



AFW Aligning Risk and Return

Evidence Document

March 2019

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1 High level response to Ofwat Feedback

1.1 Summary

Our Revised Plan addresses all of the actions raised by Ofwat in its Initial Assessment of our September Plan.

Our Revised Plan adopts Ofwat's early view of long term CPIH of 2.0% and RPI of 3.0%.

Our Revised Plan is financeable on a notional basis, using the ratios in the official Ofwat model (version 17z) and meets the Ofwat stress tests. We have undertaken additional assurance and put in place further controls to ensure that the figures reported in the model are correct. We have set the ratio targets for the notional company to align with the levels required to meet our Baa1 credit rating under Moody's current methodology and to maintain an investment grade credit rating under stress. We are concerned that on a notional basis, the company does not meet the alternative interest cover ratio indicating a shortfall in the level of return.

The Directors have confirmed in the Supplemental Board Assurance Statement that our Revised Plan enables the Company to maintain its Baa1 credit rating based on Moody's current assessment process and guidance. We expect to meet our covenants and maintain headroom against those covenants. When Ofwat's stress tests are applied, we continue to be able to meet our covenants and maintain an investment grade credit rating (based on Moody's current assessment process and guidance). Accordingly, the Board is satisfied of the Company's financeability for AMP7. This document sets out the detail of financeability tests completed that support this statement. We have also completed these tests with different capital structures.

We have revised the PAYG and RCV run off rates in our Revised Plan by reducing our PAYG rate from AMP6 and our September Plan. These rates have been set in a three-stage process

- i. Assessing the natural PAYG and RCV run off rates
- ii. Ensuring that the notional company is financeable by adjusting the PAYG rate and offsetting this with an adjustment to the RCV run off rates so that customers are not disadvantaged and aligning with customer research
- iii. Smoothing bills through AMP7 and AMP8 by adjusting the RCV run off rates in line with customer expectations supported by customer research.

We have also set out and explained the PAYG and RCV run off rates for the different wholesale price controls. This provides customers with a 15-year reducing bill and enables the company to deliver its plans and remain financeable on a notional structure. The bill we are now proposing as part of our Revised Plan had over 70% acceptability when tested in Spring 2018.

We have explained the need for a higher PAYG rate to achieve a financeable notional company. This is primarily driven by the legacy high operational gearing caused by the relatively small RCV of the company compared to the size of its operation and operating costs.

The Board has reviewed Risk and Return in detail in each of the six PR19 Board meetings it has held post the IAP. It has fully reviewed and discussed the ratios and PAYG rates at the 14th, 21st and 27th March Board meetings.

In our Revised Plan, we have removed the uncertainty mechanism for metaldehyde in light of the announcement of a ban on metaldehyde sale and distribution from 30 June 2019 and on metaldehyde storage and use from 30 June 2020. We are retaining the uncertainty mechanism for a possible sustainability reduction in our Brett community and set out the evidence that the adequate protections are not already in place.

Our uncertainty mechanism for a sustainability reduction in our Brett community has been included in our response to correspondence with the Environment Agency (“EA”). The EA has identified that an additional sustainability change may be required in our Brett community of 10 to 20 MI/d. This is over and above the sustainability changes that had been included on the WINEP3 list.

The need for the sustainability change can only be confirmed once an investigation and options appraisal is complete. We have agreed with the EA to make an early start on this during AMP6 so that it can be concluded in March 2021.

We have revised our RoRE analysis for water trading, revenue and costs and provided further explanations for each of these. In addition to the September Plan, our water trading RoRE now considers further small trades with our neighbouring water companies. Our revenue RoRE has been reduced to reflect the regulatory revenue protections and the RoRE on our wholesale Totex and retail expenditure has been linked to our corporate risks and mitigations. This remains asymmetrical due to the nature of the retail risks.

2 Detailed response to Ofwat feedback actions

2.1 AFW.RR.A1

2.1.1 Overview of test area action

Table 1: Action details for AFW.RR.A1

Action Ref.	Action
AFW.RR.A1	The company should revise its business plan and associated financial modelling to be based on our 'early view' of long term CPIH of 2.0% and RPI of 3.0%, or provide compelling evidence why this is not appropriate.

Nature of adjustment: action completed

2.1.2 Our response

We have revised our September Plan and associated financial modelling based on Ofwat's 'early view' of long term CPIH of 2.0% and RPI of 3.0%. This means that the WACC also aligns to Ofwat's 'early view'.

In our September Plan, we had provided an updated inflation forecast as our interpretation of the rules at the time led us to believe that this was required.

2.1.3 Implications across the plan

This change will result in lower WACC over the September Plan. This will affect customer bills, returns and the financial ratios. The change in inflation will offset most of these changes.

2.1.4 Assurance

KPMG have assured that we have correctly applied Ofwat's early view of CPIH, RPI and the WACC in our model.

2.1.5 Evidence

Table 2: Evidence to support the response to AFW.RR.A2

Appendix	Description
RR.A1.1	KPMG assurance report: financial model
RR.A1.2	PwC (financial) data table assurance

2.2 AFW.RR.A2

2.2.1 Overview of test area action

Table 3: Action details for AFW.RR.A2

Action Ref.	Action
AFW.RR.A2	The company should provide further explanation to underpin the assumptions made on water trading in the RoRE analysis.

Nature of adjustment: action completed

2.2.2 Our response

The requirement for the RoRE analysis on water trading is for the supply of water only. In addition to this analysis, we also purchase water from Thames Water and have an asset and supply agreement with Anglian for them to provide a supply of water from the Grafham Reservoir and Ardleigh. We continue to work with our neighbouring water companies to explore other opportunities to purchase water where it is efficient and effective to do so.

In our September Plan, we included in the RoRE analysis our existing water trade with South East Water. We have a bulk supply agreement to provide a guaranteed actual capacity of 35% of Egham water treatment works. We typically supply just under this at around 33% or 9.5MI/d. We have seen demand over the last 10 years that is higher than this; up to 43% of actual capacity on average for a year and lower down to 25% on average over a year. We have confirmed with South-East Water their need for this bulk supply for AMP7 and have used the historical variations in supply over the last 10 years to complete our RoRE analysis. Any increase in supply is partly offset by an increase in the marginal production costs.

The RoRE analysis in our Revised Plan considers the possibility of further water trading in AMP7. We believe that this is limited due to the constraints on supplies in our region, however, there are opportunities we are discussing with our neighbouring water companies on local supply issues where we can support each other and improve resilience for our customers. For example, we are discussing the potential to provide supplies to Thames in the Slough, Walton and Ardleigh regions. We have estimated that potential opportunities could result in a revenue upside of £0.5m, less associated costs.

In total, the RoRE upside on water trading net of costs is 0.17% with a downside of 0.12%. These are shown in the following table.

Table 4: RoRE on Water Trading

September 2018 Submission (14h)		Appointee	WR	WN
Water trading incentive export revenue impact upside		0.32%	1.52%	0.15%
Water trading incentive export revenue impact downside		-0.15%	-1.43%	-0.14%
Water trading export costs impact upside		-0.19%	-0.90%	-0.09%
Water trading export costs impact downside		0.33%	0.83%	0.08%
Changes				
Water trading incentive export revenue impact upside		0.08%	0.36%	0.04%
Water trading incentive export revenue impact downside		-0.15%	0.07%	0.00%
Water trading export costs impact upside		-0.05%	-0.21%	-0.02%
Water trading export costs impact downside		-0.16%	-0.04%	0.00%
Amended for Re-submission (17z)		Appointee	WR	WN
Water trading incentive export revenue impact upside		0.40%	1.88%	0.18%
Water trading incentive export revenue impact downside		-0.29%	-1.37%	-0.13%
Water trading export costs impact upside		-0.24%	-1.11%	-0.11%
Water trading export costs impact downside		0.17%	0.79%	0.08%

2.2.3 Implications across the plan

There are no implications across the plan as this action item results in no change.

2.3 AFW.RR.A3

2.3.1 Overview of test area action

Table 5: Action details for AFW.RR.A3

Action Ref.	Action
AFW.RR.A3	The company should amend its overall assessment of RoRE outcomes, or provide convincing evidence to explain why it is reasonable to assume Totex outcomes should be asymmetrically skewed to the downside for the notional company within an incentive based regime.

Nature of adjustment: action completed

2.3.2 Our response

The asymmetry in our RoRE Totex analysis related to the Retail expenditure outcomes. This is driven by two principle risks: bad debt and customer data. Our plan includes a continued improvement in the level of bad debt to an upper quartile performance of a bad debt charge of 1.8% of revenue. We believe that at this level, only smaller incremental improvements are possible. However based on industry experience, a downturn in the economy could lead to the bad charge rising to 4%. This results in an asymmetrical RoRE for bad debt.

