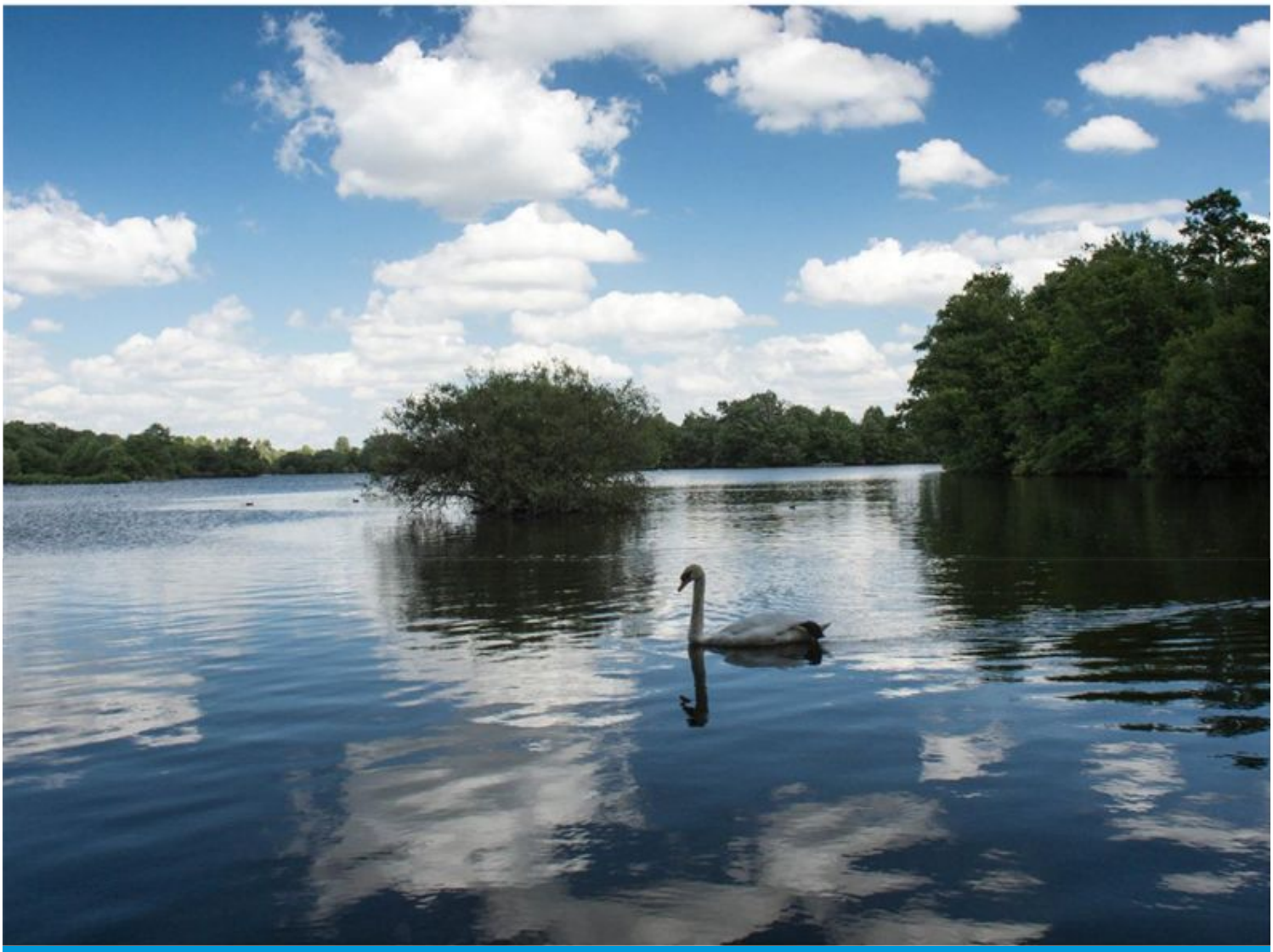
Affinity Water

Your local supply, on tap



AFW Aligning Risk and Return

Appendices

March 2019

Contents

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 Ml 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
RR.A10.3 Verve customer research report March 2019	AFW.RR.A10

Appendix RR.A1.1

Action refs AFW.RR.A1; AFW.RR.A5; AFW.RR.A6; AFW.RR.A7; AFW.RR.A9

KPMG assurance report: financial model

KPMG

Data table review

Prepared for Affinity Water

Private and confidential

—

28th of March 2019

Scope of review

KPMG was commissioned by Affinity Water Limited (AFW) to provide a series of reviews of aspects of AFW's response (the April submission) to Ofwat's initial assessment of plans (IAP).

The review comprised to two principal elements:

1) A 'second line review' of data tables.

This was a risk-based review of AFW's data tables supporting its submission. The review took place over the period 1st of March 2019 to the 16th of March, with the majority of the tables being reviewed over a five-day period. The financial model outputs tables were made available on the 15th of March, and were reviewed on the 16th of March.

There was a further review on the 23rd of March of the financial model output tables following changes in the revenue figures. This included an additional table that had not previously been completed (App26).

Every table was assessed in terms of whether there had been changes made since the business plan submission, whether any changes aligned to AFW's change log, and whether figures were of a generally expected magnitude (i.e. were there any clear errors).

AFW data providers were requested to highlight any lines in their data tables that they considered to be high risk / would appreciate a closer second review on. The data providers did not identify any such data lines, and so KPMG provided further review on tables WS1 and R1, as these cost tables have significant impacts on many of the other tables.

Where supporting information was provided, KPMG checked that the data had been correctly transposed to the data tables.

The review was carried out prior to the data tables being submitted to AFW's assurance partners for final review, and formal assurance.

For the avoidance of doubt, the KPMG review does not constitute formal assurance of AFW's data tables and/or April submission.

2) Additional checks with regard to AFW's financial ratios.

In its IAP, Ofwat identified a series of issues with AFW's 'App10' data table. As such, KPMG was commissioned to provide a series of additional checks in this area. These issues were largely driven by the fact that AFW used its own model (the 'Splash' model) to assess financial ratios, rather than Ofwat's financial model.

The agreed checks were:

- Check that the updated Splash model is producing the same results as the updated Ofwat model for financial ratios.
- Check that the financial ratios in App10 in the updated business plan tables align to the ratios calculated in the updated Ofwat model.
- Check whether the calculated ratios fall within an expected range (range to be proposed by KPMG, and agreed with Affinity Water), and are of the correct sign (i.e. positive or negative).
- Check that given the changes since the business plan submission (to the calculations used, and the supporting input data) that any changes in ratio values appear to be in an intuitive direction.
- Check that all of the data in the updated 'business plan table – Financial model mapping tool' that links to the Splash model correctly link through to the model outputs sheets in the Splash model.
- Check that the PAY-G, and run-off rates correctly feed through from the updated Splash model to the data tables.
- Check that Affinity Water's general approach to PAY-G and run-off rates across the different revenue controls comply in principle to Ofwat's stated methodology and policy objectives.

Second line review of data tables

The 'second line' review covered the following data tables:

App1	App1a	App1b	App2	App3	App4*	App5**
App7	App8	App9	App10	App11	App11a	App12
App12a	App13	App14	App15	App15a	App16	App17
App18	App19	App21	App23	App24	App24a	App25
App26	App27	App28	App29	App30	WS1	WS1a
WS2	WS2a	WS3	WS4	WS5	WS7	WS8
WS10	WS12	WS12a	WS13	WS15	WS18***	Wr1
Wr2	Wr3	Wr4	Wr6	Wr7	Wn1	Wn2
Wn3	Wn4	Wn5	Wn6	R1	R2	R3
R7	R8	R9	R10****			

*With the exception of lines 3-8.

**With the exception of SIM and VfM

***With the exceptions of sections H and D

****Section D only

Summary of process

Any issues were fed-back to the relevant data providers. A full summary of the review was logged in a tracker, and regularly shared with the AFW programme team.

The most common type of issue identified was changes made in the tables not reflected in the change log. In almost every instance, the data provider took the action of updating the change log.

For tables WS1 and R1, we did not identify any clear errors, however, we note that with WS1 the allocation of costs to business units was based on an historical allocation, and the allocation of cost by year was based on the profile used in the business plan. We note that both of these tables were changed following our review.

For a large number of data tables, we were not provided with supporting information. For these tables, our review focused on changes made since the business plan submission, whether any changes aligned to AFW's change log, and whether figures were of a generally expected magnitude (i.e. were there any clear errors).

Where supporting information was provided, we note that models were not in line with spreadsheet best practice (e.g. they did not always read left to right, inputs were not clearly separated from calculations, assumptions were not clearly highlighted, etc.). This increases the risk of errors across the piece, and will make the full reviews by AFW's assurance partners more challenging.

The review identified errors on a small number of tables. These were fed back to data providers, who confirmed that the issues would be addressed prior to the assurance partner review.

Additional checks with regard to AFW's financial ratios

A summary of our findings against each one of the agreed checks is set out below:

Check that the updated Splash model is producing the same results as the updated Ofwat model for financial ratios

Following the changes to the Splash model since the business plan submission, differences to Ofwat's financial model are small.

We understand that AFW will be using the Ofwat model to populate the data tables (App10). As such, there is less need for the figures in the Ofwat model and the Splash model to align perfectly, although large differences would raise questions as to the accuracy of the models.

While the figures are not identical, they are not so different that it could be expected that an 'in the round' assessment of the company's financeability would lead to a different set of conclusions from either set of figures. We have not undertaken a financeability assessment of AFW.

Actual - Ofwat	2020-21	2021-22	2022-23	2023-24	2024-25
Gearing	79.86%	79.96%	79.85%	79.37%	79.40%
Interest cover	3.69	3.94	3.97	3.73	3.73
Adjusted cash interest cover	1.63	1.75	1.79	1.72	1.65
Adjusted cash interest cover (alternative calculation)	1.02	1.09	1.12	1.10	1.10
FFO/Net Debt	8.78%	9.00%	9.06%	8.65%	8.88%
FFO/Net Debt (alternative calculation)	7.23%	7.52%	7.63%	7.24%	7.46%
Dividend cover	0.00	0.00	0.00	2.31	0.78
RCF/Net Debt	8.78%	9.00%	9.06%	8.38%	8.02%
RCF/Capex	59.48%	61.67%	67.58%	74.60%	86.52%
Return on capital employed	4.61%	4.56%	4.46%	4.04%	4.11%
RORE	4.55%	4.60%	4.63%	4.66%	4.68%

Source: 'AW Data Tables April Master Post-audit.xlsb', Last modified at 3/22/2019 9:13 pm

Actual - Splash	2020-21	2021-22	2022-23	2023-24	2024-25
Gearing	79.81%	79.91%	79.80%	79.35%	79.36%
Interest cover	3.70	3.94	3.97	3.73	3.73
Adjusted cash interest cover	1.63	1.75	1.79	1.72	1.65
Adjusted cash interest cover (alternative calculation)	1.02	1.09	1.12	1.10	1.10
FFO/Net Debt	8.79%	9.01%	9.06%	8.65%	8.88%
FFO/Net Debt (alternative calculation)	7.24%	7.53%	7.63%	7.24%	7.46%
Dividend cover	0.00	0.00	0.00	2.38	0.81
RCF/Net Debt	8.79%	9.01%	9.06%	8.38%	8.02%
RCF/Capex	59.48%	61.68%	67.57%	74.58%	86.51%
Return on capital employed	4.68%	4.63%	4.53%	4.10%	4.17%
RORE	4.55%	4.59%	4.62%	4.65%	4.67%

Source: 'Project Splash v2.25cs22.02.19.xlsb', Last modified at 3/22/2019 5:49 pm

Additional checks with regard to AFW's financial ratios

Check that the financial ratios in App10 in the updated business plan tables align to the ratios calculated in the updated Ofwat model

We reviewed one version of the data tables on the 15th of March 2019. That set of data tables had one line (line 33) erroneously linking to the wrong line within the financial model.

Following our early feedback, this was amended. Our review of the data tables on the 16th of March 2019 confirmed that all the App10 ratios were correctly linked to the Ofwat model (for both the actual and notional structures). We conducted a further review on a slightly updated set of tables on the 23rd of March 2019.

Check whether the calculated ratios fall within an expected range (range to be proposed by KPMG, and agreed with Affinity Water), and are of the correct signage

All of the ratios are of the correct signage. Our proposed range is the range derived from other companies' business plan submissions.

For the actual financial structure: With the exception of gearing (where AFW is the highest), all ratios fall within the range of what other companies had in their business plans. Excluding United Utilities, AFW has the lowest AICR (alternative calc) in the sector. This still falls within the range of what Moody's would expect for a Baa rated company.

For the notional financial structure: For the last two years of the control period, AFW has the lowest gearing figures in the sector. For the last year of the AMP, AFW has the highest interest cover in the sector. For every year of the control period, AFW has the highest RCF/net debt in the sector.

See the appendix for a full set of charts illustrating AFW's comparative position.

Check that given the changes since the business plan submission (to the calculations used, and the supporting input data) that any changes in ratio values appear to be in an intuitive direction

Since the business plan submission, there have been numerous changes to the Splash model. Ofwat has also issued multiple updates of its financial model. Therefore, there is limited benefit in attempting to develop a full reconciliation between the business plan submission and the April submission.

Instead, we have reviewed whether changes in the ratios since the business plan submission bring the AFW figures closer to the rest of the industry's business plan submissions. This is set out on the subsequent two slides, and should be read in conjunction with the full set of charts illustrating AFW's comparative position included in the appendix.

