4
Actual / Forecast	No.		4	5	12	10	8
Reward deadband	No.		3	6	9	12	16

We continue to explore any opportunities to work with others to resolve any customer issues but there is no direct investment associated with this PC as any solutions promoted should also support delivery of service level improvements to our customers under other PCs.

We have bettered our target for each year of the review period so far and are forecasting to continue to do so for the remainder of the 2015-20 period. The current forecast outturn in the last two years of the review period will drive a financial reward totalling £0.172m.

### Performance Commitments WC3 & SB5: Amount of land conserved and enhanced

The table below identifies the amount of land that 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 PC is a total commitment, held at appointee level. It spans water and wastewater controls and specific targets have not been allocated to the individual controls. This PC is reported by financial year and has both a financial penalty of £0.020263m per hectare and a reward of £0.1013171m per hectare calculated in 2018-19 for 2019-20 outturn for any performance outside the acceptable deadband performance but within the reward cap and penalty collar.

		Starting level	Committed performance levels (Water and wastewater combined)				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC (Appointee)	Ha.	-	-	-	-	-	11,736
Actual / Forecast	Ha.		-	-	-	-	11,689
Penalty collar	Ha.		-	-	-	-	10,998
Penalty deadband	Ha.		-	-	-	-	11,501
Reward deadband	Ha.		-	-	-	-	11,971
Reward cap	Ha.		-	-	-	-	12,049

Please note, when we submitted App5 as part of the PR14 Reconciliation in July we had entered a value of 11,684 for this measure in error, the value should actually be 11,689, a change of 0.04%, we have now rectified this in the App5 table.

Although actual performance to date and future forecast performance is not forecast to achieve the PC target it is forecast to remain within the deadband of acceptable performance and therefore will not attract any financial penalty.

The reason that we are forecasting not to meet our target of 11,736Ha is that a 47Ha area of SSSI land at Newton Dale, that we had included when setting the target, was sold just before the start of the review period when the figures had already been set. A business decision was made at the time, agreed with the YFWC, that, since this change was marginal, we would not proceed to formal Ofwat approval to change the target and would instead accept that we will not meet our target for this PC.

### Performance Commitments WD1, SC1 & RC1: Proportion of energy use generated by renewable technology

The table below identifies the amount of energy Yorkshire Water generates through its renewable technology expressed as a percentage of total energy consumption.

The PC is a total commitment, held at Appointee level. It spans water, wastewater and retail controls and specific targets have not been allocated to the individual controls. This PC is reported by financial year and has no financial incentives but does have a reputational impact.

		Starting level	Committed performance levels (Water, wastewater and HH retail combined)				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC (Appointee)	%	8	12	12	12	12	12
Actual / Forecast	%		11.3	10.0	11.4	12.0	17.0

We have failed to achieve this PC target to date in the current reporting period, this was due to the damage to key energy generation equipment during the flooding over the Christmas and New year period in 2015-16. These assets are now in the capital programme to be replaced but due to the complexity of building these new assets they will not be in beneficial use until report year 2019-20.

To drive performance to target our 2018-19 target of 12% without these key assets we have identified a number of new energy saving initiatives such as ensuring CHP (combined heat and power) maintenance is a high priority to minimise downtime of energy generating assets as well as creating a new energy focussed role to understand further energy saving opportunities and then driving these improvements within the business.

In FD14 we were funded £2m to carry out European Union (EU) Energy Efficiency Directive Audits for both our Water and Waste Water assets. Energy Savings Opportunity Scheme (ESOS) is an energy saving scheme developed to meet the EU directive to have our sites surveyed by a lead assessor and to date these have identified a number of energy saving projects that have been put in place which already achieved over £0.5m of cumulative savings to date in this reporting period by investing the £2m allowed in the original plan.

## Performance Commitments WD2, SC2 & RC2: Proportion of waste diverted from landfill

The table below identifies the amount of waste from all Yorkshire Water activities (office, operational or construction) that is recycled or re-used as a percentage of total waste produced.

The PC is a total commitment, at appointee level. It spans water, wastewater and retail controls and specific targets have not been allocated to the individual controls. This PC is reported by financial year and has no financial incentives but does have a reputational impact

		Starting level	Committed performance levels (Water, wastewater and HH retail combined)				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC (Appointee)	%	93	94	94	95	95	95
Actual / Forecast	%		98.9	99.0	99.4	98.9	98.9

There is no expenditure in the original plan to directly impact on this PC. Achievement of this commitment is supported by the investment improvements which deliver our Wastewater quality stability and reliability factor commitment. This ensures that the assets required to treat the amount of waste from all Yorkshire Water activities (office, operational or construction) can be recycled or re-used and not sent to landfill.