A loss or breach of customer data could be a significant risk and cost for Retail. Whilst we have protections in place and are a leader in cyber security in the sector, the risk remains and would result in a asymmetry in Retail expenditure in the RoRE analysis. In total, Retail expenditure has RoRE outcomes of +0.32% and -0.97%.

The asymmetry of the Totex in our September Plan also appears to be driven by the Ofwat model including water trading RoRE in the Totex RoRE. Our water trading RoRE is asymmetrical and is explained in our response to action AFW.RR.A2 above.

We confirm the wholesale Totex RoRE outcome in our September Plan was symmetrical and has remained symmetrical in our Revised Plan. We have revised the risks and opportunities in the wholesale Totex RoRE analysis, aligning it with our strategic risks and reflecting the additional efficiencies taken in the Revised Plan and our current level of operating costs.

The RoRE for wholesale and retail cost outcomes is shown below:

Table 6: RoRE for Wholesale Cost Outcomes

September 2018 Submission (14h)	Appointee	WR	WN
Costs including uncertainty mechanism upside	0.86%	1.62%	0.75%
Costs including uncertainty mechanism downside	-0.86%	-1.62%	-0.75%
Changes			
Cost upside	1.14%	2.33%	0.96%
Cost downside	-1.14%	-2.33%	-0.96%
Amended for Re-submission (17z)	Appointee	WR	WN
Costs including uncertainty mechanism upside	2.01%	3.95%	1.72%
Costs including uncertainty mechanism downside	-2.01%	-3.95%	-1.72%

Table 7: RoRE for Retail Cost Outcomes

September 2018 Submission (14h)	Appointee
Retail costs upside	0.36%
Retail costs downside	-1.11%
Changes	
Retail costs upside	-0.04%
Retail costs downside	0.14%
Amended for Re-submission (17z)	Appointee
Retail costs upside	0.32%
Retail costs downside	-0.97%

2.3.3 Implications across the plan

There are no implications across the plan as this action item results in no change.

2.4 AFW.RR.A4

2.4.1 Overview of test area action

Table 8: Action details for AFW.RR.A4

Action Ref.	Action
AFW.RR.A4	<p>The company should remove the uncertainty mechanism for metaldehyde or provide further evidence to demonstrate why the uncertainty mechanism is required - specifically whether the cost item will remain uncertain at the time of draft and final determinations.</p> <p>The company should remove the uncertainty mechanism for sustainability reductions or provide convincing evidence that adequate protections are not already in place given Totex cost sharing arrangements and scope for transitional arrangements at PR24.</p> <p>If the company retains an uncertainty mechanism in its revised business plan, it should ensure the proposal is underpinned by RoRE assessment in accordance with section 10.4.3 of the PR19 methodology.</p>

Nature of adjustment: action completed

2.4.2 Our response

We have removed the uncertainty mechanism for metaldehyde in light of the announcement of a ban on metaldehyde sale and distribution from 30 June 2019 and on metaldehyde storage and use from 30 June 2020. We are retaining the uncertainty mechanism for a possible sustainability reduction in our Brett community and set out evidence that the adequate protections are not already in place.

Our uncertainty mechanism for a sustainability reduction in our Brett community has been included in response to correspondence with the Environment Agency (“EA”). The EA has identified that an additional sustainability change may be required in our Brett community of 10 to 20 Ml/d. This is over and above the sustainability changes that had been included on the WINEP3 list.

The need for the sustainability change can only be confirmed once an investigation and options appraisal is complete. We have agreed with the EA to make an early start on this during AMP6 so that it can be concluded in March 2021.

If the investigation and options appraisal demonstrates that a sustainability change is required then this will need to be delivered by December 2024. This is a deadline imposed by the Water Framework Directive (“WFD”) through two provisions: (1) the date for achievement good status; and under Article 4; and (2) the date by which measures to achieve good status must be operational under Article 11.

The WFD required all water bodies to achieve *good* status by 22 December 2015 unless the deadline is extended under Article 4.4. Article 4.4 provides that the deadline could be extended for specified reasons that include that the scale of improvements requires a longer delivery timescale for reasons of technical feasibility or because completion within the timescales would be disproportionately expensive. However, Article 4.4(c) specifies that these extensions could only be applied for two updates of the river basin management plan. River basin management plans are updated once every six years. The first update to river basin management plans was in December 2015 and the second update will be in December 2021. It is therefore not possible to extend achievement of good status beyond December 2027.

The sustainability change would be a “measure” for the purposes of Article 11 of WFD. If needed, it would be included in the programme of measures published in the updated river basin management plan in 2021. Article 11.8 requires that any new or revised measures are made operational within three years of their establishment. Thus, any sustainability change would need to be implemented by December 2024. This is also likely to be required for the change to be effective prior to December 2027, the date for achievement of *good* status.

We explored with the EA whether it would be possible for it to update the WINEP3 list to include the additional sustainability change. The EA informed us that their understanding of the process was that it did not allow for amendments to be made to the WINEP3 list and that therefore, it was unable to do this.

If this sustainability change had been included on the WINEP3 list then it is likely that it would appear as “Amber”. Amber indicates a likely change to licence will be necessary. Ofwat’s methodology provides that Green and Amber sustainability changes will be funded but that an environmental uncertainty mechanism should be included to return money to customers should a sustainability change not be implemented.

If we were to rely on the sharing mechanism then we would only be able to recover a share of any cost we incur to implement the sustainability change. This would put us in a worse position than we would have been in if the sustainability change had been identified in WINEP3. We would therefore suffer a detriment as a result of the process not allowing for the EA to update WINEP3. Our bespoke uncertainty mechanism seeks to mirror the position that would have applied if the additional sustainability change had been identified in time to be included on WINEP3.

We have provided costs for a sustainability reduction required at two different levels depending on the outcome of the investigation and options appraisal. This depends on whether the additional sustainability reduction is within our current supply demand surplus or is greater than our current supply demand surplus.

We have updated our understanding of our available surplus in our revised draft WRMP published on 1 March 2019. We now believe we could accommodate an additional 2 MI/d within our existing surplus rather than 1.1MI/d as indicated in our September Plan. If a greater change than this was required, we would need an additional supply option. We have investigated several options for delivering the full volume and we have selected the solution most likely to meet this requirement to deadline at best value, which is a desalination plant. If a smaller level of reduction occurs then we will explore the opportunity for a more regionally based transfer solution.

Table 9: Proposed uncertainty mechanisms for the Revised Plan

Uncertainty	Linked Outcome	Unit	Indicative Unit Cost (£m)	Indicative Total Cost (£m)
Sustainability reduction not on WINEP3 in Brett Region (from 2.6 MI/day to 4.6 MI/day)	Making sure you have enough water, while leaving more water in the environment.	MI/d of deployable output reduced	3.35	6.7
Sustainability reduction not on WINEP3 in Brett Region (from 4.6 MI/day to 20 MI/day)	Making sure you have enough water, while leaving more water in the environment.	MI/d of deployable output reduced	6.67	113.2

These costs are indicative only. Until the investigation and options appraisal, we will not know the volume of any change, the best solution for delivering that change or the cost for implementing the change. If a sustainability change were required, we would expect to make a further submission to Ofwat to demonstrate that the investment proposed was robust and deliverable, selected after a proper assessment of options and that the option proposed is the best one for customers.

We have carried out a RoRE analysis on the basis of these indicative costs. If the desalination plant were required we would incur £51.7m in years 3,4 and 5 of AMP7. Our proposal is for the mechanism to allow for this cost to be added to our RCV, enabling us to finance such a large increase in our Totex. At PR24, this would then be trued up for the cost of capital and reflected in the Price Review. This would mean that customers' bills are not affected during AMP7.

The £52m before the uncertainty mechanism is applied gives a RoRE downside 1.01%, including the 50% recovery from customers, assuming a sharing rate of 50:50. This would impact returns by 22%, highlighting the need for the uncertainty mechanism. Applying the uncertainty mechanism fully mitigates the impact in the RoRE analysis. However, we would incur a timing difference in our actual cashflows which we have accepted.

During our rdWRMP pre-consultation, we took the opportunity to ask for early indicative customer feedback on preferences. Four customer focus groups of mixed gender, age and socio-economic demographic profile were run. Whilst some participants felt that the sea provided an efficient way to address the issue, being a good, natural resource, others were concerned with the environmental impact and energy costs of building and running a new plant.