Additional checks with regard to AFW's financial ratios

Business plan submission – actual financial structure

	2020-21	2021-22	2022-23	2023-24	2024-25
Gearing	79.20%	79.13%	79.16%	79.32%	79.33%
Interest cover	4.24	3.52	3.55	3.65	3.31
Adjusted cash interest cover	2.85	1.98	1.94	2.02	1.64
Adjusted cash interest cover (alternative calculation)	2.63	1.84	1.77	1.96	1.64
FFO/Net Debt	12.26%	8.96%	8.96%	9.50%	8.40%
FFO/Net Debt (alternative calculation)	11.25%	7.99%	8.02%	8.57%	7.46%
Dividend cover	3.12	0.00	3.88	0.88	0.73
RCF/Net Debt	11.32%	8.96%	8.52%	8.05%	7.14%
RCF/Capex	75.93%	62.15%	65.23%	75.49%	85.84%
Return on capital employed	4.59%	4.83%	4.87%	4.57%	4.31%
RORE	0.06%	3.05%	3.19%	3.30%	3.36%

Source: 'PR19_data-tables28_09_18.xlsb', As submitted to Ofwat.

April submission – actual financial structure

	2020-21	2021-22	2022-23	2023-24	2024-25
Gearing	79.86%	79.96%	79.85%	79.37%	79.40%
Interest cover	3.69	3.94	3.97	3.73	3.73
Adjusted cash interest cover	1.63	1.75	1.79	1.72	1.65
Adjusted cash interest cover (alternative calculation)	1.02	1.09	1.12	1.10	1.10
FFO/Net Debt	8.78%	9.00%	9.06%	8.65%	8.88%
FFO/Net Debt (alternative calculation)	7.23%	7.52%	7.63%	7.24%	7.46%
Dividend cover	0.00	0.00	0.00	2.31	0.78
RCF/Net Debt	8.78%	9.00%	9.06%	8.38%	8.02%
RCF/Capex	59.48%	61.67%	67.58%	74.60%	86.52%
Return on capital employed	4.61%	4.56%	4.46%	4.04%	4.11%
RORE	4.55%	4.60%	4.63%	4.66%	4.68%

Source: 'AW Data Tables April Master Post-audit.xlsb', Last modified at 3/22/2019 9:13 pm

- **Gearing –** gearing has not significantly changed, with AFW continuing to target a level just under 80%.
- **Interest cover** – the most material change was in the first year. This brings AFW closer to the industry average position of 3.8.
- **Adjusted interest cover** – the most material change was in the first year. This brings AFW closer to the industry average position of 1.7.
- **Adjusted interest cover (alternative calculation)** – the most material change was in the first year. This brings AFW closer to the industry average position of 1.3.
- **FFO/Net Debt** - the most material change was in the first year. This brings AFW closer to the industry average position of 9%.
- **FFO/Net Debt (alternative calculation) -** the most material change was in the first year. This brings AFW closer to the industry average position of 8%.
- **Dividend cover** – this has changed to reflect the updated dividend profile.
- **RCF/Net Debt** - the most material change was in the first year. This brings AFW closer to the industry average position of 7%.
- **RCF/Capex** - the most material change was in the first year. This brings AFW closer to the industry average position of 66%.
- **Return on capital employed –** no material changes.
- **RORE -** the most material change was in the first year. This brings AFW closer to the industry average position of 4.8%.

Additional checks with regard to AFW's financial ratios

Business plan submission – notional financial structure

	2020-21	2021-22	2022-23	2023-24	2024-25
Gearing	60.24%	60.28%	59.93%	58.56%	56.84%
Interest cover	5.10	4.03	3.97	4.13	3.81
Adjusted cash interest cover	3.41	2.27	2.16	2.28	1.89
Adjusted cash interest cover (alternative calculation)	3.15	2.11	1.98	2.22	1.89
FFO/Net Debt	16.81%	12.35%	12.32%	13.43%	12.38%
FFO/Net Debt (alternative calculation)	16.81%	12.35%	12.32%	13.43%	12.38%
Dividend cover	0.00	0.00	0.00	0.00	0.00
RCF/Net Debt	16.81%	12.35%	12.32%	13.43%	12.38%
RCF/Capex	85.72%	65.28%	71.42%	93.04%	106.67%
Return on capital employed	4.52%	4.76%	4.81%	4.51%	4.25%
RORE	1.53%	3.03%	3.10%	3.15%	3.18%

Source: 'PR19_data-tables28_09_18.xlsb', As submitted to Ofwat.

April submission – notional financial structure

	2020-21	2021-22	2022-23	2023-24	2024-25
Gearing	59.19%	59.66%	59.78%	58.92%	57.68%
Interest cover	4.71	4.72	4.69	4.57	4.77
Adjusted cash interest cover	2.08	2.10	2.11	2.11	2.10
Adjusted cash interest cover (alternative calculation)	1.30	1.31	1.32	1.35	1.40
FFO/Net Debt	12.79%	12.73%	12.72%	12.43%	13.18%
FFO/Net Debt (alternative calculation)	11.85%	11.85%	11.86%	11.58%	12.30%
Dividend cover	0.00	0.00	0.00	0.00	0.00
RCF/Net Debt	12.79%	12.73%	12.72%	12.43%	13.18%
RCF/Capex	64.22%	65.08%	71.01%	82.16%	103.31%
Return on capital employed	4.60%	4.56%	4.46%	4.03%	4.10%
RORE	4.49%	4.56%	4.59%	4.63%	4.66%

Source: 'AW Data Tables April Master Post-audit.xlsb', Last modified at 3/22/2019 9:13 pm

- **Gearing –** gearing has not significantly changed, with AFW continuing to target the notional level of gearing of 60%.
- **Interest cover** – the most martial change was in the first year. This brings AFW closer to the industry average position of 4.2.
- **Adjusted interest cover** – the most material change was in the first year. This brings AFW closer to the industry average position of 1.7.
- **Adjusted interest cover (alternative calculation)** – the most material change was in the first year. This brings AFW closer to the industry average position of 1.4.
- **FFO/Net Debt** - the most material change was in the first year. This brings AFW closer to the industry average position of 11%.
- **FFO/Net Debt (alternative calculation) -** the most material change was in the first year. This brings AFW closer to the industry average position of 10%.
- **Dividend cover** – this has changed to reflect that no cash is available for distribution on the notional structure.
- **RCF/Net Debt** - the most material change was in the first year. This brings AFW closer to the industry average position of 8%.
- **RCF/Capex** - the most material change was in the first year. This brings AFW closer to the industry average position of 64%.
- **Return on capital employed –** no material changes.
- **RORE -** the most material change was in the first year. This brings AFW closer to the industry average position of 4.6%.

Additional checks with regard to AFW's financial ratios

Check that all of the data in the updated 'business plan table – Financial model mapping tool' that links to the Splash model correctly link through to the model outputs sheets in the Splash model

Our review of the data tables on the 16th of March 2019 confirmed that all the data in the financial model mapping tool that linked to the Splash model, correctly linked to the Splash model. We conducted a further review on a slightly updated set of tables on the 23rd of March 2019.

Check that the PAY-G, and run-off rates correctly feed through from the updated Splash model to the data tables

Our review of the data tables on the 16th of March 2019 confirmed that the PAY-G, and run-off rates correctly feed through from the updated Splash model. We conducted a further review on a slightly updated set of tables on the 23rd of March 2019.

Check that Affinity Water's general approach to PAY-G and run-off rates across the different revenue controls comply in principle to Ofwat's stated methodology and policy objectives

Ofwat's framework does not specify the use of any particular values for PAY-G and run-off rates. Instead, Ofwat asks companies to justify their approaches. Therefore, we have reviewed AFW's justification for its proposed PAY-G and run-off rates, as set out in 'AFW Aligning Risk and Return: Evidence Document', as provided on the 27th of March 2019.

AFW has used a three stage approach:

- Estimating the natural rates.
- Adjusting the PAYG to ensure the company is financeable on the notional structure, and the run-off to off-set the impact for customers.
- Further adjusting the run-off rates to smooth bills.

<u>Estimating natural PAY-G and run-off rates</u>

AFW has estimated the natural PAY-G rate by dividing opex (including expensed IRE) by totex. This does not seem like an unreasonable approach, and at a company level, appears to be broadly in line with what other companies proposed in their business plans (see Ofwat's comparison of PAY-G rates set out in 'Aligning risk & return –webinar').

At a price control level, AFW is proposing a PAY-G rate for water resources that is the second lowest in the industry (behind Portsmouth Water) comparing to companies' business plan submissions. This may not be 'wrong', as it could reflect the underlying cost structure, but perhaps would benefit from further explanation. The water network plus PAY-G rate appears to be broadly in line with what other companies proposed in their business plans.

AFW has estimated the natural run-off rate by dividing the depreciation charge by average net book value. AFW do not provide an explanation as to why this is an appropriate way to estimate run-off rates. Furthermore, the analysis is undertaken for years 2016/17 and 2017/18. Other companies have considered how AMP7 investment profiles impact rates. Ofwat's methodology states:

"In carrying out our assessment, we will look at the impact of the proposed PAYG and RCV run-off rates on allowed revenue, relative to the levels of both historical and forecast operational and capital expenditure, and RCV depreciation. Looking at both historical and forecast rates allows us to assess how the proposals reflect current expenditure plans. It also allows us to take into account the impact of any historical capital expenditure (capex) bias on the chosen rates."[1]

At a company level, the run-off rate is in line with what other companies proposed in their business plans (see Ofwat's comparison of PAY-G rates set out in 'Aligning risk & return –webinar'). At a price control level, AFW's proposed run-off rates appear to be broadly in line with what other companies proposed in their business plans.

[1] Ofwat (2018) 'Delivering Water 2020: Our final methodology for the 2019 price review', page 195

Additional checks with regard to AFW's financial ratios

Adjusting the PAYG to ensure the company is financeable on the notional structure, and the run-off to off-set the impact for customers

Ofwat's methodology states that:

"In some cases, companies may wish to increase cash flows, so that they exceed the level underpinned by the economic substance of the forecast expenditure, to address financeability constraints under the notional capital structure. Where they do so, we expect companies to provide compelling evidence that their approach benefits customers and has the support of customers."[1]

AFW has included some customer research in its response. However, it is quite high level. Portsmouth Water for example (a company that proposed a material adjustment to PAYG and was rated as 'B' by Ofwat in the IAP for the relevant test) tested the bill impact of customers of re-profiling the rate, and found support for an impact of £3-£4 per bill.[2]

If AFW were able to elaborate on its customer research, it may improve its chances of meeting the Ofwat requirement of 'providing compelling evidence'.

Furthermore, in this section of its response to the IAP, AFW does not demonstrate that it would be unfinanceable (on the notional structure) without adjusting the rates.

Further adjusting the run-off rates to smooth bills

Ofwat's methodology states that:

"If companies consider it appropriate to adjust their PAYG or RCV run-off rates further for other reasons (for example, to address financeability for the notional financial structure or to smooth customer bills), we will look for evidence that this has been fully explained within business plans, with evidence of customer preferences"[2]

AFW reference customer research that supports bill smoothing. It is not included within 'AFW Aligning Risk and Return: Evidence Document', and so we have not performed a review of that evidence.

The PAYG adjustment is larger than any other company proposed in their business plan submissions. Therefore, we would expect this to be supported by compelling customer research. It is also not clear from the document provided, how much of the adjustment relates to ensuring financeability, and how much relates to bill smoothing.

Conclusion

We have not found any issues of clear non-compliance with regard to AFW's use of PAY-G and run-off rates. However, the submission would benefit from further evidence to support the rates proposed. In particular with regard to:

- AFW's approach to the natural run-off rate.
- Demonstrating that AFW would be unfinanceable (on the notional structure) without adjusting the rates.
- Customer support for the adjustments made.

[1] Ofwat (2018) 'Ofwat (2018) 'Delivering Water 2020: Our final methodology for the 2019 price review', page 196.

[2] Portsmouth Water (2018) 'Business Plan 2020-25', page 117.

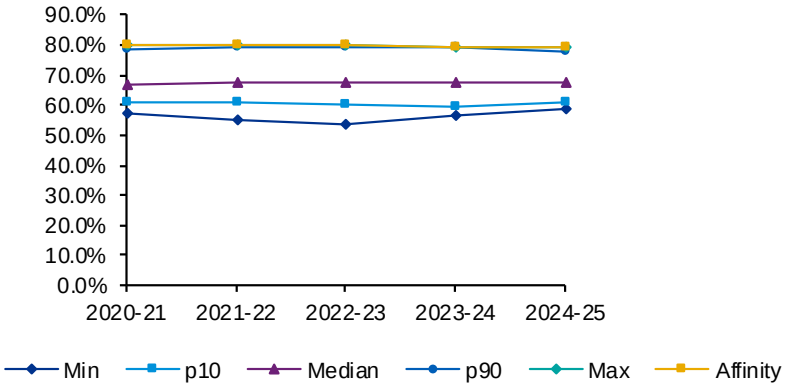
[3] Ofwat (2018) 'Delivering Water 2020: Our methodology for the 2019 price review - Appendix 12: Aligning risk and return', page 110.