Actual performance to date and future performance is forecast to continue to better our waste disposal targets which will mean there should be no risk of any reputational impact to the company.

## Performance Commitment RA1: Service incentive mechanism (SIM)

The table below identifies our SIM performance the full definition of this measure is in 'Service incentive mechanism (SIM) for 2015 onwards – conclusions', as published on Ofwat's website in April 2014. This PC is reported by financial year and has both a financial penalty and reward calculated by the comparative position which is calculated annually.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	Score	82.0	>2014-15	>2015-16	>2016-17	>2017-18	>2018-19
			82.6	83.4	84.3	87.0	87.0

Customer service performance has improved year on year, demonstrated within the SIM. The drive to improve satisfaction and resolve queries first time has seen a reduction in the number of written complaints. Satisfaction in billing contacts was industry leading in 2017-18. We expect overall performance to continue to improve in 2018-19 and 2019-20. This will be achieved through better resolution of water and waste related issues. Our forecast is to target 87 SIM points over the remaining two years to ensure continued year on year improvements.

## Performance Commitment RA2: Service commitment failures

The table below identifies the total number of GSS (Guaranteed Standards of Service) events, including enhanced GSS events, each year.

This PC is reported by financial year and has no financial incentives but does have a reputational impact.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	No.	15,267	Average of 2015-20 performance to be less than average of last 3 years of 2010-15 performance				
			10,567	10,356	12,203	12,000	12,000

The number of annual failures has been consistently lower than the average number reported from 2010 to 2015. We are committed to reducing the number of failures further in 2018 to 2020 and expect sewer flooding incidents and interruptions to supply to reduce. Total volumes are expected to be less than 12,000 per year.

## Performance Commitment RA3: Overall customer satisfaction

The reported value for overall customer satisfaction determined by the annual Consumer Council for Water (CCWater) tracking survey.

This PC is reported by financial year and has no financial incentives but does have a reputational impact.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	-	Average of 2015-20 performance to be better than average of 2010-15 performance				
Water	%		95	93	94	95	95
Waste	%		92	91	89	95	95

Our overall satisfaction of service measured through the CCWater's annual survey, known as Water Matters, has been consistently high. Our focus on delivering high quality water and waste water services will continue in the next two years and we expect the score to remain at this level.

### Performance Commitment RB1: Cost of bad debt to customers expressed as proportion of bill

The cost to bill paying customers to cover the cost of interest on revenue that is not collected, debt written off and debt management costs, expressed as a percentage of the average annual bill. This includes the collection and revenue activities for managing the debt.

This PC is reported by financial year and has no financial incentives but does have a reputational impact.

		Starting level	Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	3.1	3.16	3.16	3.16	3.16	3.16
	%		3.05	2.94	3.10	3.16	3.16

This measure reflects how efficiently we collect revenue from customers and avoid unpaid bills. Our performance in this area has historically been leading within the industry and we have consistently met our target of 3.16%. Innovative debt management practice has helped us to deliver on this commitment. We are confident that new initiatives relating to debt management will help us to meet future targets.

### Performance Commitment RB2: Number of people who we help to pay their bill

The number of customers who are assisted to pay their bill. This includes, but is not limited to WaterSure, Resolve and the Community Trust, plus the number of those who take up



a water meter as a result of targeted advice following identification of an affordability issue (customers should not be double counted).

This PC is reported by financial year and has no financial incentives but does have a reputational impact.

	Starting level		Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	No.	-	To publish data annually on the number of people who have been helped				
			22,735	26,902	28,853	29,000	40,000

We have exceeded the number of people helped year on year. Our original targets for 2018 to 2020 of 24,000 will now be exceeded significantly due to the success of our current schemes and additional funding for our Social tariff. This was not originally confirmed when the PR14 reconciliation and accounting for past delivery was submitted on 13th July but has now been agreed with CCWater and the YFWC driving the improved forecast for 2018-19 and 2019-20 and we have updated table App5 to show this.

### Performance Commitment RB3: Value for money

The reported value for value for money determined by the annual CCWater tracking survey.

This PC is reported by financial year and has no financial incentives but does have a reputational impact.

	Starting level		Committed performance levels				
	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PC	%	-	Average of 2015-20 performance to better than average of 2010-15 performance				
Water			83	79	76	80	80
Waste			82	82	79	80	80

We are on track to meet our average satisfaction score compared to the scores observed from 2010 to 2015. Historically these scores can be more volatile due to external factors. However, we believe the improvement in customer service and the support we give to those struggling to pay will help achieve our targets.

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