When asked to rank all supply side options in order of preference, groups anticipated desalination could be an option for the future, provided this option was explored and more research carried out to find an energy efficient approach. (Affinity Water, rdWRMP Pre-consultation Customer Focus Groups 1, Ipsos Mori, December 2018)

A further four groups were run in January 2019 to research - in more depth - the options that customers support. Views towards desalination were mixed, with similar outcomes to those of customers in the December groups. Of particular note however, was a customer group in Manningtree - a location nearest to the area most likely to benefit from a desalination plant – who were slightly more receptive to the idea of desalination, suggesting that proximity and the perceived local benefit was a key driver of attitudes towards this option. (Affinity Water, rdWRMP Pre-consultation Customer Focus Groups 2, Ipsos Mori, February 2019).

2.4.3 Implications across the plan

The removal of the uncertainty mechanism for metaldehyde has been reflected in the RoRE analysis.

2.4.4 Assurance

Not applicable

2.4.5 Evidence

Table 10: Evidence to support the response to AFW.RR.A4

Appendix	Description
RR.A4.1	Affinity Water rdWRMP Pre-consultation Customer Focus Groups 1 Report. A report on outcomes of customer focus groups run in December 2018.
RR.A4.2	Affinity Water rdWRMP Pre-consultation Customer Focus Groups 2 Report. A report on outcomes of customer focus groups run in January 2019.

RR.A4.3	SR Brett – 20 Ml per Day. A summary of the options considered and preferred option selected.
RR.A4.4	Correspondence with the Environment Agency

2.5 AFW.RR.A5

2.5.1 Overview of test area action

Table 11: Action details for AFW.RR.A5

Action Ref.	Action
AFW.RR.A5	The company should provide further evidence to reconcile the financial ratios set out in the business plan tables to those produced in the official financial model and explain why these are appropriate for the company's assessment of financeability.

Nature of adjustment: action completed

2.5.2 Our response

The September Plan contained an error relating to the Company's models which resulted in some of the financial ratios in the data tables and September Plan document not agreeing to those in the Ofwat model. We have identified and corrected the errors and confirm that our September Plan remained financeable with this error corrected. On 21 February 2019, we shared our findings and the adjusted ratios with Ofwat.

To ensure that the ratios in our Revised Plan does not contain errors we have taken the following actions;

- Correct the errors identified
- Implemented additional checks to prevent a reoccurrence of the issue
- Reconciled the ratios reported to the Ofwat model
- Engaged KPMG to provide an external review of the model and this test area of our Revised Plan
- Engaged PwC to provide assurance of the inputs and outputs of the model and that the data tables have been completed correctly
- A secondary review of our model calculation has been added to our process. This was completed by one of our shareholders modelling experts.

Totex and a number of financial drivers have changed in the Revised Plan. The ratios for the Revised Plan are shown under the response to action AFW.RR.A7 of this report. We confirm that these agree to those calculated in the official model version 17z and BPT mapping tool v8.1.

2.5.3 Implications across the plan

The correction to the ratios calculated in the September Plan has no effect on the total plan: the plan remains financeable. The Revised Plan ratio results are shown under the response to action AFW.RR.A7 of this report.

2.5.4 Assurance

KPMG have reviewed the model, the output and the data tables to provide assurance to the Board that these have been correctly stated in the Revised Plan.

2.5.5 Evidence

Table 12: Evidence to support the response to AFW.RR.A5

Appendix	Description
RR.A1.1	KPMG assurance report: financial model
RR.A1.2.	PwC (financial) Data Table Assurance Report

2.6 AFW.RR.A6

2.6.1 Overview of test area action

Table 13: Action details for AFW.RR.A6

Action Ref.	Action
AFW.RR.A6	The company should assess the financeability of the notional company in relation to financial ratios produced by the official financial model for the notional company as set out in the methodology including the component parts of the early view cost of capital.

Nature of adjustment: action completed

2.6.2 Our response

The financeability of our Revised Plan has been assessed on the notional company in relation to the financial ratios produced by the official financial model. This has been completed using Ofwat's early view of the cost of capital (see response to action AFW.RR.A1 of this document) and our revised view of PAYG and RCV run-off rates (see response to action AFW.RR.A9 of this document) This has been completed for the 10 year period covering AMP7 and AMP8.

We have set the ratio targets in our assessment at a level to maintain our Baa1 investment grade credit rating as assessed by Moody's. This is using Moody's current process and methodology. These targets are in line with the current guidance issued by Moody's, see appendix RR.A6.1 We are targeting the upper end of this range as the Baa1 rating is an upper Baa rating.

We have set the PAYG to achieve the Adjusted cash interest cover ratio (Ofwat). This has a target range of 1.5 to 2.5, and we are targeting 2.0+ to maintain the Baa1 credit rating. The PAYG rate is explained in the response to action AFW.RR.A9 of this document.

The ratios for the notional company are shown in tables 14 and 15 below:

Table 14: AMP7 Ratios on a Notional Structure

Revised Business Plan		AMP7				
Notional Structure Ratios	Target	2020-21	2021-22	2022-23	2023-24	2024-25
<u>Ofwat's Metrics</u>						
Cash interest cover		4.7	4.7	4.7	4.6	4.8
Adjusted cash interest cover ratio (Ofwat)	1.5 to 2.5	2.1	2.1	2.1	2.1	2.1
Adjusted cash interest cover ratio (Alternative)	1.5 to 2.5	1.3	1.3	1.3	1.3	1.4
Funds from operations / net debt (Ofwat)	10% to 15%	13%	13%	13%	12%	13%
Funds from operations / net debt (Alternative)	10% to 15%	12%	12%	12%	12%	12%
Retained cash flow / debt		0.1	0.1	0.1	0.1	0.1
Dividend cover		-	-	-	-	-
Regulatory equity / regulated earnings for the regulated company		22.3	21.9	21.8	21.6	21.5
RCV / EBITDA		10	10	10	10	10
RCF to capex		64%	65%	71%	82%	103%

Table 15: AMP8 Ratios on a Notional Structure

Revised Business Plan		AMP8				
Notional Structure Ratios	Target	2025-26	2026-27	2027-28	2028-29	2029-30
<u>Ofwat's Metrics</u>						
Cash interest cover		3.7	3.9	4.0	3.7	3.7
Adjusted cash interest cover ratio (Ofwat)	1.5 to 2.5	1.6	1.8	1.8	1.7	1.6
Adjusted cash interest cover ratio (Alternative)	1.5 to 2.5	1.0	1.1	1.1	1.1	1.1
Funds from operations / net debt (Ofwat)	10% to 15%	9%	9%	9%	9%	9%
Funds from operations / net debt (Alternative)	10% to 15%	7%	8%	8%	7%	7%
Retained cash flow / debt		0.1	0.1	0.1	0.1	0.1
Dividend cover		-	-	-	2.4	0.8
Regulatory equity / regulated earnings for the regulated company		22.0	21.8	21.6	21.5	21.4
RCV / EBITDA		10	10	10	10	10
RCF to capex		59%	62%	68%	75%	87%

The tables show that the ratios are met for the notional company, with the exception of the Adjusted cash interest cover ratio (Alternative). This metric replicates the Moody's test. We are limited in the actions we can take to improve the Alternative ratio and it is not affected by changing the PAYG rates or wholesale outperformance. The main way it could be improved is by an increase in the WACC. This indicates the possible need for a premium on a notional basis and would be further strained if there were a decrease in the WACC in the draft or final determinations. This issue is shown in the table below with the post-tax return on RCV of £211m over the AMP being 1.4 times the notional interest payments.

Table 16: Notional Structure Return

Wholesale Revenue Building Blocks (Notional)	2021	2022	2023	2024	2025	Total
PAYG% totex	173	174	176	183	182	889
RCV Run-off	70	75	79	79	86	389
Post-tax return on RCV (WACC)	36	39	43	45	47	211
High gearing benefit sharing	(2)	(2)	(2)	(2)	(2)	(11)
PR14 reconciliation adjustments	(1)	(1)	(1)	(1)	(1)	(4)
Pension deficit repair allowance	-	-	-	-	-	-
Third party & principle service revenues	(2)	(2)	(2)	(2)	(2)	(12)
Tax allowance	4	4	4	3	4	20
Total Wholesale Revenue	278	288	296	305	315	1,483
Wholesale opex	(153)	(152)	(152)	(159)	(160)	(774)
10% opex overspend	(15)	(15)	(15)	(16)	(16)	(77)
10% overspend as a % of return on RCV	42%	39%	36%	35%	34%	37%
Notional interest cash	(27)	(29)	(31)	(33)	(33)	(154)

Ratio of Post-tax return on RCV to notional interest	1.3	1.3	1.4	1.4	1.4	1.4
1 - Ratio adjusted for gearing benefit sharing and PR14 adjustments	1.2	1.2	1.3	1.3	1.3	1.3
2 - Ratio adjusted for 10% opex increase	0.8	0.8	0.9	0.9	0.9	0.9
3 - Ratio adjusted for 1 & 2 above	0.7	0.7	0.8	0.8	0.9	0.8

On an actual balance sheet basis for the Company, the Moody's test is met based on their current methodology. In part, this is driven by the Company benefiting from a one (1) notch uplift up from its securitised debt structure. This changes the target range to 1.2 to 1.5 and on this basis the test would be met. Considering this, we believe that the Company is financeable on a notional basis, however we remain concerned about the Alternative ICR ratio.