Appendix – comparison of financial ratios

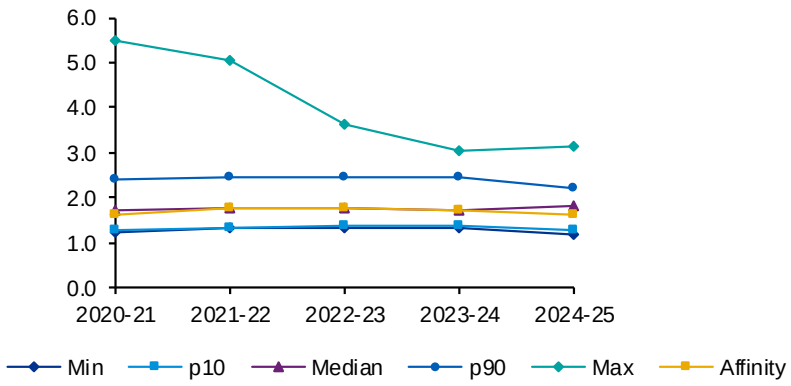
Appendix – comparison of financial ratios

Comparison of ratios - actual financial structure (1 of 3)

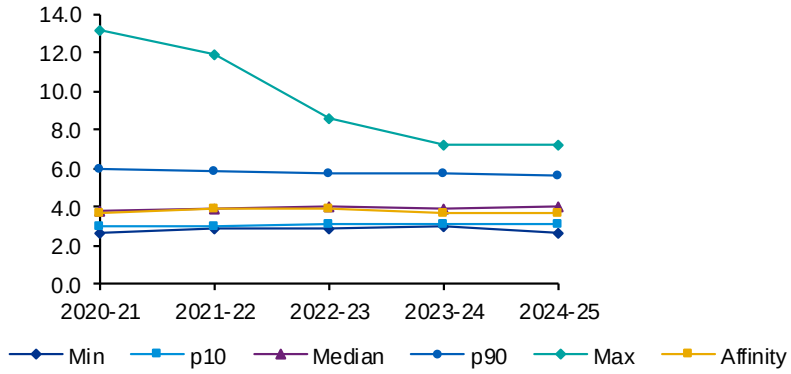
Gearing



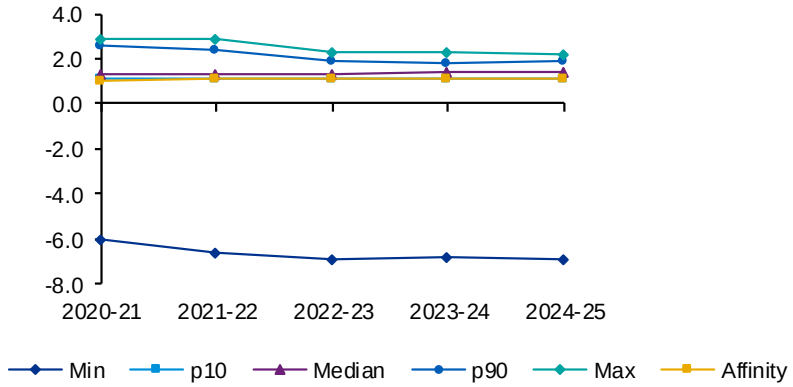
Adjusted cash interest cover



Interest cover



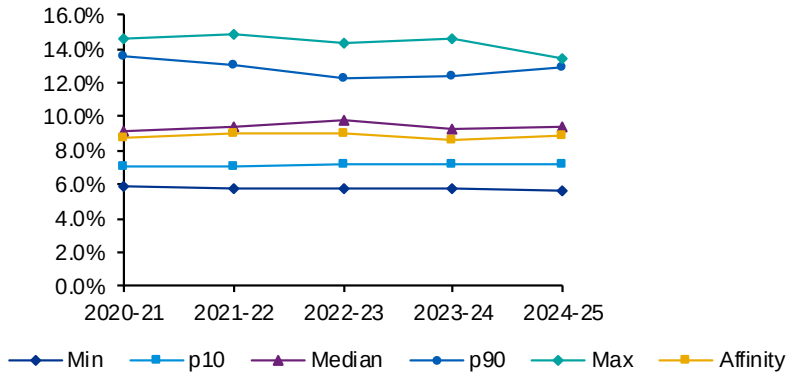
Adjusted cash interest cover (alternative calculation)



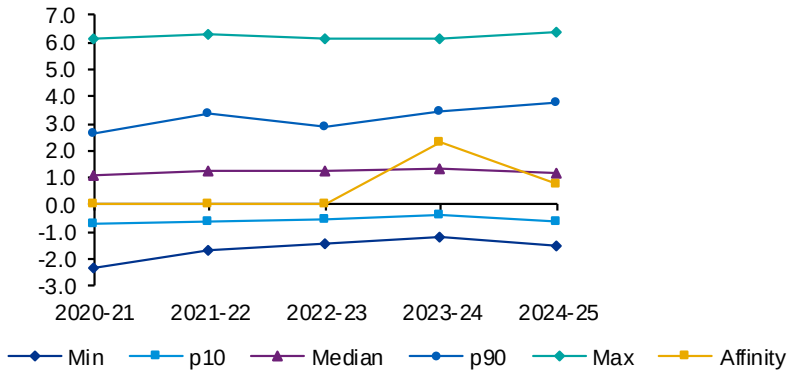
Appendix – comparison of financial ratios

Comparison of ratios - actual financial structure (2 of 3)

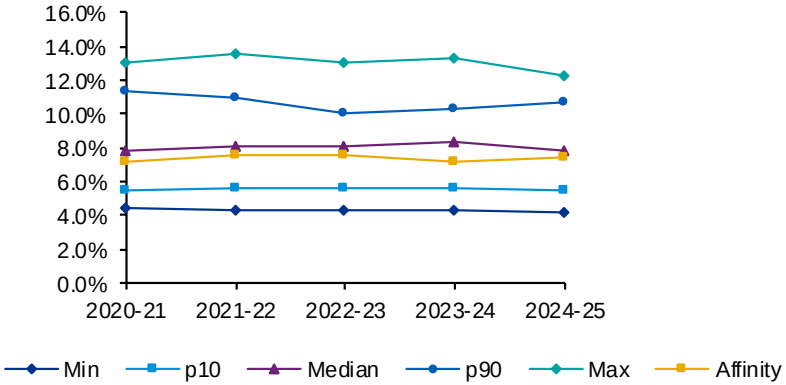
FFO/Net Debt



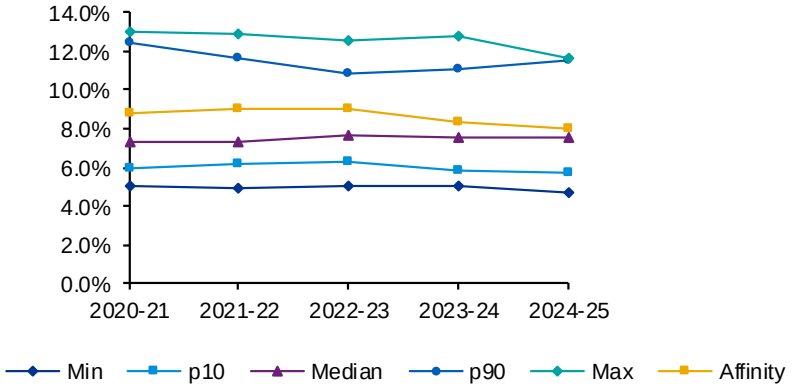
Dividend cover



FFO/Net Debt (alternative calculation)



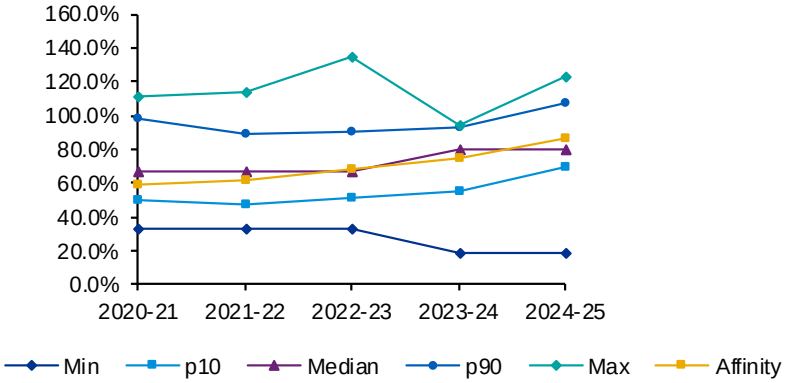
RCF/Net Debt



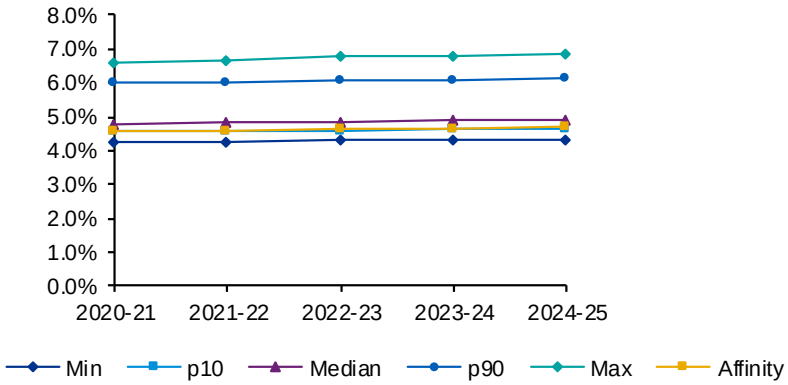
Appendix – comparison of financial ratios

Comparison of ratios - actual financial structure (3 of 3)

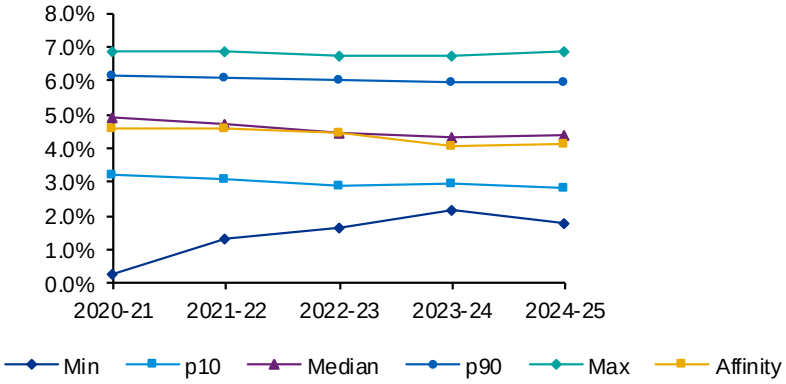
RCF/Capex



RORE



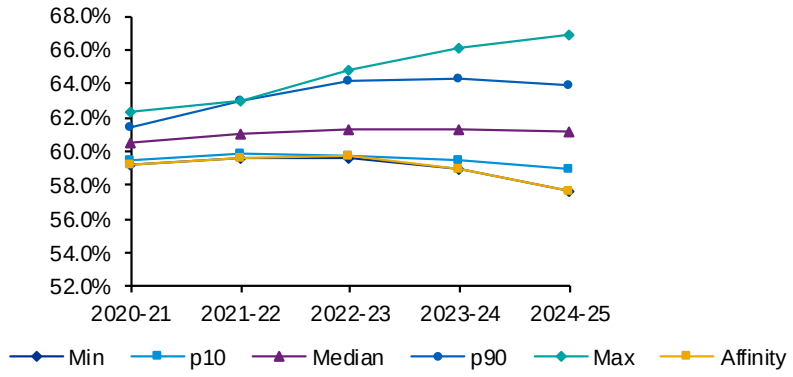
Return on capital employed



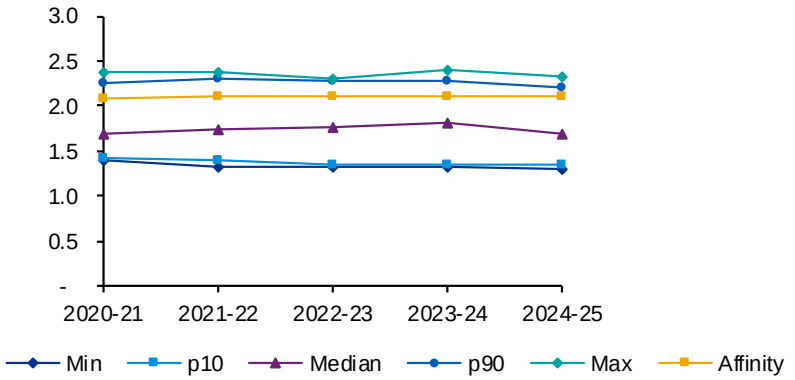
Appendix – comparison of financial ratios

Comparison of ratios - notional financial structure (1 of 3)

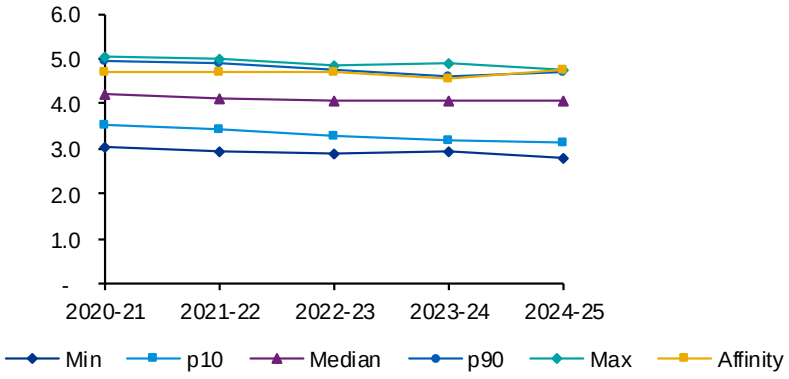
Gearing



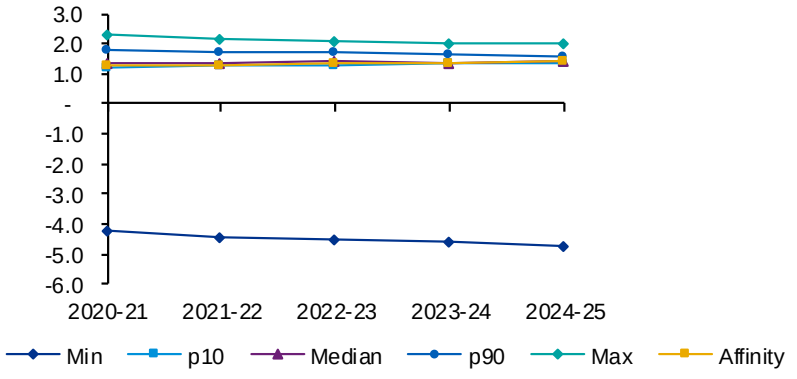
Adjusted cash interest cover



Interest cover



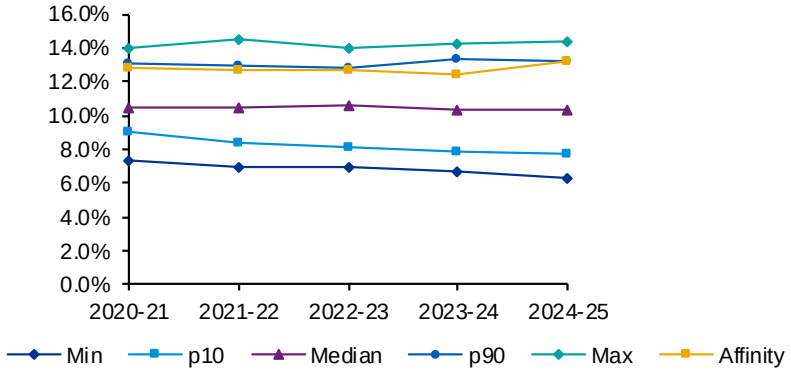
Adjusted cash interest cover (alternative calculation)



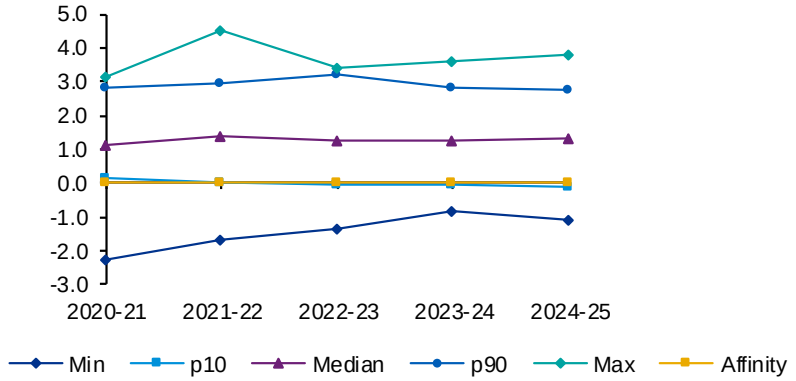
Appendix – comparison of financial ratios

Comparison of ratios - notional financial structure (2 of 3)

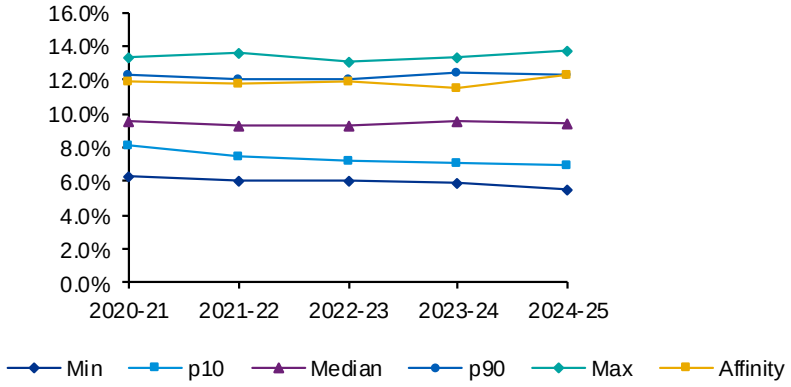
FFO/Net Debt



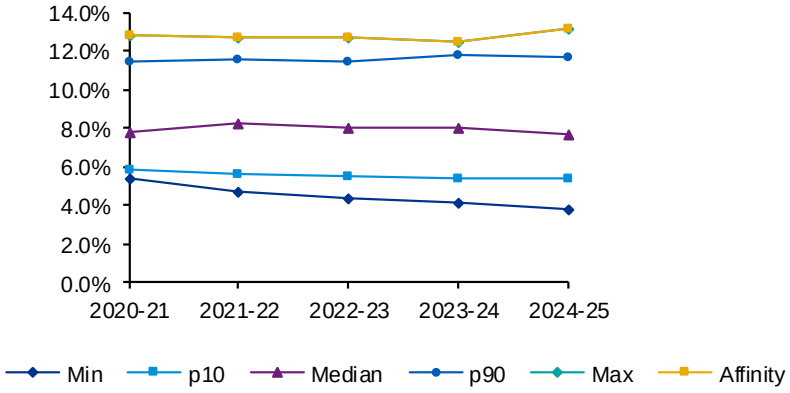
Dividend cover



FFO/Net Debt (alternative calculation)



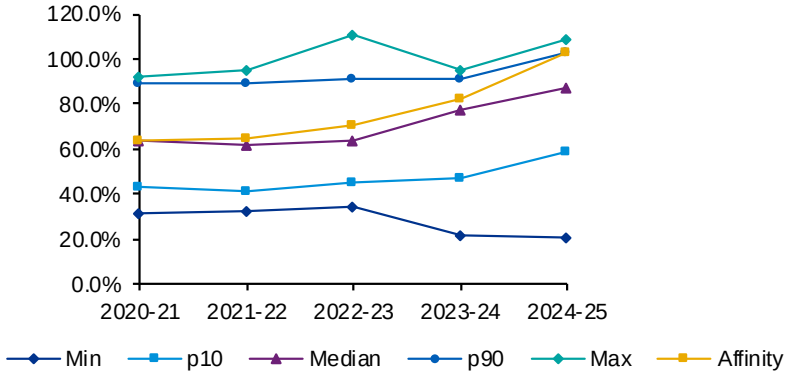
RCF/Net Debt



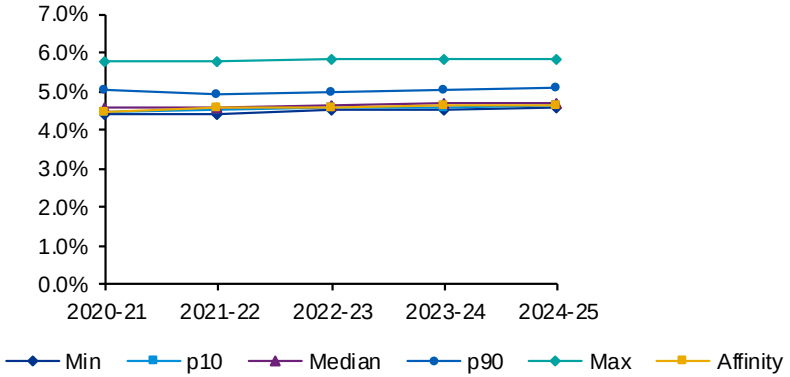
Appendix – comparison of financial ratios

Comparison of ratios - notional financial structure (3 of 3)

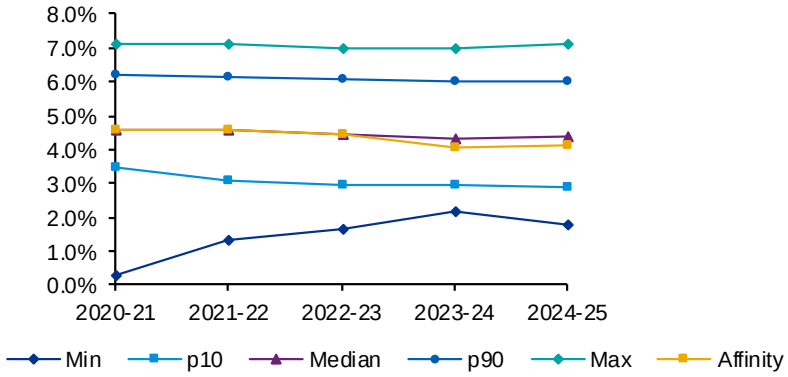
RCF/Capex



RORE



Return on capital employed



Important notice

This note has been prepared on the basis set out in our scope of work addressed to Affinity Water Limited (the 'Client') in accordance with our agreed written terms of the engagement letter dated 7th of February 2019 (the 'Engagement Letter). This note was designed to meet the requirements of Affinity Water Limited only and should be viewed solely in conjunction with the oral briefing provided by KPMG LLP.

This note is provided solely for the benefit and information only of the addressees of our Engagement letter and should not be copied, referred to or disclosed in whole or in part without our prior written consent. We accept no responsibility to anyone other than the parties identified in our engagement letter for the information contained in this note.

The information contained in this note, including market data, has not been independently verified. No representation, warranty or undertaking, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information, the opinions, or the estimates contained herein. The information, estimates and opinions contained in this note are provided as at the date of this note and are subject to change without notice.

In preparing our note, our primary source has been publically available information, and data from Affinity Water Limited management. We do not accept responsibility for such information which remains the responsibility of management. We have satisfied ourselves, so far as possible, that the information presented in our note is consistent with other information which was made available to us in the course of our work in accordance with the terms of our Engagement Letter. We have not, however, sought to establish the reliability of those sources by reference to other evidence. In addition, references to draft financial information relate to indicative information that has been prepared solely for illustrative purposes only.

This engagement is not an assurance engagement conducted in accordance with any generally accepted assurance standards and consequently no assurance opinion is expressed. Nothing in this note/document constitutes legal advice or a valuation.

This note is not suitable to be relied on by any party wishing to acquire rights against KPMG LLP (other than the Client) for any purpose or in any context. Any party other than the Client that obtains access to this options paper or a copy and chooses to rely on this note does so at its own risk. To the fullest extent permitted by law, KPMG LLP does not assume any responsibility and will not accept any liability, including any liability arising from fault or negligence, for any loss arising from the use of this note or its contents or otherwise in connection with it to any party other than the Client.

KPMG

Contact us

Andrew Beaver
Director

T +44 (0)7779 606 565
E Andrew.Beaver@kpmg.co.uk

Tom Rogers
Associate Director

T +44 (0)7903 009 818
E Tom.Rogers@KPMG.co.uk

Appendix RR.A1.2

Action refs AFW.RR.A1; AFW.RR.A5; AFW.RR.A6; AFW.RR.A9

PwC (financial) data table assurance

www.pwc.com

PR19
Review of the Financial Data Tables

Affinity Water Limited

Confidential

27 March 2019

pwc

Strictly Private and Confidential

The Directors,
Affinity Water Limited,
Tamblin Way,
Hatfield,
Hertfordshire
AL10 9EZ

27 March 2019

Data Tables Assurance: Report in response to Ofwat queries

Dear Sirs,

We are pleased to enclose our report to the Board in respect of our review of the updated financial data tables prepared for re-submission by 1 April 2019 to Ofwat, as part of the PR19 process.

The primary purpose of this report is to:

- Communicate our approach to the work
- Confirm the scope of our review; and
- Provide you with a record of any findings from our work.

Our work has been conducted to provide assurance to you in response to the changes to financial data tables following feedback from Ofwat on 31 January 2019.

Yours faithfully

Dave Gandee
Partner
PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP, Abacus House, Castle Park, Cambridge, CB3 0AN
T: +44(0)1223 460 05, F: +44(0) 1223 552 336, www.pwc.co.uk

1. Our approach

Our detailed approach to reviewing changes to data tables

As outlined in Ofwat's review methodology, high quality data underpins the 2019 Price Review (PR19) and information quality is vital for trust and confidence in the water sector. It is essential that Affinity Water's Business Plan and supporting data is accurate and consistent with Ofwat's information requirements, and updated in accordance with any actions identified by Ofwat in their IAP assessment that was shared with Affinity Water on 31 January 2019, following the 28 September 2018 submission.

Approach to test changes in data tables

Affinity Water retain responsibility for the final content in the documents to be re-submitted. Our role has been to review the change log maintained by Affinity Water, and actions raised by Ofwat, to assess if the changes made by Affinity Water are accurate, in line with Ofwat's raised actions and supported by an appropriate and quality evidence.

For each of the changes in data table, we have undertaken the following procedures:

1. Obtained the relevant table, which had been through the necessary reviews by Affinity Water, and signed off as being of sufficient quality to pass to PwC for review;
2. Discussed the methodology used to generate the data with the Data Owner. This conversation was supported by documented processes as appropriate, being the Methodology Statements;
3. Confirmed that the data tables were prepared in accordance with the agreed methodology.
4. Compared the data within re-submission data tables to the 28 September 2018 data tables to identify changes and traced the input data back to an appropriate source (as per the Methodology Statement); and
5. Fed back any exceptions identified to the Data Owner for them to address. Where no exceptions were noted we confirmed this to the Data Owner.