These ratios have also been tested against the stress tests of the Ofwat scenarios. These are shown in tables 17 and 18 below.

Table 17: AMP7 Notional Structure Stress Tests

Ratio	Targets	Measure	Base Case	+10% Totex	Financial Penalty (3% Revenues)	ODI Penalty (3% RORE)	Bad Debt Increase 5%	Inflation High	Inflation Low	Cost of New Debt +2%	Combination - +10% Totex, Financial Penalty 1% Revenues & ODI Penalty 1.5% RORE
Cash interest cover		Avr	4.7	4.3	4.5	4.7	4.7	4.7	4.7	4.6	4.3
Adjusted cash interest cover ratio (Ofwat)	1.5 to 2.5	Avr	2.1	1.8	1.9	2.1	2.1	2.1	2.1	2.1	1.7
Adjusted cash interest cover ratio (Alternative)	1.5 to 2.5	Avr	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Funds from operations / net debt (Ofwat)	10% to 15%	Min	12%	11%	12%	12%	12%	12%	12%	12%	10%
Funds from operations / net debt (Alternative)	10% to 15%	Min	12%	10%	11%	12%	12%	11%	12%	11%	10%
Return on capital employed (ROCE)		Avr	4%	3%	4%	4%	4%	4%	4%	4%	3%
Return on capital employed (ROCE) (building blocks)		Avr	3%	3%	3%	3%	3%	3%	3%	3%	3%
Return on regulatory equity (RoRE) (building blocks)		Avr	5%	5%	5%	5%	5%	5%	5%	5%	5%

Table 18: AMP8 Notional Structure Stress Tests

Ratio	Targets	Measure	Base Case	+10% Totex	Financial Penalty (3% Revenues)	ODI Penalty (3% RORE)	Bad Debt Increase 5%	Inflation High	Inflation Low	Cost of New Debt +2%	Combination - +10% Totex, Financial Penalty 1% Revenues & ODI Penalty 1.5% RORE
Cash interest cover		Avr	4.4	4.1	4.2	4.4	4.4	4.3	4.4	4.1	4.0
Adjusted cash interest cover ratio (Ofwat)	1.5 to 2.5	Avr	2.0	1.7	1.8	2.0	2.0	2.0	2.0	1.9	1.7
Adjusted cash interest cover ratio (Alternative)	1.5 to 2.5	Avr	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5
Funds from operations / net debt (Ofwat)	10% to 15%	Min	10%	9%	10%	10%	10%	10%	10%	10%	8%
Funds from operations / net debt (Alternative)	10% to 15%	Min	9%	8%	9%	9%	9%	9%	10%	9%	8%
Return on capital employed (ROCE)		Avr	2%	2%	2%	2%	2%	3%	2%	2%	1%
Return on capital employed (ROCE) (building blocks)		Avr	3%	3%	3%	3%	3%	3%	3%	3%	3%
Return on regulatory equity (RoRE) (building blocks)		Avr	5%	5%	5%	5%	5%	5%	5%	5%	5%

The ratios are all met under the stress tests, accepting the point above on the Alternative ratio. The Ofwat Adjusted interest cover ratio does reduce in the more severe tests of the combined scenarios and the 10% overspend but remains in the Baa range and therefore the credit rating would remain at investment grade on these metrics. However, if this continued for more than one or two years, it could result in a lower investment grade rating of Baa2/Baa3.

Based on the analysis provided, we consider that the notional company is financeable.

2.6.3 Implications across the plan

It is fundamental for the plan to be financeable.

2.6.4 Assurance

The process to calculate the ratios reported have been reviewed by KPMG. The outputs of our financial modelling have been reviewed and assured by PwC.

2.6.5 Evidence

Table 19: Evidence to support the response to AFW.RR.A6

Appendix	Description
RR.A1.1	KPMG assurance report: financial model
RR.A1.2	PwC (financial) Data Table Assurance Report
RR.A6.1	Moody's Financial Ratio Guidance

2.7 AFW.RR.A7

2.7.1 Overview of test area action

Table 20: Action details for AFW.RR.A7

Action Ref.	Action
AFW.RR.A7	The company should set out the steps taken and the assurance obtained by the board in order to assess financeability of the business plan.

Nature of adjustment: action completed

2.7.2 Our response

In the Supplemental Board Assurance Statement, the Directors confirm that Affinity Water Limited with its Revised Plan remains financeable. Our Revised Plan enables the Company to maintain its Baa1 credit rating based on Moody's current assessment process and guidance. The Company meets the Company's covenants and maintains headroom against those covenants. When Ofwat's stress tests are applied, the Company continues to be able to meet its covenants and maintain an investment grade credit rating (based on Moody's current assessment process and guidance). Accordingly, the Board is satisfied with the Company's financeability for AMP7.

Our overarching financeability objectives are retaining the Company's existing corporate family credit rating of BBB+/Baa1 assessed by Moody's, maintaining the crediting ratings of our class A debt of A3 from Moody's and A- form Standard and Poor's (S&P), and meeting our financial covenants relating to gearing and interest cover. We believe that our Revised Plan will enable these objectives to be met.

The financeability of the Revised Plan and of the Company has been considered with four different levels of capital structure in appendix RR.A7.1 for AMP7:

- capital structure 80% as per our data submission for our Revised Plan (Table 1)
- a structure with 75% gearing (Table 2)
- a structure with 70% gearing (Table 3)
- a structure that reflects the expected de-gearing scenario based on our current de-gearing plan (Table 4).

Considering these options has enabled us to understand how the financeability of the plan is affected as the gearing level changes. Each structure is reported against Ofwat's eight stress tests and considers the following ratios:

- the Ofwat ratios as per the latest Ofwat model
- the Company's covenant ratios
- the credit rating tests applied to the company to maintain the Company's investment grade credit rating.

In assessing the financeability of the Revised Plan, we have also considered the ability of the Company to finance the Revised Plan and the level of cash reserves.

We have considered the stress tests suggested by Ofwat and believe that they are appropriate stresses to assess the financeability of the plan. We believe that the 10% Totex overspend, RoRE and combined

scenarios are more appropriate for our Revised Plan due to the increased risk in the Revised Plan for ODI's and Totex. These stress tests have been applied without management action or mitigations.

The same analysis has been completed for AMP8 as we also assess our financeability over the longer term. We will report our longer-term viability, over 10 years, in our annual report to be published in June.

Financeability with the Ofwat Ratios

The tables in appendix RR.A7.1 show the performance of the Ofwat ratios in delivering the Revised Plan (first column). For all four capital structures, the ratios are met. The target ratio has been adjusted to the Ba range in the of Moody's tests as shown in appendix RR.A6.1. This is due to the notch uplift gain from our securitised capital structure. The exception is the Adjusted cash interest cover ratio (Alternative) which is not met. This ratio, as explained above, replicates the Moody's test. However, the Company does meet the Moody's ratio, assuming its current methodology, and therefore, we believe no action is required to meet this test for the Ofwat metrics.

The tables also show that these metrics against the Ofwat stress tests are met. The boxes coloured light orange indicate where the ratios get tight and in the dark orange where they are borderline. The exception is on the 80% capital structure in table 1 where the Adjusted cash interest cover ratio (Alternative) falls just outside the ratio range on average and therefore the ratio is not met. This is the most severe scenario and mitigating management actions would be taken to prevent this occurring in every year.

Financeability against the Company's Covenants

Our bond programme is governed by Whole Business Securitisation (WBS) documentation, which encompasses a series of covenants that the Company must meet in addition to its regulatory requirements. The assessment of the ability to meet these covenants within the Revised Plan forms a significant part of the Boards assessment of the financeability of the plan. We set targets against the covenant ratios to maintain headroom against the lockup and trigger levels.