For each of the data tables where there has been a change, we considered the associated Commentary to also be in scope of our work. For each Commentary, we reviewed the wording as prepared by Data Owner, and undertook the following:

1. Compared the updated Commentary to the 28 September 2018 commentary, to identify where changes were made;
2. By reference to the change log, confirmed that all changes to Commentaries were consistent and notified Data Providers of any conflicts ; and
3. Reviewed each Commentary and challenged whether the level of detail was appropriate, and whether the Commentary was aligned to the Ofwat guidelines for the data table in question.

This report contains the outcomes of the procedures above.

Check of all changes to data tables

In addition to the above, to provide you comfort over changes to all data tables, we have used an automated tool to compare the final data tables that you submitted in September 2018 to the final versions of the re-submission data tables which will be submitted on 1 April 2019. The purpose of this comparison is primarily to identify all changes between tables to facilitate the management with a completeness check over all changes.

2. Summary of findings

Our review identified a number of recurring issues

Having reviewed all 51 data tables in the scope of our work, we have identified a number of exceptions that are summarised below:

- Data tables were not always appropriately signed off by the relevant layers of management, which meant that in certain regards we have acted as a 2nd line of defence;
- Commentaries have not always been updated fully, and explanations for the changes in data from 28 September 2019 to March 2019 are not as complete and transparent as we would expect;
- We have identified a number of instances whereby the data in the data table has not been calculated in accordance with the methodology;
- The Change Log, which was expected to be the central repository of all changes made to the data tables, has not been maintained in line with those changes. Hence it has not been possible to always use the Change Log as a complete and accurate summary of the changes;
- Using an automated tool to compare the data between 28 September 2018 data tables and 1 April 2019 re-submission data tables, we have identified changes in certain tables where Data Owners initially confirmed that no such changes will be made;
- Certain key pieces of information were not always included, such as the Ofwat IAP reference, or a breakdown of sections or lines that have changed, which makes it difficult to follow the 'audit trail'; and
- A number of isolated 'one-off' errors that were identified and required rectification by Affinity Water.

Whilst we identified a number of exceptions, as above, it should be noted that in all cases the exceptions were passed to the relevant Affinity Water staff on a timely basis and were subsequently addressed. We then undertook a follow up review of the resulting changes to confirm that the exceptions were remediated appropriately, and can confirm that this is the case.

3. Change Analysis

Data Tables reviewed and changes identified

To identify all changes in the Data Tables we used an automated tool that utilised scanning analytics, comparing changes between the September 2018 Data Tables and the April 2019 re-submission Data Tables. We were able to reconcile these changes with the change log, and identify additional changes. In total, we identified 2,920 changes.

The table below shows the detail of the data tables we have re-examined, and the outcome of change analysis.

Note that we have included a complete list of data tables that were in scope for our work in 28 September 2018 submission, with those that have changed since that date being in scope for re-submission work. The data tables which are out of scope, as there were no changes, are highlighted in grey.

No	Business Plan Data Sheet	Number of changes
1	App10 - Financial ratios	104
2	App11 - Income statement based on the actual company structure	49
3	App11a - Income statement based on a notional company structure	45
4	App12 - Balance sheet based on the actual company structure	78
5	App12a - Balance sheet based on a notional company structure	90
6	App13 - Trade receivables	24
7	App14 - Trade and other payables	37
8	App15 - Cashflow based on the actual company structure	31
9	App15a - Cashflow based on a notional company structure	25
10	App16 - Tangible Fixed assets	60
11	App17 - Appointee revenue summary	0
12	App18 - Share capital and dividends	4
13	App19 - Debt and interest costs	46
14	App21 - Direct procurement for customers	22
15	App22 - Pensions	0
16	App23 - Inflation measures	312
17	App24 - Input proportions	70
18	App24a - Real price effects (RPEs) and productivity assumptions	101
19	App25 - PR14 reconciliation adjustments summary	3
20	App26 - RoRE Scenarios	145
21	App28 - Developer services (wholesale)	12
22	App29 - Wholesale tax	71
23	App32 - Weighted average cost of capital for the Appointee	0
24	App33 - Wholesale operating leases reclassified under IFRS16	0
25	App7 - Proposed price limits and average bills	8
26	App8 - Appointee financing	11
27	App9 - Adjustments to RCV from disposals of land	3
28	R1 - Residential retail - All sections NOT B	162
29	R3 - Residential retail ~ further information on bad debt	7
30	R7 - Revenue and cost recovery for retail	25
31	R8 - Net retail margins	0
32	R9 - PR14 reconciliation of household retail revenue	10
33	Wn3 - Wholesale revenue projections for the water network plus price control	81
34	Wn4 - Cost recovery for water network plus	50
35	Wn5 - Weighted average cost of capital for the water network plus control	0
36	Wr2 - Wholesale water resource opex - Part A	120
37	Wr3 - Wholesale revenue projections for the water resources price control	61
38	Wr4 - Cost recovery for water resources	65
39	Wr5 - Weighted average cost of capital for the water resources control	0
40	Wr7 - New water resources capacity ~ forecast cost of options beginning in 2020-25 - Line 15	578
41	WS1 - Wholesale water operating and capital expenditure by business unit - PART A, C and D	190
42	WS1 - Wholesale water operating and capital expenditure by business unit - PART B 18 + 20	
43	WS12 - RCV allocation in the wholesale water service - PART A+B	10
44	WS12 - RCV allocation in the wholesale water service - PART C	

Data tables and narrative documents review

No	Business Plan Data Sheet	Number of changes
45	WS12a - Change in RCV allocation in the wholesale water service	5
46	WS13 - PR14 wholesale revenue forecast incentive mechanism for the water service	15
47	WS15 - PR14 wholesale total expenditure outperformance sharing for the water service	15
48	WS1a (DRAFT) - Wholesale water operating and capital expenditure by business unit including operating leases reclassified under IFRS16	154
49	WS5 - Other wholesale water expenditure	6
50	WS7 - Wholesale water local authority rates	15
51	WS8 - Third party costs by business unit for the wholesale water service	0

4. Testing by Data Table

Data tables and narrative documents reviewed

The table below shows the detail of data tables we have re-examined, and the outcome of our testing.

Note that we have included a complete list of data tables that were in scope for our work in 28 September 2018 submission, with those that have changed since that date being in scope for re-submission work. The data tables which are out of scope are highlighted in grey.

No	Business Plan Data Sheet	Data Table in scope	Data agreed to source	Commentary reviewed	Data methodology reviewed	Work completed & exceptions resolved
1	App10 - Financial ratios	Y	Y	Y	Y	●
2	App11 - Income statement based on the actual company structure	Y	Y	Y	Y	●
3	App11a - Income statement based on a notional company structure	Y	Y	Y	Y	●
4	App12 - Balance sheet based on the actual company structure	Y	Y	Y	Y	●
5	App12a - Balance sheet based on a notional company structure	Y	Y	Y	Y	●
6	App13 - Trade receivables	Y	Y	Y	Y	●
7	App14 - Trade and other payables	Y	Y	Y	Y	●
8	App15 - Cashflow based on the actual company structure	Y	Y	Y	Y	●
9	App15a - Cashflow based on a notional company structure	Y	Y	Y	Y	●
10	App16 - Tangible Fixed assets	Y	Y	Y	Y	●
11	App17 - Appointee revenue summary	Y	Y	Y	Y	●
12	App18 - Share capital and dividends	Y	Y	Y	Y	●
13	App19 - Debt and interest costs	Y	Y	Y	Y	●
14	App21 - Direct procurement for customers	Y	Y	Y	Y	●
15	App22 - Pensions	N				
16	App23 - Inflation measures	Y	Y	Y	Y	●
17	App24 - Input proportions	Y	Y	Y	Y	●
18	App24a - Real price effects (RPEs) and productivity assumptions	Y	Y	Y	Y	●
19	App25 - PR14 reconciliation adjustments summary	Y	Y	Y	Y	●
20	App26 - RoRE Scenarios	Y	Y	Y	Y	●

Data tables and narrative documents review

No	Business Plan Data Sheet	Data Table in scope	Data agreed to source	Commentary reviewed	Data methodology reviewed	Work completed & exceptions resolved
21	App28 - Developer services (wholesale)	Y	Y	Y	Y	●
22	App29 - Wholesale tax	Y	Y	Y	Y	●
23	App32 - Weighted average cost of capital for the Appointee	N				
24	App33 - Wholesale operating leases reclassified under IFRS16	N				
25	App7 - Proposed price limits and average bills	Y	Y	Y	Y	●
26	App8 - Appointee financing	Y	Y	Y	Y	●
27	App9 - Adjustments to RCV from disposals of land	Y	Y	Y	Y	●
28	R1 - Residential retail - All sections NOT B	Y	Y	Y	Y	●
29	R3 - Residential retail ~ further information on bad debt	Y	Y	Y	Y	●
30	R7 - Revenue and cost recovery for retail	Y	Y	Y	Y	●
31	R8 - Net retail margins	N				
32	R9 - PR14 reconciliation of household retail revenue	Y	Y	Y	Y	●
33	Wn3 - Wholesale revenue projections for the water network plus price control	Y	Y	Y	Y	●
34	Wn4 - Cost recovery for water network plus	Y	Y	Y	Y	●
35	Wn5 - Weighted average cost of capital for the water network plus control	N				
36	Wr2 - Wholesale water resource opex - Part A	Y	Y	Y	Y	●
37	Wr3 - Wholesale revenue projections for the water resources price control	Y	Y	Y	Y	●
38	Wr4 - Cost recovery for water resources	Y	Y	Y	Y	●
39	Wr5 - Weighted average cost of capital for the water resources control	N				
40	Wr7 - New water resources capacity ~ forecast cost of options beginning in 2020-25 - Line 15	Y	Y	Y	Y	●
41	WS1 - Wholesale water operating and capital expenditure by business unit - PART A, C and D	Y	Y	Y	Y	●
42	WS1 - Wholesale water operating and capital expenditure by business unit - PART B 18 + 20	Y	Y	Y	Y	●
43	WS12 - RCV allocation in the wholesale water service - PART A+B	Y	Y	Y	Y	●
44	WS12 - RCV allocation in the wholesale water service - PART C	Y	Y	Y	Y	●
45	WS12a - Change in RCV allocation in the wholesale water service	Y	Y	Y	Y	●

Data tables and narrative documents review

No	Business Plan Data Sheet	Data Table in scope	Data agreed to source	Commentary reviewed	Data methodology reviewed	Work completed & exceptions resolved
46	WS13 - PR14 wholesale revenue forecast incentive mechanism for the water service	Y	Y	Y	Y	●
47	WS15 - PR14 wholesale total expenditure outperformance sharing for the water service	Y	Y	Y	Y	●
48	WS1a (DRAFT) - Wholesale water operating and capital expenditure by business unit including operating leases reclassified under IFRS16	Y	Y	Y	Y	●
49	WS5 - Other wholesale water expenditure	Y	Y	Y	Y	●
50	WS7 - Wholesale water local authority rates	Y	Y	Y	Y	●
51	WS8 - Third party costs by business unit for the wholesale water service	N				

Appendix RR.A4.1
Action ref AFW.RR.A4

Affinity Water rdWRMP Pre-consultation Customer Focus Groups 1 Report. A report on outcomes of customer focus groups run in December 2018

December 2018

Affinity Water

rdWRMP Pre-consultation Customer Focus Groups 1

Report

Prepared by Ipsos MORI

Contents

Key take-outs 4
Background and method 5
Awareness and engagement with Affinity Water 6
Potential demand-side options 7
Potential supply-side options 11
- Effluent re-use 12
- Reservoir 14
- Transfer 15
- Desalination 18

Drought resilience 19
Ranking 20
Next steps: information needs 21

Key take-outs

Participants were often surprised at the challenges facing Affinity Water. They engaged with these and felt that more should be done to educate the public on this issue.

There is strong appeal for demand-side options to reduce water use. Participants felt that more could be done to educate customers about how to reduce water use. Use of data to provide customers with information about their own usage via bill information, emails or smart meters was met with positive response.

Overall, reaction to potential supply-side options were based on the **perceived impact** of the option. This includes the following four key inter-related factors. Participants felt that more information on these factors would support them in making a more informed decision about a preferred option. These information needs typically reflected the four key factors:

Key factor	**Information need**
Cost of the option	Impact on bill
Efficiency of the option	How efficient is this option (building work required, amount of water it will supply)
Environmental impact of the option	Environmental impact
Quality of water delivered by the option	How will water be treated (most relevant for effluent re-use)

Transfer by canal emerges as the preferred supply-side option because it is perceived to be the lowest impact option.

Background and method

The aim of this research was to explore specifics parts of the revised draft Water Resources Management Plan that have not been previously explored in detail with customers.

Qualitative research was carried out to gather open views towards potential demand side and supply side options. Four focus groups were carried out, bringing Affinity Water customers together to enable discussion of the options. Each group lasted 90 minutes and included up to 10 customers. The groups took place between 22nd and 28th November 2018. A total of 40 customers participated in the focus groups.

The sample for the focus groups was designed to provide a broad spread of demographics across the research whilst enabling positive group dynamics in each session by some degree of homogeneity:

Group 1: Folkestone • Mix men/ women • 55+ years • Socio-economic group: BC1C2[1]	**Group 2: Clacton** • Mix men/ women • 35-54 years • Socio-economic group: C2DE
Group 3: Watford • Mix men/ women • 18-34 years • Socio-economic group: C2DE	**Group 4: Watford** • Mix men/ women • 35-54 years • Socio-economic group: BC1

A discussion guide and accompanying stimulus material was designed collaboratively by Ipsos MORI and Affinity Water. This ensured that the options explored in the focus groups were described consistently across the groups.

Overall, participants engaged in the research sessions, and appreciated being asked to give their opinion.

"I think it's quite good that the company even bothers to ask its customers. I think there's a lot of companies that don't even bother, they just do things off their own back and whether it's right or wrong everyone just has to go along with it." (Folkestone, 55+ years, BC1C2)

[1] The socio-economic group for this focus group was expanded to include 'C2' to reflect the local demographic profile.

Awareness and engagement with Affinity Water

Overall, participants had limited awareness of Affinity Water. Most simply knew that they paid a water bill, and money went to Affinity Water.

"They just give me all my water." (Watford, 35-54 years, BC1)

A few participants mentioned that they thought Affinity Water had previously been Veolia and queried whether Affinity Water was a UK-based company.

Some had noticed Affinity Water work being carried out in their local area, with mentions of road works; these participants anticipated that this work was related to fixing leaks.

Participants mentioned forms of contact they had had with Affinity Water:

- Receiving bills: Those who tended to engage more with their bills (read them in detail) were more likely to be aware of Affinity Water. These participants were often older (55+ years) and those on a water meter (although not all participants on a water meter were actively looking at their bill).
- Receiving information and hippo blocks in the post to inform people about better water use.
- Home audit/ household water quality test.

When provided with information about Affinity Water, many were surprised, particularly with regards to:

- The size of Affinity Water coverage.
- The number of Affinity Water customers.
- The volume of water provided by Affinity Water.

"That's impressive." (Watford, 35-54 years, BC1)

Participants were provided with information regarding the challenges facing Affinity Water. This focused on information detailing population increase, and the impact of climate change on current water resources. Participants expressed surprise at the challenges facing Affinity Water and felt that more should be done to educate the public on this issue.

"I think water use is…you take for granted that you can have water." (Watford, 35-54 years, BC1)

"I don't know whether it needs to be more expensive, or whether it needs…there needs to be more incentive for people to save the water, or more incentive and more education, so they really understand the challenges." (Watford, 35-54 years, BC1)

"Just the idea that we have to find the water supply. That's a huge increase [in population]." (Watford, 18-24 years, C2DE)

"I'm quite surprised. I don't' think you like to think that the water's going to run out." (Folkestone, 55+ years, BC1C2)

Potential demand-side options

Personal water use

During the research sessions, participants were provided with information about Per Capital Consumption (PCC) levels across the Affinity Water areas. Participants were often shocked at the PCC figures, and the amount of water that is used.

"That's a massive amount of water." (Watford, 35-54 years, BC1)

There were some questions about why PCC figures differed across locations. However, overall, PCC levels made participants think about their own usage.

Whilst those who scrutinised their Affinity Water bill tended to have greater knowledge regarding the amount of water they personally used, most participants were unsure. The statistic that 1 minute in the shower uses 12 litres of water was particularly impactful and interesting.

"I normally spend about 20 minutes having my shower. I have my shower in the morning and at night, so you can just imagine. But now [in light of this information], I'm like okay, after just five minutes I'm out.." (Watford, 18-24 years, C2DE)

Overall, participants cited a range of benefits for reducing water usage including:

- Environmental benefits
- Cost to customer (reduced bills)
- Preserving water resources for the future

"For our children's children and for their, for the next generations and everything could be a concern." (Clacton, 35-54 years, C2DE)

"We'd have a more sustainable source of water for a longer period of time." (Watford, 18-24 years, C2DE)

"Well perhaps we're safeguarding the future by not being over generous with ourselves with water, you know trying to safeguard for the next generation." (Folkestone, 55+ years, BC1C2)

Some participants (particularly those in Watford) felt that they needed to do more to reduce their water use and welcomed ideas for how to do this. These participants enjoyed sharing tips/ information about reducing water use such as use of hippo blocks and the impact of old taps and less efficient appliances.

Others (often in Clacton and Folkestone, those older, or those who commented they play close attention to their water use) felt that they were reasonably good at managing their water use. Whilst they noted that overall improvements could be made, they did not always feel that they personally needed to make major changes.

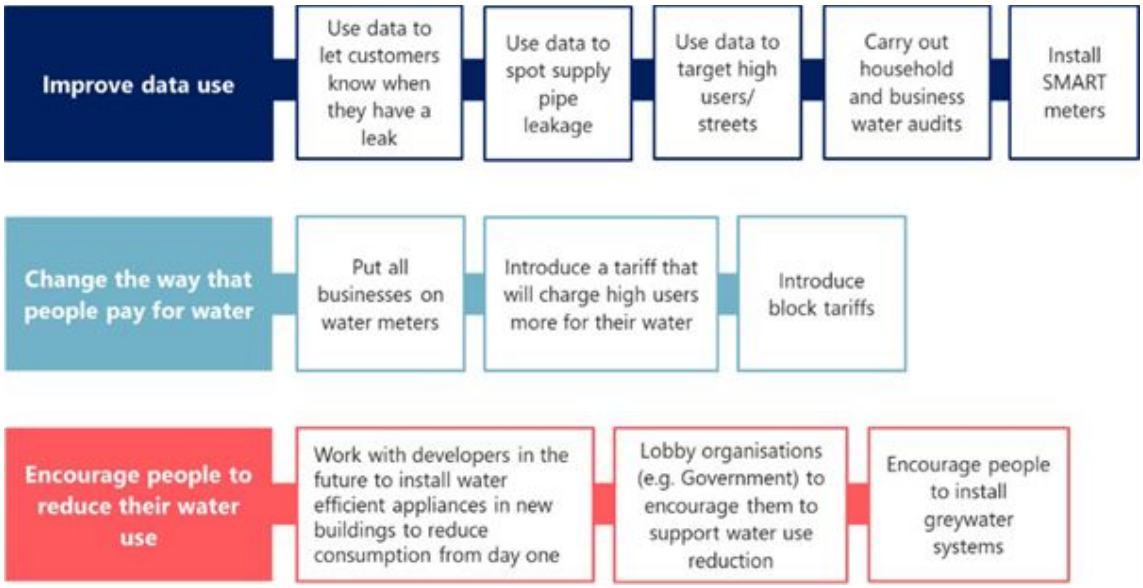
"We're using rainwater for the car, turning the tap off, having a little, one of those little egg timer things in the shower." (Folkestone, 55+ years, BC1C2)

Many struggled to identify drawbacks to reducing water consumption, with most citing the challenges around changing behaviours and lifestyles. However, participants were clear that the benefits of reducing water use outweighed this drawback. Participants felt that people would be willing to make lifestyle changes if they understood the challenges of water supply and were educated on how to make changes.

"It's being taught though, it's being shown, it's being educated so people know, isn't it?" (Watford, 35-54 years, BC1)

Supporting reduction in water use

Participants were presented with ideas for how Affinity Water could reduce water use.



Improve data use

Across the research, participants mentioned the importance of detecting and dealing with leaks.

"How many times do you go past something leaking…the investments got to be in the infrastructure and the storage of the water to make it sustainable." (Clacton, 35-54 years, C2DE)

They were therefore positive towards the idea of data use to detect these.

Overall participants felt that more public information and education was needed to support Affinity Water PCC aims. As part of this, participants were very positive towards providing more usage data to customers. However, participants had not heard of the Affinity Water website Customer Portal and did not anticipate that they would use it.

"I couldn't be bothered going on checking the website regularly." (Folkestone, 55+ years, BC1C2)

There was preference for:

- More information on bills: this was cited by older participants and those already scrutinising their water bills. Others said that they were unlikely to read bills.
- Email/ text messages with updates.

  "Perhaps if it had email notifications…if you're going over a certain amount." (Watford, 18-24 years, C2DE)

When thinking about data use, participants discussed metering. Those who were not currently metered felt that becoming metered would make them more aware of their water use.

"I don't have a meter, but I used to in another property. And when it is metered you do think about it a little bit more, because you're watching it." (Watford, 35-54 years, BC1)

"People that use it [water] a lot could at least be targeted and …they might be using it and they're not aware they're using as much as they're using." (Clacton, 35-54 years, C2DE)

Some questioned whether smart meters would be available for water (in line with those they had seen for gas and electricity).

Change the way that people pay for water

Participants were positive towards the idea of businesses being metered.

Reaction to different ways for customers to pay were mixed. Those who felt that they were good at managing their water use (and were already using a water meter) tended to voice greater support for tariffs. Others considered access to water as a right and therefore disagreed with charging people different amounts for the same amount of water (e.g. charging higher users more for their water).

"You can't charge one person one price and another person another price for water, can you." (Clacton, 35-54 years, C2DE)

Some participants further felt that block tariffs could be punitive to those who did not know how to reduce water use, those with larger families, or those who, for example, had older appliances that were less water efficient.

Encourage people to reduce their water use

At a spontaneous level, many suggested that developers had a role to play in installing water efficient appliances and systems in new builds.

"This [being water efficient] should be standard in new homes." (Watford, 35-54 years, BC1)

Some questioned whether Affinity Water were already liaising with developers in this respect.

Some also questioned the role of Government in addressing water resource challenges, with a couple querying whether Government supports with funding for water infrastructure (e.g. pipelines).

"Does the government help towards anything like this?" (Clacton, 35-54 years, C2DE)

Greywater re-use was also mentioned at a spontaneous level, and support for these types of systems for generating water for non-drinking purposes (e.g. watering the garden) was strongly voiced across the groups. This led participants to more broadly talk about rain water re-use with some noting that they had water butts in their gardens and felt that more people should be re-using rainwater in their homes.

"It's all about the rain harvesting these days isn't it?" (Clacton, 35-54 years, C2DE)

Potential supply-side options

Participants were presented with an overview of potential supply-side options:

Effluent re-use

Option: Minworth to Sunden, direct transfer via pipe.

Reservoirs

Option 1: accessing water from Grafham Reservoir, South Lincolnshire.

Option 2: new building of the South East Strategic Reservoir.

Transfer

Option 1: transfer water from the River Severn to the River Thames via pipe.

Option 2: transfer water from Minworth to the River Thames via canal.

Desalination

Option: new desalination plant.

Overall, reaction to potential supply-side options were based on the **perceived impact** of the option. This included consideration of the following four key inter-related factors:

The strength of these perceived impacts is discussed for each option below.

Effluent re-use

Water quality

Water quality was often cited by participants as the most important consideration for this option. Associations with the word 'effluent' were often a difficult barrier for some participants to overcome.

"It sounds disgusting…people get everything that anyone else throws down the sink, urgh" (Watford, 35-54 years, BC1)

"I think they need to change the word effluent…make it a bit more attractive." (Clacton, 35-54 years, C2DE)

"It's just a bit off putting." (Watford, 18-24 years, C2DE)

A couple preferred an indirect process, anticipating that mixing the water in a water source and treating in twice would result in better quality water. However, there were questions regarding how the water would need to be treated and how many chemicals would end up in drinking water.

"It's pumped full of chemicals." (Watford, 18-24 years, C2DE)

There was some confusion over this including confusion in Folkestone around where water would be treated with some anticipating that waste water from the South East would be transferred to Minworth for treatment before being transferred back to the South East.

Some participants suggested that effluent re-use water could be routed for non-drinking water uses and wondered whether new houses could include two different taps – one for drinking quality water and one for other water (e.g. water from effluent re-use).

"You have drinking water supply and then all the other stuff. So, all of that maybe yeah, you wouldn't want to drink, you wouldn't want to think about drinking it [water from effluent re-use] but you could use it in your washing machine. As long as it's clean." (Watford, 35-54 years, BC1)

However, others felt that as long as water provided to households met drinking water standards, this approach would be acceptable. These participants often cited water challenges in other countries such as India and South Africa and anticipated that effluent re-use would already be in place in these types of places.

"The thing with science is there's so much they're doing, you can now buy those, if you were in the jungle you can buy this chemical… that you put into the river to get drinking water." (Clacton, 35-54 years, C2DE)

Learning that effluent re-use was used in other countries was reassuring for some.

Costs

Participants assumed that this option would be costly given the requirement for new pipework and treatment works.

"Are they going to put my water bill up to fund this pipe? It does sound expensive." (Clacton, 35-54 years, C2DE)

Environment

Participants questioned the environmental impacts of building new pipework, especially where this would involve building across countryside.

"I can't quite understand the feasibility of digging to put a pipe even if it, whether or not it's a straight line or not, all the way down to, when they're trying to save the environment." (Watford, 35-54 years, BC1)

"How much disruption is that going to cause over 15 years for those people?" (Clacton, 35-54 years, C2DE)

However, it should be noted that these types of concerns were subsequently highlighted for other options involving new pipework.

Efficiency

Some participants felt that re-use of water would be an efficient option as it was based on a ready-made supply of water (waste water).

A couple queried whether the overall design could also be made to be efficient, noting that the pipework could be planned to follow natural gradients in the landscape to run downhill, or hydro power could be generated for energy needs.

"Doesn't all water run downhill...that way they could use water power, hydro power." (Clacton, 35-54 years, C2DE)

Reservoir

Efficiency

Various aspects relating to the efficiency of the reservoir options were voiced. Many participants in Watford, and a few in other locations were more positive towards the South East Strategic Reservoir option, as they felt it would be more efficient to have a source of water created locally rather than bringing water in from another area.

"Logically that looks like the better idea because the distance is, it's much closer." (Watford, 35-54 years, BC1)

"If it's closer to home it's less pipework, it's less maintenance, the overall cost is probably going to be more effective." (Watford, 35-54 years, BC1)

However, some participants (from across locations) questioned whether building a reservoir in the South East, where rainfall is unpredictable and often low, was the best option.