The covenants sections in the tables in appendix RR.A7.1 show performance against the Company's covenant ratios. These covenants are set in our lending documents. The trigger level - if breached - would require increased reporting and would lockup dividend payments. If the default level were breached, the creditors take control of the holding company. The covenants are assessed at the Affinity Water Limited (AWL) level, the same level as our corporate family credit rating is assessed. The tables show that AWL meets its covenants with the Revised Plan for all four capital structures.

Under the stress tests, the covenants do breach the trigger levels for the 10% Totex overspend scenario and the combined scenario. This is mainly on the gearing ratios and this would result in a high gearing. However, the default levels are not breached and therefore the Company is financeable with the Revised Plan.

Assessment if the plan will enable the Company to maintain its credit rating and an investment grade credit rating

A key consideration in the Company assessing its financeability is its ability to maintain its credit ratings. The ratios and stress tests shown in the tables in appendix RR.A7.1 demonstrate that the company meets the ratio levels currently required to maintain its credit ratings based on Moody's and S&P's current rating methodology across the four different capital structures. However, it should be noted that the ratios make up 40% of the requirements of the credit rating. Other factors that make up the rating are Business Profile (50%) and Financial Policy (10%). There is also a one (1) notch uplift for Structural Considerations that is based on the Company's corporate structure, its regulatory licence or its financing arrangements. Moody's views structural enhancements in AWL's financing structure as credit positive as it provides protection to creditors. These enhancements are incorporated in our financing agreements and also in our regulatory licence. We confirm that we will maintain these structural enhancements in the long run.

Moody's state factors that could lead to a downgrade, such as insufficient financial flexibility to accommodate lower returns in PR19, financial ratios persistently not meeting the required threshold and a significant increase in business risk as a result of legal and/or regulatory changes.

The S&P methodology initially analyses the Company's business profile and then the financial risk profile, which includes the ratios that are stress-tested in tables 1 to 4 in appendix RR.A7.1. Business risk is weighted more heavily than financial risk and a number of additional factors such as diversification, capital structure, financial policy, liquidity, and management and governance are included.

Business risk is based on providing low-risk services that are natural monopolies, which is underpinned by a strong regulatory framework. This is expected to be maintained in the medium to long-term.

S&P apply a one (1) notch uplift due to structural features related to our senior debt. These include:

- Restrictions on mergers, acquisitions, and asset disposals, and a share pledge in the operating company's and holding company's assets (to the extent allowed by legislation) and shares.
- Dividend-restricted and debt-restricted payment conditions and a covenanted liquidity structure that should, in our opinion, allow the bond-issuing company to manage temporary cash flow shocks.
- An automatic 18-month standstill period after an event of default, during which time creditors can take control of the bond issuing company and either aim for operational recovery or sell the shares in the operating and holding company.
- Prudent management of foreign exchange, refinancing, and counterparty risks.

A portion of our debt matures in 20 years or more, so we will maintain these structural features in the long run.

S&P states factors that could lead to a lower rating, such as unsatisfactory operational performance (resulting in material penalties) or, operations being negatively impacted by stricter regulation resulting in a declining FFO-to-Debt ratio below the target.

The performance of the credit rating ratios for the Company in the tables in appendix RR.A7.1 show that the ratios are satisfied with the credit rating agencies current process and methodology. Therefore, the Company's Revised Plan is expected to maintain its credit rating and is financeable.

The ability of the company to finance the plan and hold sufficient cash reserves

In its financeability assessment, the Company has considered the requirements to fund the Revised Plan. Our objective is to ensure we have adequate funding arrangements, cash and standby facilities to enable us at all times to have the level of funds available for the achievement of our business and service objectives. At 28 February 2019, we held cash balances of £109.3m and undrawn revolving credit facility of £100m, as well as debt service reserves which we plan to continue to hold. The high cash balance reflects the pre-funding of AMP7 undertaken to reduce the financing risk. A further £120m of Debt is required to fund the investments planned and £14m of our existing debt matures in AMP7. Our Revised Plan assumes that this cash need is funded through additional external debt. However, if the expected capital restructure of the Group is completed to de-gear the operating company, this cash need will be met mainly by the restructure.

Interest rate exposure is primarily managed by using a mixture of fixed rate, floating rate, CPI and RPI linked to deliver the investment proposed in the Revised Plan. In August 2018, we put in place a swap to move £135m of bonds from fixed to be index-linked. This has further supported the financeability of the Revised Plan.

Board Review

The Board has reviewed Risk and Return in detail in each of the six PR19 Board meetings it has held post the IAP. It has fully reviewed and discussed the ratios and PAYG rates at the 14th, 21st and 27th March Board meetings.

2.7.3 Implications across the plan

Not applicable

2.7.4 Assurance

KPMG have assured that the ratios we are targeting are in line with our targeted credit rating. They have assured the ratio calculations presented.

2.7.5 Evidence

Table 21: Evidence to support the response to AFW.RR.A7

Appendix	Description
RR.A1.1	KPMG assurance report: financial model
RR.A7.1	PR19 Actual Structure Financial Stress Tests

2.8 AFW.RR.A8

2.8.1 Overview of test area action

Table 22: Action details for AFW.RR.A8

Action Ref.	Action
AFW.RR.A8	The company should provide further evidence to support its view that the key financial ratios are consistent with the target credit ratings including how the threshold levels for each of the ratios have been determined.

Nature of adjustment: action completed

2.8.2 Our response

In response to action AFW.RR.A7 of this report we explain how our credit rating target is expected to be maintained and how the threshold levels for each of the ratios has been determined.

2.9 AFW.RR.A9

2.9.1 Overview of test area action

Table 23: Action details for AFW.RR.A9

Action Ref.	Action
AFW.RR.A9	The company should set out how the approach to setting PAYG and RCV run-off rates reflects the forecast costs and the depreciation of the underlying RCV for the company for each wholesale control and provide further evidence to demonstrate that the rates are consistent with the company's approach.

Nature of adjustment: action completed

2.9.2 Our response

The approach used in the September Plan in setting PAYG and RCV run-off rates was to set PAYG rates at a level that secures a financeable position for the actual capital structure while maintaining RCV run-off rates at the natural rate of 4%, derived from analysis of historical depreciation rates of regulatory assets at wholesale level (see table 26). Following IAP feedback we have re-assessed this approach and challenged it against the PR19 methodology framework leading us to the decision to take a different approach from that used in our September Plan.

Our Revised Plan has assessed PAYG and RCV run-off rates to reflect the forecast costs and depreciation of the underlying RCV for the Company and for each of the wholesale price controls. In AMP6, we had a PAYG rate that was relatively high in comparison to the others in the water sector. This was due to the split between our operating expenditure and capital expenditure known as the natural rate and the need to increase revenue to meet the financeability of the Company. This financeability need is driven by the return generated by the RCV, which is small compared to the operating size of the business. We have called this our operational gearing.

In our Revised Plan, we have reviewed the PAYG rate for AMP7 and AMP8 in a three-step process;

- i. Assessing the natural PAYG rate and RCV run off
- ii. Ensuring that the notional company is financeable by adjusting the PAYG rate and offsetting this with an adjustment to the RCV run off rates so that customers are not disadvantaged and aligning with customer research

- iii. Smoothing bills both within AMP7 and between AMP6 and AMP8 in line with customer expectations supported by customer research. This smoothing is achieved by adjusting the RCV run off rates.

The natural rate in our Revised Plan for PAYG for AMP7 is 51.6% revenue and 48.4% for RCV, reflecting the ratio of Opex (including expensed IRE) to capex (including capitalised IRE). The RCV run off rates at 7.5% and 3.9% for Water Resources and Water Network, respectively reflect the natural depreciation rates of the regulatory assets as shown by the table below:

Table 24: APR data for regulatory asset historical depreciation rates

		2105/16	2016/17	2017/18	Average
Opening NBV £'000	Water Resources		9,649	12,369	11,009
	Water Network		1,246,642	1,305,239	1,275,941
	WholesaleWater	1,250,353	1,256,291	1,317,608	1,274,751
Closing NBV £'000	Water Resources		12,370	15,342	13,856
	Water Network		1,305,238	1,356,588	1,330,913
	WholesaleWater	1,281,646	1,317,608	1,371,930	1,323,728
Average NBV £'000	Water Resources		11,010	13,856	12,433
	Water Network		1,275,940	1,330,914	1,303,427
	WholesaleWater	1,266,000	1,286,950	1,344,769	1,299,239
Depreciation Charge £'000	Water Resources		756	1,120	938
	Water Network		49,915	51,541	50,728
	WholesaleWater	50,757	50,671	52,661	51,363
Run-off Rate %	Water Resources		6.9%	8.1%	7.5%
	Water Network		3.9%	3.9%	3.9%
	WholesaleWater	4.0%	3.9%	3.9%	4.0%

We note that some companies have calculated their natural RCV run off rates using current depreciation as a percentage of RCV. We have completed a high-level analysis using the data in data table WS12 and considering the impact of AMP7 capital expenditure in line with historical rates for current cost depreciation. This analysis showed that on this basis, our RCV run off rate would double; applying this would have a large impact on customer bills and would be significant change from PR14. The result is driven by the relatively small RCV to operating costs and size. When adopting this approach - using CCD applied to RCV - this mismatch between RCV and the regulatory assets is not a good indication of the economically natural depreciation rate for RCV. We therefore do not believe that this method is currently appropriate for our plan.