"It's weather dependent as well...the effluent system is dependent on human function rather than what the weather's doing." (Clacton, 35-54 years, C2DE)

"There's more space up north for building reservoirs along with better rainfall, so it kind of does make sense actually." (Watford, 18-24 years, C2DE)

A few participants queried whether a side-benefit of the reservoir option would be to help control times of flooding on the Thames. A few others wondered whether using the Thames in this was could make the Thames more likely to flood.

Focusing specifically on bringing water to the South East from the Grafham Reservoir (South Lincolnshire), some participants wondered how efficient a pipe would be, noting concerns about the length of the pipework, and maintenance. This led a couple to query whether leaks or issues with the pipework in the long run would impact on Affinity Water customers' water supply.

"What would concern me is that water has got a long way to travel and with a pipe that long that's going to come with its own issues, cracks, leaks, and how many times is that going to impact our area, our supply?" (Watford, 35-54 years, BC1)

Costs

Participants assumed that both of the reservoir options would be costly given the need to either build a new reservoir or pipework and treatment works.

"At the end of the day it's all about the end user isn't it? As long as it's not going to cost us any more." (Clacton, 35-54 years, C2DE)

In Folkestone, there was some discussion that the South East Strategic option could potentially be more expensive, as they anticipated that land in the South East would be more expensive.

"I know cost is going to be a big thing, but we know for a start that it's, this is more expensive land, square whatever, footage, so it could well be the far cheaper option to take it in from more north, northern, which are the other options." (Folkestone, 55+ years, BC1C2)

Environment

Participants questioned the environmental impacts of the building work required for reservoir options with queries regarding the impact on major roads and homes in the path/ site of the required building work.

"There's still the same issue isn't there, of digging everything up to stick a pipe in." (Watford, 35-54 years, BC1)

There were a few mentions of the dual purpose of reservoirs as a positive aspect of these options (both for water storage and leisure).

Water quality

Water quality was not a key mention for this option.

Transfer

Efficiency

Efficiency emerged as an important factor for consideration for both of the transfer options explored in the focus groups.

The pipe transfer option (River Severn to River Thames) was often met with mixed views. Whilst some questioned the infrastructure that would be required via building a new pipe, others felt that it was sensible to take water where it was available rather than rely on rainfall (e.g. via reservoirs) in the South East.

"On longer terms, it redistributes water more effectively across the country, maybe it has a longer term, maybe it's a case of shorter-term, high cost, longer-term, greater gain." (Watford, 35-54 years, BC1)

"It makes sense to take it from where they've got more than they can cope with." (Clacton, 35-54 years, C2DE)

One participant queried whether the transfer option could help in times when the River Severn was at risk of flood.

The canal transfer option was met with positive views given the efficiency of using a system already in place.

"It seems like a ready-made solution." (Clacton, 35-54 years, C2DE)

"That makes sense because it's already there isn't it? There's already a water way there." (Watford, 35-54 years, BC1)

"Infrastructure's there…it was built for that, it was built to get one thing to another thing, one item to another city, if that item is water, what's the difference?" (Clacton, 35-54 years, C2DE)

Cost

Perceptions of the cost of the transfer options varied. Participants assumed that the pipe transfer option would be costly given the requirement for new pipework and treatment works.

"It [transfer from River Severn to River Thames] looks like an enormous project." (Watford, 35-54 years, BC1)

The canal transfer option was anticipated to be a most cost-efficient option, as the infrastructure already exists.

"It's probably cheaper and quicker." (Clacton, 35-54 years, C2DE)

"You haven't got the outlay of all that pipework." (Watford, 35-54 years, BC1)

"This might be a cheaper option for Affinity though. To bypass the building of another processing centre." (Watford, 18-24 years, C2DE)

Environment

Participants questioned the environmental impacts for the pipe transfer option, considering the building work required.

"I've got visions of people having to leave their houses because there's going to be a pipe being built." (Watford, 35-54 years, BC1)

There were fewer queries regarding environmental impacts for the canal option as the canal would not need to be built. The canal transfer option was often described by participants as the more 'natural' option. This was appealing to many.

"I prefer that because it's natural and it seems there will be less cost." (Watford, 35-54 years, BC1)

There was some concern voiced that the wastewater put into the canal would contaminate the waterway.

"Would we be contaminating the canals with waste water or would it be treated prior to being put into the canals?" (Watford, 18-24 years, C2DE)

However, others anticipated that use of the canal could help maintain the canal network.

"I like it because it's dual use, it's, people can have barges and stuff, they, people use that whereas you can't sit by a waterpipe can you?" (Folkestone, 55+ years, BC1C2)

Water quality

Because both pipe and canal options were presented as transfer options, it led some participants to consider the impact that these options may have on water quality. Views on this topic were mixed.

Some were unsure about the cleanliness of canals.

"It would revolt me, it really would…I cycle on the canal, so I've seen all sorts in the canal." (Watford, 35-54 years, BC1)

Some further queried whether industry along the canal would be pumping into the canal, and what impact that might have on water quality.

"With industry, what they're pumping into the canal, the river beds…" (Clacton, 35-54 years, C2DE)

A couple however felt that the canal would be less of a threat to water quality than putting it in the Thames.

Focusing on the River Severn to River Thames transfer option, a couple questioned whether water would be 'sat in pipes' for waiting to be transferred which they felt could result in bacteria breeding etc.

"You don't want water sitting in that big tunnel…well, for a long time, it will go all manky." (Watford, 35-54 years, BC1)

Other participants reflected that regardless of transfer method once treated, the water would be safe; these participants were often those who had travelled to other countries with water quality issues.

"I can't help but think we're in the 21st century England, the water that comes out our taps is going to be safe." (Watford, 18-24 years, C2DE)

Desalination

Some participants had heard of desalination and brought it up spontaneously in the research, often citing examples from other countries.

"Sourcing water from better places would be good too. At the moment we rely on rivers and stuff, but if we could somehow use the sea, for instance." (Watford, 18-24 years, C2DE)

Efficiency

Efficiency was the key query regarding the use of desalination across the focus groups.

Participants felt that the sea provided a good, natural source of information.

"We've got that natural resource and we're going to get more water." (Clacton, 35-54 years, C2DE)

However, some participants were aware that desalination used a lot of energy which led participants to query how efficient this option was. There was appetite for more information about what type of energy was used.

"I like the idea of desalination, but I don't like the fact that it uses so much energy." (Clacton, 35-54 years, C2DE)

Participants were interested to know whether renewable energy could be used with mentions of hydro energy and solar power

"I guess if they could find a renewable source of energy and keep the plant working, yeah, why not." (Watford, 18-24 years, C2DE)

This led some to conclude that perhaps desalination was a good option for the future – once more research had been carried out into how to make it an energy efficient option.

Costs

Participants assumed that desalination would be costly given the requirement for new desalination plant to be built, and the energy costs required to keep it running.

"It's [desalination] expensive. And probably fraught with logistical challenges, but I mean it's, some countries obviously use it quite heavily." (Watford, 35-54 years, BC1)

Environment

Participants questioned the environmental impacts of building a new plant. Participants in Clacton were keen to note that they would not want it to be built in their local area.

"I don't want one of those right next door." (Clacton, 35-54 years, C2DE)

Water quality

Water quality was not a key mention for this option.

Drought resilience

Participants had not heard of the term 'drought resilience'. However, they were interested to know about drought resilience and some wondered what impact Summer 2018 weather would have on water resources for next year. A few were interested in finding out why there had not been a hosepipe ban or similar.

There was positive reaction to the Affinity Water drought management plan. However, this did raise questions around how much it might cost to achieve this.

"It's all good having plans, it's whether or not it's actually feasible to achieve it or not, or how much it's cost to achieve it then, or how it's customers have to pay to achieve it." (Watford, 35-54 years, BC1)

Overall, information regarding drought resilient reinforced participant views that action needs to happen to manage water demand and supply.

Ranking

In each focus group participants were asked to prioritise which options (across both potential demand and potential supply side options) they thought should be put in place to meet water challenges.

Across the groups, participants consistently prioritised demand-side options noting the importance of people changing behaviours and being more aware of water use. This may also be because participants simply found these options more tangible, and easy to engage with.

"Canal's an obvious choice to move water around but educating people in how to reduce their water waste has got to come first." (Clacton, 35-54 years, C2DE)

The following **demand-side options** were favoured:

Anything that promotes general education and public awareness of:

- The challenges facing water supply
- What customers can do to change their behaviours and reduce water use.

Improved data use to:

- Help people understand how they can reduce their water use through roll-out of better metering
- Detect leaks

Encourage developers to install greywater systems: participants were also interested in how they could be better at using water (rainwater and greywater) in their own home.

Change the way that people pay for water by introducing tariffs: this option only emerged as popular in Folkestone, where participants were older (55+ years) and felt confident that they were good at managing their water use.

Become more drought resilient: again, this option only emerged as popular in Folkestone where older participants (55+ years) recalled previous droughts and felt that it was important and made sense for this to be a key focus.

The following **supply-side options** were favoured:

Transfer option 2: canal. This option appealed as the canal is already in place meaning that this was often considered to be the option with **least impact.** Of particular note was the perception that it would be:

- Efficient: the canal already exists.
- Less costly than other options: the canal already exists
- Have fewer environmental impacts: it is already built.

South East Strategic Reservoir: this was popular in Watford as a 'local' option and therefore something that would be more efficient. However, other participants questioned whether a reservoir in an area with unpredictable and low rainfall was the best option.

Desalination: this was something that participants anticipated could be an option for the future. It was therefore often ranked fairly high in the list of supply-side options, as participants felt that the option should be explored, and more research carried out to find an energy-efficient approach.

Next steps: information needs

The research identified that there is appetite for more information about the options to support customers in making an informed decision about which option is preferred.

"Where's the money going to come from? How much disruption is it going to cause? Because you know when they dig up pipes and stuff like that, how much problems it causes..." (Watford, 18-24 years, C2DE)

"Costs, distance, disruption to the environment and the practicality of what work is needed." (Folkestone, 55+ years, BC1C2)

Key information needs reflect the impact factors identified across the research:

Cost	• Overall cost of the option • Impact on bill (individual, average bill)
Efficiency	• Amount of planning required: how long this will take • Amount of building work required: how long this will take • Implementation date of each option • Energy required to make the option operational (e.g. energy required by desalination, and source of energy) • How the option will work (what the process is) • Anticipated impact on water sources (amount of water it will supply and impact on water resilience)
Environment	• Environmental impact of building the required infrastructure (short term impacts). For example, impact of building pipes/ treatment works on place, people and animals. • Environment impact of the resulting infrastructure (long term impacts). For example, long term impact of reservoir or use of a canal for place, people and animals.
Quality of water	• Any difference in quality of water across options e.g. effluent re-use vs. pipe transfer vs. canal transfer • What treatment is carried out (a simple overview) • Why water is treated twice (e.g. before and after pipe transfer)

Other questions/ information provision that may be useful and should be considered includes:

- Any other short and long-term benefits of each strategic option

- Maintenance levels for each strategic option
- How long each strategic option will last
- How relationships with other regions/ water companies are managed (e.g. what if Anglian Water changed their mind regarding access to Grafham Reservoir)
- Images of what the options may look like (based on existing examples)
- Single map showing distances involved for each option

It should be noted that given the list of information needs identified above, the potential for 'information overload' should be considered when designing any further research.

For more information

3 Thomas More Square
London
E1W 1YW

t: +44 (0)20 3059 5000

www.ipsos-mori.com
http://twitter.com/IpsosMORI

Appendix RR.A4.2

Action ref AFW.RR.A4

Affinity Water rdWRMP Pre-consultation Customer Focus Groups 2 Report. A report on outcomes of customer focus groups run in January 2019

February 2019

Affinity Water

rdWRMP Pre-consultation Customer Focus Groups 2

Report

Prepared by Ipsos MORI

Contents

Key take-outs 3
Background and method 4
Awareness and engagement with Affinity Water 5
Potential demand-side option: housing developers 8
Potential supply-side options 9
Detailed feedback for the supply options 10
- Effluent re-use 10
- South Lincolnshire Reservoir 11
- South East Strategic Reservoir 13
- Transfer from River Severn to River Thames 15
- Transfer by Grand Union Canal 16
- Desalination 18

Ranking 20
Final comments 22

Key take-outs

Participants are engaged in the challenges that face the Affinity Water area. They are interested to know how these challenges are being addressed and looked at from both regional and national levels. Participants feel that water companies should work together. They are also keen for more information to be provided to customers (and the public in general) about how to manage household water use.

There is strong push-back towards the idea of Affinity Water customers funding other customers to have greywater systems and water efficient appliances installed in new build properties.