A business plan with these rates would be unfinanceable on a notional structure due to the insufficient revenues to meet the ratio requirements. This is shown in the table above. The return on the notional structure is £211m and the notional interest is £154m over the AMP. However, a 10% Totex overspend is £77m which means that there is not a sufficient return to cover this risk or the combined scenario test. The table shows that without changing the PAYG rate, the ICR ratio would be 1.4, which would not be meet the required level. Therefore, the PAYG rate needs to increase for the notional company to be financeable.

This shortfall on the notional structure is primarily driven by the relatively small RCV of Affinity Water in comparison to its operational size, which means it does not generate the level of return required to provide sufficient headroom to handle operationally-driven financial shocks. This is a legacy issue and reflects how we have developed from a number of small Water Only Companies. This is highlighted in the figures below:

Figure 1: Opex as a Percentage of RCV By Water Company

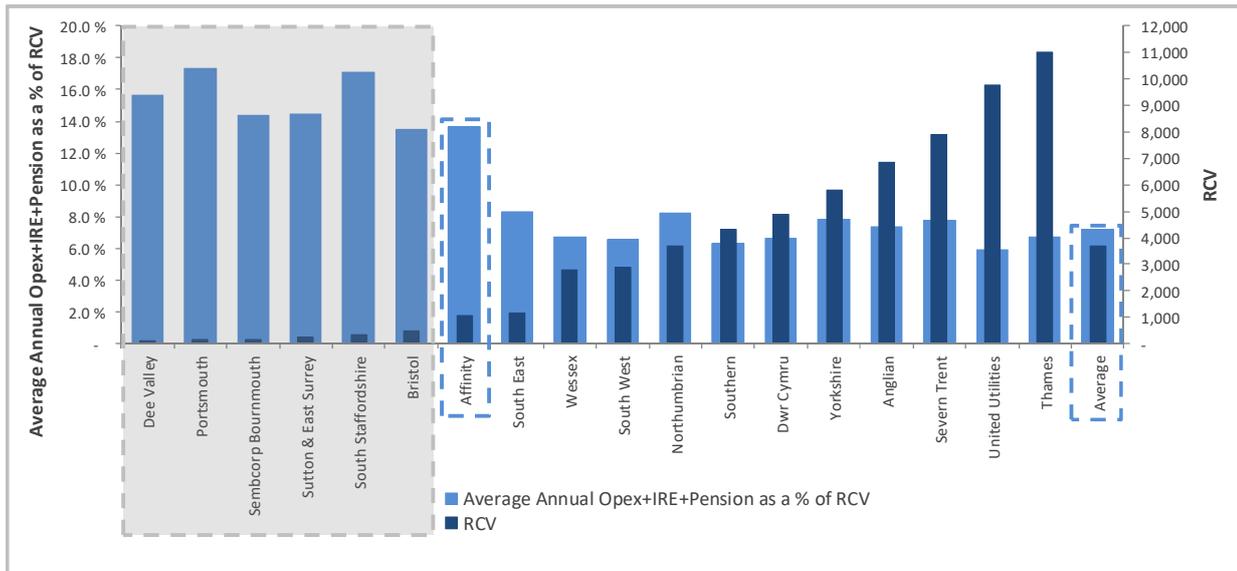
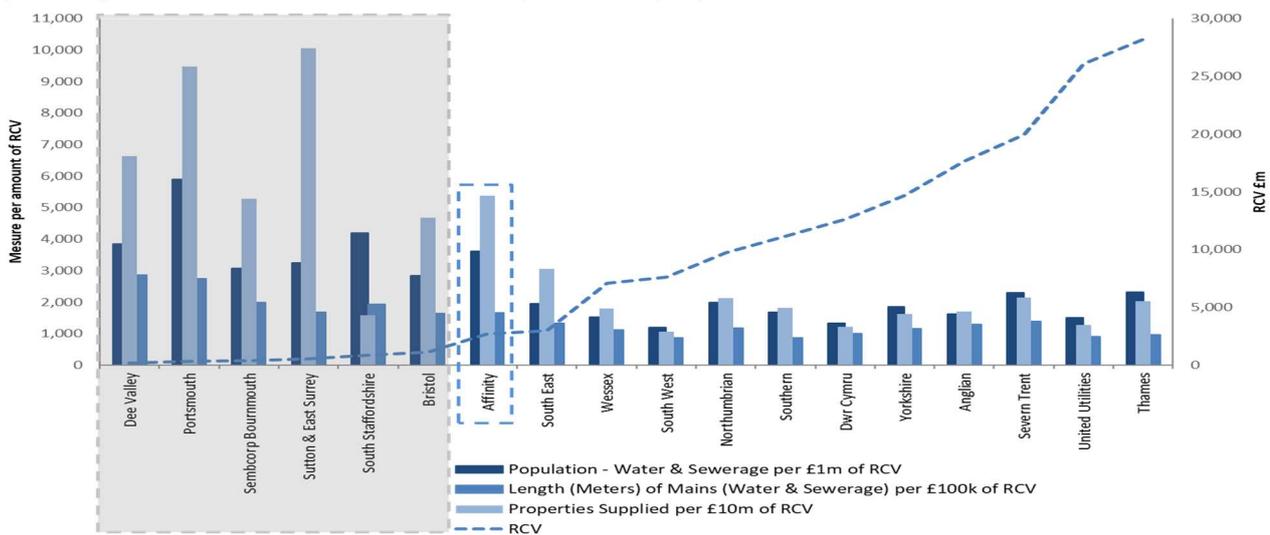


Figure 2: Operational Metrics vs Size of the RCV by Water company



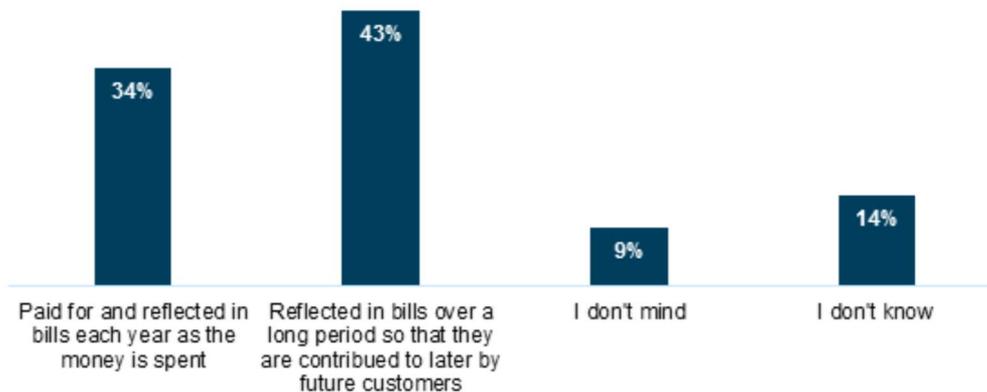
Source: Water UK - Industry Facts and Figures 2014

Figure 1 shows that our average annual operating cost is 13.6% of RCV. This is much larger than the WASCs and larger than South East Water, the other large WoC. Figure 2 shows the RCV as a proportion relative to the operations of the business is lower.

Following increasing the PAYG rate, the RCV run-off rates have been adjusted to counteract the increase so that customers are not negatively impacted. The PAYG rate is increased by 7.6% on revenue to 41.1% on Water Resources and 63.2% on Water Network+ to achieve the required ratios. The adjustments to the RCV run-offs, applied equally to the two water price controls, are an increase of 0.2% on the natural rates to 7.7% for Water Resource and 4.1% for Water Network+.

To understand customers views on changing the PAYG rate, we have undertaken quantitative customer research using an online panel. The results are shown in the graph below:

Figure 3: Customer Preferences for PAYG rate



The outcomes from the customer research shows that there is not a strong preference for the approach to rate of PAYG (full report on customer engagement in appendix RR.A10). We have therefore limited the increase in the rate of PAYG to make the notional company financeable and limited the effect for customer by adjusting the RCV run off.

These adjustments to the PAYG and RCV run off rates address the financeability issue but result in a bill with an uneven profile from the end of AMP6, throughout AMP7 and then throughout AMP8. Our customer research detailed in action AFW.RR.A10 below shows that customers preference is for a smooth bill in particular for a smooth bill into AMP8.

To deliver the smoothed bill profile as shown in table 25 below we have adjusted the RCV run off rates over the period. This results in a declining bill over the 15-year period of AMP6, 7 and 8.

In summary, our PAYG and RCV run off rates for Revised Plan have been set by:

1. assessing the natural PAYG rates
2. objective of making the notional structure of the company financeable through the PAYG rate and adjusting bills back through RCV run-off rates to not disadvantage customers
3. smoothing of the bills over AMP7 using the RCV run-off rates; and
4. a smooth glide path to AM8 to avoid bills reducing and then increasing in the next AMP to align with customer expectations.

Table 25 below shows the PAYG and RCV run-off rates at each stage of the process:

Table 25 PAYG and RCV Run Off Rates

	PAYG		RCV Run-off	
	WR	WN	WR	WN
1. Natural rates	33.45%	55.60%	7.48%	3.89%
2. Financeable on notional structure	41.09%	63.24%	6.29%	2.71%
3. Smooth AMP7 bill	41.09%	63.24%	7.29%	3.70%
4. Smooth bill into AMP8	41.09%	63.24%	7.71%	4.12%

We have assessed the natural PAYG and RCV run-off rates for the different wholesale price controls to reflect the underlying economic nature for each of the individual price controls. The Water Resources PAYG rate is considerably less than Water Network+ due to the large amount of capital expenditure proposed in the Revised Plan for this price control in relation to its operating expenditure when compared to Water Network+. The RCV run-off rates also differ between the two price controls driven by the nature of the regulatory assets within each one. This approach is in line with Ofwat's guidance and final methodology. The rates for the Revised Plan are shown in the following table:

Table 26: PAYG and RCV Run Off Rates

September Submission		2020-21	2021-22	2022-23	2023-24	2024-25	Average
PAYG	Water Network+	63.72%	61.88%	63.84%	68.44%	73.90%	66.36%
	Water Resources	63.72%	61.88%	63.84%	68.44%	73.90%	66.36%
RCV Run-off	Water Network+	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
	Water Resources	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Changes		2020-21	2021-22	2022-23	2023-24	2024-25	Average
PAYG	Water Network+	-3.68%	-1.79%	-2.93%	-0.98%	-6.22%	-3.12%
	Water Resources	-23.26%	-26.46%	-26.45%	-30.36%	-19.82%	-25.27%
RCV Run-off	Water Network+	0.66%	0.37%	0.11%	-0.32%	-0.21%	0.12%
	Water Resources	4.25%	3.96%	3.70%	3.27%	3.38%	3.71%
April Revised Business Plan		2020-21	2021-22	2022-23	2023-24	2024-25	Average
PAYG	Water Network+	60.04%	60.09%	60.91%	67.46%	67.68%	63.24%
	Water Resources	40.46%	35.42%	37.39%	38.08%	54.08%	41.09%
RCV Run-off	Water Network+	4.66%	4.37%	4.11%	3.68%	3.79%	4.12%
	Water Resources	8.25%	7.96%	7.70%	7.27%	7.38%	7.71%

2.9.3 Implications across the plan

Adjusting the PAYG and RCV run-off rates affects customers' bills and the financeability of the company.

2.9.4 Assurance

KPMG has reviewed our use of PAYG and run-off rates, and how they flow from our model to the updated data tables.

2.9.5 Evidence

Table 27: Evidence to support the response to AFW.RR.A9

Appendix	Description
RR.A1.1	KPMG assurance report: financial model

RR.A1.2	PwC (financial) Data Table Assurance Report
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2.10 AFW.RR.A10

2.10.1 Overview of test area action

Table 28: Action details for AFW.RR.A10

Action Ref.	Action
AFW.RR.A10	The company should set out the steps taken to address the concerns raised by the Customer Challenge Group in relation to the late addition of the final bill profile to the business plan, providing evidence that the annual bill profile set out in the business plan is consistent with customer preferences.

Nature of adjustment: action completed

2.10.2 Our response

We acknowledge that the late changes in our AMP7 bill profile did not allow our CCG to have early sight of the final bill profile included in our September Plan. In the development of the Revised Plan, we have worked with our CCG to agree the scope of work and associated timescales. As agreed and to timeline, we presented our responses at the CCG meeting on 13 March 2019, and subsequently shared final versions of relevant evidence documents with our CCG.

Table 29: Bill profile from AMP6 through to AMP8 included in our September Plan

Average Bill	AMP6					AMP 7					AMP 8				
Year	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
£/Customer Real 2017/18	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
Average Customer Bill from September Plan	182.9	184.5	182.0	171.7	170.9	174.2	176.6	177.7	178.3	174.4	178.2	178.6	179.0	179.4	179.9
Bill Movement from AMP to AMP	-6.6%					+2.1%					+3.1%				

Testing the AMP7 bill profile

The Ofwat action AFW.RR.A10 has a direct link with the Ofwat action AFW.AV.A1, where in response to this item - during March 2019 - we undertook additional quantitative research. An online panel was used to test the AMP7 bill profile included in our September Plan, as well as an alternative smoother bill profile. We tested acceptability and affordability for both profiles with the service package from our September Plan. For the testing of the combined bill, we used the values included in the WASCs' September Plans.

Table 30: bill profiles tested with customers in March 2019

	AMP6	AMP7					AMP8				
Profiles tested	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30
Profile 1 without inflation (September plan)	170.9	174.0	176.6	177.5	178.1	174.4	178.2	178.6	179.0	179.4	179.9
Profile 2 without inflation (Smoother plan)	170.9	172.6	174.3	176.1	177.9	179.6	179.4	179.2	179.0	178.8	178.6

The table below shows the AMP7 customer acceptability and affordability results. Profile 1 was based on our September Plan and that of the three sewerage providers we provide billing for (Anglian Water, Southern Water, Thames Water). Profile 2 was a clean water profile, with a smoother gradient.

Table 31: AMP7 profile acceptability and affordability results

	Clean only bill (no inflation)		Clean only bill (with inflation)		Combined bill (no inflation)		Combined bill (with inflation)	
	Profile1	Profile2	Profile1	Profile 2	Profile1	Profile 2	Profile1	Profile2
Acceptability	82%	78%	59%	54%	69%	67%	51%	42%
Affordability	77%	72%	60%	57%	70%	62%	48%	43%

Following the testing of our September Plan AMP7 bill, we decided to amend our final proposal. The Revised Plan reflects a bill that was tested with customers in Spring 2018 as part of Phase 2 of our customer engagement programme, and for which we received high acceptability. A number of proposals were published and tested with customers. Our final bill is represented by plan L (also presented as Plan C). The three different plans presented to customers as packages of options are detailed in the following table.

Table 32: Three different Business Plans presented to customers as packages of options; dWRMP Final Research Report, Ipsos Mori, June 2018

Forecast bills	Fixing leaks	Sourcing water more sustainably	Reducing personal water use	Risk of interruptions	Severe drought restrictions	Environmental pilot projects	Reliability of water pressure
Plan J/Plan A £170 per year 2019/20 £158 per year in 2024/25	11% reduction	10 million litres less	129 litres per person per day	1.5% chance (1 in 65) per year	1.7% (1 in 60) chance per year	£2 million to fund new schemes	8.7 hours low pressure per year
Plan K/Plan B £170 per year 2019/20 £161 per year in 2024/25	11% reduction	10 million litres less	129 litres per person per day	0.8% chance (1 in 130) per year	1.7% (1 in 60) chance per year	£6 million to fund new schemes	6.5 hours low pressure per year
Plan L/Plan C £170 per year 2019/20 £168 per year in 2024/25	15% reduction	39 million litres less	124 litres per person per day	1.5% chance (1 in 65) per year	0.5% (1 in 200) chance per year	£2 million to fund new schemes	8.7 hours low pressure per year

Plan L was considered the most aspirational plan, presenting stretching, ambitious targets. Generally, all three plans in Spring 2018 were considered acceptable, scoring between 74% and 78% for 'very acceptable' or 'fairly acceptable'. The bill testing for Plan L was a qualitative method of engagement with customers, held in the homes of customers representative of our customer base and included customers in vulnerable circumstances. The design of this research was informed by prior qualitative research, made up of focus groups which tested customer understanding.

The proposed final bill profile for AMP7 will be tested with customers once we have received the final AMP7 bill profiles from the three WASCs, in our Phase 2 customer research after 1 April 2019.

Testing the AMP8 bill

The table below shows the AMP8 customer acceptability and affordability results. Profile 1 was based on our September Plan profile. Profile 2 had a smoother gradient.

Table 33: AMP8 profile acceptability and affordability results

	Clean only bill (no inflation)		Clean only bill (with inflation)	
	1	2	1	2
Acceptability	74%	81%	49%	51%
Affordability	73%	78%	45%	46%

Testing showed high levels of acceptability and affordability pre-inflation with Profile 2 and considered this to be statistically significantly more acceptable than Profile 1. Customers also found Profile 2 to be more affordable than Profile 1 but not statistically significantly so.

In March 2019, we asked customers about PAYG rates, there was not a strong preference whether customers would prefer that:

1. the investment is reflected in bills over a longer period, so that they are contributed to later by future customers; or
2. that the investment is paid for and reflected in bills each year as the money is spent.

Given that both AMP7 bill profiles received high acceptability and the smoother AMP8 bill profile was significantly more acceptable, customers showed no strong preference for PAYG rates. In addition, due to changes in financial modelling and to avoid bill shocks for customers, we have a revised smoother bill profile that declines by 1.6% in AMP7 (in line with our high acceptability for Plan L in Spring 2018) and a further 2% in AMP8, this is on top of the 7.7% reduction in AMP6. This is compared with our September Plan, which had a 2% increase in AMP7 and a 3% increase in AMP8.

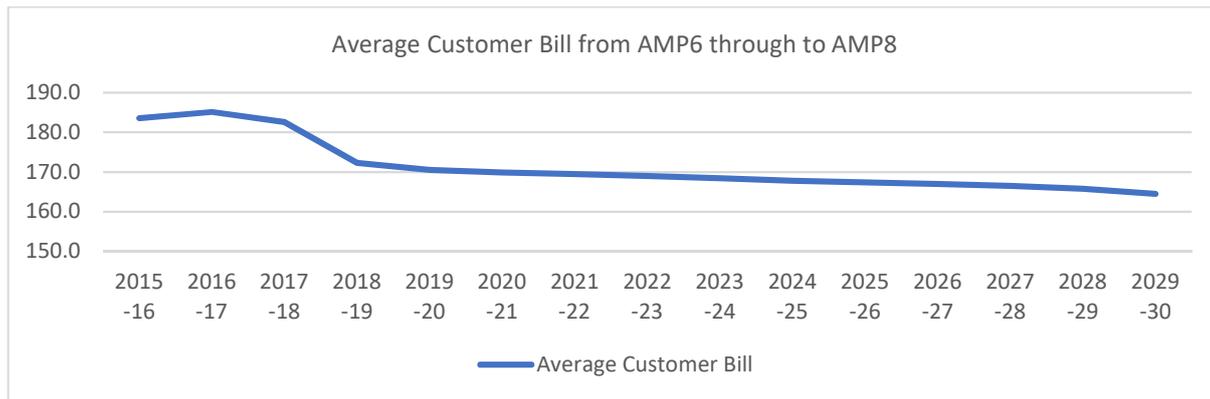
Table 34: Final clean water household bill AMP6 – AMP8

Average Bill	AMP6					AMP 7					AMP 8				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Year	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
£/Customer Real 2017/18 CPIH															
Average Customer Bill for revised Plan	183.5	185.1	182.6	172.3	170.5	169.9	169.5	169.0	168.4	167.8	167.4	167.0	166.5	165.8	164.5
Bill Movement from AMP to AMP	- 7.7%					-1.6%					- 2.0%				

The change in the AMP6 bill from the September Plan is due to indexation, meaning that amount before inflation changes.

The bill profile for our Revised Plan has been shared with the CCG. In their CCG Report in April 2019, they provided assurance that we have undertaken research testing customer views on the acceptability and affordability of proposed bills and proposed AMP7 bill profile from our September Plan. The CCG noted that 'our proposed bill profile' is considered acceptable and affordable by its customers. The final bill profile which will be included in our Revised Plan is shown below.

Figure 4: Average customer bill from AMP6 to AMP8 in real terms



2.10.3 Implications across the plan

Not applicable

2.10.4 Assurance

Our CCG have reviewed and assured our response to this action item and presented their findings in the CCG Report.

2.10.5 Evidence

Table 35 Evidence to support the response to AFW.RR.A5

Appendix	Description
RR.A10.1	Ipsos Mori Triangulation Report June 2018
RR.A10.2	Supplementary report to Ofwat from the Affinity Water Customer Challenge Group (29 March 2019)
RR.A10.3	Verve customer research report March 2019

2.11 AFW.RR.A11

2.11.1 Overview of test area action

Table 36 Action details for AFW.RR.A11

Action Ref.	Action
AFW.RR.A11	The company should provide convincing evidence that its exposure to revenue variation is as wide as its RoRE risk analysis suggests, particularly with regard to the regulatory protections in place.

Nature of adjustment: action completed

2.11.2 Our response

We have reassessed the revenue variation we reported in our September Plan, considering this Ofwat action and what other companies have reported in their plans. In our Revised Plan we will continue to be exposed to the variations in revenue reported in the September Plan within a single year. However, we note that the Revenue Correction Mechanism will adjust for these variations with a two year offset. We have therefore excluded this movement from our Revised Plan RoRE. We have retained the risk of a penalty for over-collecting revenue above the 2% WRFIM threshold. We have set this at 2.5% as a P10 scenario. The revised RoRE ranges are shown in the table below:

Table 37: Action details for AFW.RR.A11

September 2018 Submission (14h)	Appointee	WR	WN
Revenue upside	1.61%	2.26%	1.52%
Revenue downside	-1.61%	-2.26%	-1.52%
Changes			
Revenue upside	-1.61%	-2.26%	-1.52%
Revenue downside	1.60%	2.24%	1.51%
Amended for Re-submission (17z)	Appointee	WR	WN
Revenue upside	0.00%	0.00%	0.00%
Revenue downside	-0.01%	-0.01%	-0.01%

September 2018 Submission (14h)	Appointee
Retail revenue upside	0.17%
Retail revenue downside	-0.17%
Changes	
Retail revenue upside	-0.17%
Retail revenue downside	0.17%
Amended for Re-submission (17z)	Appointee
Retail revenue upside	0.00%
Retail revenue downside	0.00%

2.12 AFW.RR.B1

2.12.1 Overview of test area action

Table 38: Action details for AFW.RR.B1

Action Ref.	Action
AFW.RR.B1	The company should provide a clearer link between its internal risk management and mitigation procedures and the RoRE analysis.

Nature of adjustment: action completed

2.12.2 Our response

We have aligned our RoRE with our internal strategic risks and the additional risk assumed in our Revised Plan. In assessing our risks, the mitigations are considered and these have been factored into the RoRE analysis.

3 Appendices

All the appendices listed below for this evidence document are included in the appendices titled AFW Aligning Risk and Return Appendix.

Table 39 Full summary of Aligning Risk and Return appendices

Appendix	Action ref(s)
RR.A1.1 KPMG assurance report: financial model	AFW.RR.A1; AFW.RR.A5; AFW.RR.A6; AFW.RR.A7; AFW.RR.A9
RR.A1.2 - PwC (financial) data table assurance	AFW.RR.A1; AFW.RR.A5; AFW.RR.A6; AFW.RR.A9
RR.A4.1 Affinity Water rdWRMP Pre-consultation Customer Focus Groups 1 Report. A report on outcomes of customer focus groups run in December 2018.	AFW.RR.A4
RR.A4.2 Affinity Water rdWRMP Pre-consultation Customer Focus Groups 2 Report. A report on outcomes of customer focus groups run in January 2019.	AFW.RR.A4
RR.A4.3 SR Brett – 20 MI per Day. A summary of the options considered and preferred option selected.	AFW.RR.A4
RR.A4.4 Correspondence with the Environment Agency	AFW.RR.A4
RR.A6.1 Moody's Financial Ratio Guidance	AFW.RR.A6
RR.A7.1 PR19 Actual Structure Financial Stress Tests	AFW.RR.A7
RR.A10.1 Ipsos Mori Triangulation Report June 2018	AFW.RR.A10
RR.A10.2 Supplementary report to Ofwat from the Affinity Water Customer Challenge Group (29 March 2019)	AFW.RR.A10

Appendix	Action ref(s)
RR.A10.3 Verve customer research report March 2019	AFW.RR.A10