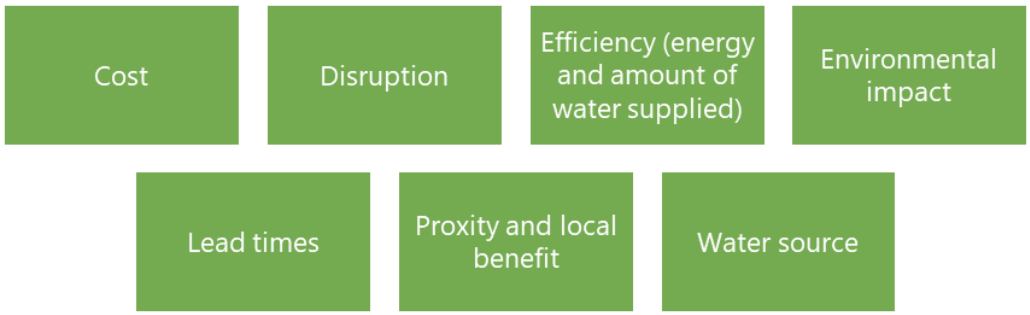
The most appealing supply side options across all four groups were (in no particular order):

- Transfer by Grand Union Canal
- South East Strategic Reservoir
- South Lincolnshire Reservoir

The least appealing supply side options across all four groups were (in no particular order):

- Effluent re-use
- Transfer from River Severn to River Thames
- Desalination

Appeal of supply side options is driven by a combination of the following factors:



Background and method

The aim of this research was to explore parts of the revised draft Water Resources Management Plan in more depth than was previously explored with customers in focus groups during November 2018 (pre-consultation customer focus groups 1).

The November 2018 focus groups research identified that there is appetite for more information about the options to support customers in making an informed decision about which option is preferred. Therefore, the decision was made to provide customers with the additional information they had identified. This additional information included:

- Cost
  - Overall cost of the option
  - Impact on bill (individual, average bill)
  - Efficiency
  - Amount of planning required: how long this will take
  - Amount of building work required: how long this will take
  - Implementation date of each option
  - Energy required to make the option operational (e.g. energy required by desalination, and source of energy)
  - How the option will work (what the process is)
  - Anticipated impact on water sources (amount of water it will supply and impact on water resilience)
- Environmental impact
- Quality of water
- Any other short and long-term benefits of each strategic option
- How long each strategic option will last
- How relationships with other regions/ water companies are managed.
- Images of what the options may look like (based on existing examples)
- Maps showing distances involved and location for each option.

Qualitative research was carried out to gather open views towards potential demand side and supply side options. Four focus groups were carried out, bringing Affinity Water customers together to enable discussion of the options. Each group lasted 105 minutes and included up to

10 customers. The groups took place between 10th – 15th January 2019. A total of 41 customers participated in the focus groups. The sample for the focus groups was designed to provide a broad spread of demographics across the research whilst enabling positive group dynamics in each session by some degree of homogeneity:

Group 1: Harrow • Mix men/ women • 35 - 54 years • Socio-economic group: ABC1	**Group 2: Harrow** • Mix men/ women • 18 - 34 years • Socio-economic group: C2DE
Group 3: Manningtree and surrounding areas • Mix men/ women • 55+ years • Socio-economic group: ABC1	**Group 4: Dover and surrounding areas** • Mix men/ women • 35 - 54 years • Socio-economic group: C2DE

A discussion guide and accompanying stimulus material was designed collaboratively by Ipsos MORI and Affinity Water. This ensured that the options explored in the focus groups were described consistently across the groups.

Overall, participants engaged in the research sessions, and appreciated being asked to give their opinion.

"They should continue to consult the people...even if it is just a leaflet through the door, we need more awareness." (Harrow, 18-34 years, C2DE)

Awareness and engagement with Affinity Water

Overall, participants had heard of Affinity Water and knew that they supplied their household water, but levels of engagement varied across the groups. Some participants had little awareness of Affinity Water beyond supplying water and felt the company was 'anonymous' compared to other utility providers.

"I am (Affinity Water) *that is all I know." (Harrow, 18-34 years, C2DE)*

A few participants mentioned they thought Affinity Water had previously been part of Veolia and had noticed the company had changed its name recently. Some questioned whether it had ties with France.

"They changed their logos, which we all paid for, which I thought was a waste of money… has it been something else between that and Affinity Water?" (Manningtree, 55+ years, ABC1)

Affinity Water customers that were on water meter were very engaged with their water use and tended to accurately estimate how much water they were using.

"It was about £32 a month. Now I'm at £28" (Manningtree, 55+ years, ABC1)

Those who were metered and monitored their bill, tended to focus on the cost of the bill (rather than how much water they were using). These participants were typically from socio-economic group C2DE, and some vocalised that they were financially struggling.

"Why are they so expensive?" (Dover, 35-54 years, C2DE)

Additionally, lower socio-economic group participants were most likely to express cynicism towards Affinity Water, noting high water bills (especially in Dover), querying why there was no choice over water provider, and wondering how much shareholders were paid.

"Who decided which firm gets which area? Who decides if we are getting the best deal?" (Dover, 35-54 years, C2DE)

Higher socio-economic group participants were most likely to talk about water companies working together and question how this worked, and what was being done to make sure water resourcing was being looked at from a regional and national perspective. These participants were alarmed at the thought that water companies might not be working together, anticipating that water companies would prefer to compete rather than cooperate.

"They need to be talking with other water companies." (Manningtree, 55+ years, ABC1)

"It is ridiculous that we do not have a National Grid for water…it is shocking and reckless." (Harrow, 18-34 years, C2DE)

The role of the government was mentioned across all groups with participants querying what their role was, often assuming that they were the 'guarantor' of water supplies and querying what investment they were making in water resourcing.

Some participants recalled receiving water saving devices (e.g. Hippo cistern bags) and leaflets from Affinity Water containing water saving tips in the past but could not recall any recent activities.

"We had a leaflet on how to save water…have a shower not a bath." (Harrow, 35-54 years, ABC1)

Participants were surprised at the size of the Affinity Water supply area when presented with information about Affinity Water. Some thought the company only provided water in their area e.g. Dover or Manningtree.

Participants found it difficult to estimate their daily water consumption (especially those not on a water meter), estimates averaged around 70 litres per day which led to surprise when shown the actual figures. This left some feeling that they take water for granted.

"That is mad." (Harrow, 18-34 years, C2DE)

"I feel a bit guilty." (Harrow, 18-34 years, C2DE)

When provided with information about the challenges facing the country's South East region, participants agreed that this was a big issue that needed to be acted upon. This led participants to question why more properties were being built in the region, if there was not enough water to support increased population. These participants again, considered that the issue was something that should be looked and at a regional/ national level, and not just in the Affinity Water area.

"This is nothing new, we have had hosepipe bans, now water meters." (Dover, 35-54 years, C2DE)

"They still keep building homes in the South despite the fact that there is not enough water." (Dover, 35-54 years, C2DE)

"They ran out of reservoir (water)*...and you see the amount of houses that have gone up...?" (Manningtree, 55+ years, ABC1)*

Participants felt that the responsibility of meeting the water resource challenges lies with everyone (water customers, water companies and the government) and some participants spontaneously raised suggestions for things that could be done to meet the water resource challenges:

- **Demand side ideas** were often noted including changing in-home behaviours (e.g. only filling the kettle up as much as needed) combined with education on how to reduce water usage in-home; roll-out of water meters; fixing leaks (using data to identify leaks quicker); and use of rainwater collection or greywater systems in homes and public spaces including new builds (working with developers).

  "I have had a water meter for 3 years and it does make you more conservative with water." (Manningtree, 55+ years, ABC1)

  "They should recycle waste water." (Harrow, 35-54 years, ABC1)

"I waste a lot, I just leave taps running I don't know why I do it, if I had a meter I would use less." (Harrow, 18-34 years, C2DE)

- **Supply side ideas** included: desalination and transferring more water from reservoirs or rivers or from different parts of the country.

  "I think in Spain they have desalination?" (Manningtree, 55+ years, ABC1)

  "Could we not transfer from other rivers and reservoirs?" (Dover, 35-54 years, C2DE)

Potential demand-side option: housing developers

Participants had often spontaneously suggested that more work should be done with housing developers to make homes water efficient and some queried whether this was already being done. Participants wondered whether more support could also be made to existing housing stock to improve water efficiency e.g. putting in place greywater systems (although some participants felt that this would not be directly relevant to them as they lived in flats without outside space or had a strong dislike to the concept of greywater use).

Working with housing developers was seen as a positive step that made sense. However, there was strong push back towards the idea of Affinity Water customers paying for greywater systems and/ or water efficient appliances in new builds:

- Participants felt that the cost of these should be met by the housing developers themselves, and it was anticipated that this would be built into the cost of the home. Or government grants should be provided similar to home insulation grants.
- *"Greywater is a good idea but the cost needs to be included in the property as a selling point." (Dover, 35-54 years, C2DE)*
- Participants felt that this approach was not fair as they would be paying for other people to have water efficient homes whilst there would be no support for people in older homes to make these changes.

  "I suppose it is a form of investment, but it should go to the older properties too." (Harrow, 35-54 years, ABC1)

"Poorer people in older houses might be penalised…it isn't fair to people who live in older homes and can't make these changes." (Dover, 35-54 years, C2DE)

A couple of participants voiced stronger appeal for greywater systems noting that they were more of a long-term solution (e.g. once installed they could be maintained), whilst appliances felt like a more short-term solution as they tended to have a short lifespan.

"What happens when they break in 3 years and have to replace it." (Dover, 35-54 years, C2DE)

Potential supply-side options

Six potential supply-side options were presented to participants for evaluation:

- Effluent re-use
- South Lincolnshire Reservoir
- South East Strategic Reservoir
- Transfer from River Severn to River Thames
- Transfer by Grand Union Canal
- Desalination

Overall, appeal of the potential supply-side options was driven by the following interlocking factors:

Views towards each option were typically based on a **combination** of these factors, as discussed below.

Detailed feedback for the supply options

Effluent re-use

Views towards effluent re-use were mixed but overall there was limited appeal. Reaction to this option often focused on views towards the water source, and the concept of effluent re-use itself (a dislike of the idea of using wastewater as a water source for some). There were also concerns regarding the building work required for new pipework.

Cost: across options, cost was taken into account in combination with the other factors, with participants using this information to consider for example, how cost worked in combination with environmental impacts, efficiency and water quality. Whilst cost for effluent re-use was not cited as the key reason for limited appeal for effluent re-use, it was noted that it was one of the higher costs presented across all the options.

Disruption: participants felt that the options involving pipework and new facilities would have the greatest disruption. 130 km was considered to be a long distance for new pipework. Whilst they understood that steps would be taken to minimise disruption, they still felt that when compared to other options, the pipework required made this option one of the more disruptive options.

"…the reuse…the distance on it for me would be off-putting." (Harrow, 18-34 years, C2DE)

Efficiency (energy and amount of water supplied): participants noted that effluent re-use was ranked fourth (out of six) in terms of how energy efficient the supply options are. The fact that it would not supply any more water than other options that were more energy efficient was considered when evaluating this option. There were also more broadly, concerns that options that used long pipework would be susceptible to leaks, making them less efficient in the long-run.

"Why are we going for this one, it isn't very energy efficient and takes 12 years?" (Harrow, 35-54 years, ABC1)

Environmental impact: participants noted that a negative environmental impact would be the new pipework required which they anticipated would disrupt the countryside. A few noted that from a positive environmental impact perspective, this option was recycling existing water supply rather than seeking new supply.

Lead times: there was wide-spread scepticism across participants that the lead times presented would be realistic, with many citing that large infrastructure projects typically took longer than

anticipated. Long pipework was considered to be particularly prone to delays (and resultantly increasing costs) in this regard and participants were cynical that 12 years was realistic or achievable. Additionally, participants felt that given the long pipework, planning regulations could delay the project further.

"It says 12 years, it could be 25." (Harrow, 35-54 years, ABC1)

"The impact of planning permission could bring this to a complete holt." (Dover, 35-54 years, C2DE)

Proximity and local benefit: the fact that wastewater would be transferred from near Birmingham was a point of much discussion across the groups. Participants were unsure why wastewater could not be treated locally, to avoid the pipework required.

"Why spend so much money on running pipes so far away? If you are going so far why not go the Scotland where there is loads of water?" (Dover, 35-54 years, C2DE)

Water source: strongest resistance to effluent re-use came from participants who queried the source of the water and therefore the quality of the water that would be provided. Whilst they understood that this would meet Drinking Water Inspectorate (DWI) standards, they were unable to overcome their dislike of the concept of effluent re-use. Some queried whether there would be health risks or distrusted companies assurance of water quality. Other participants were happy to accept that the water would meet DWI standards often noting that other countries used these types of systems and current drinking water is also treated to meet DWI standards.

"Bit gross." (Harrow, 18-34 years, C2DE)

"There are no long-term effects and if it meets the drinking water standard that is fine…it is exactly what we are drinking now." (Harrow, 18-34 years, C2DE)

"I don't have a problem at all as long as it's treated to a particular standard." (Manningtree, 55+ years, ABC1)

South Lincolnshire Reservoir

Views towards reservoirs were positive. Reaction to this option often focused on the positive environmental impact of reservoirs and the 'natural' feel of using reservoirs.

Cost: compared to the other options, the South Lincolnshire Reservoir option was noted as one of the lower cost options, delivering 100 million litres of water per day. Whilst not cited as the key reason for like of this option, the cost was a clear driving factor.

"It's only 20p a month." (Harrow, 18-34 years, C2DE)

Disruption: whilst few participants queried the disruption in building a reservoir (especially as the new reservoir was to be sited on agricultural land), there were some concerns regarding the pipework required. As with all other options with substantial pipework, participants felt that this made this option more disruption than others looked at. However, views towards this disruption were outweighed by positive attributes of this option.

"It's on farmland it's not going to upset too many people like some of the others." (Manningtree, 55+ years, ABC1)

"It is not going to impact housing." (Harrow, 35-54 years, ABC1)

"It is using an existing reservoir and only building on agricultural land." (Harrow, 35-54 years, ABC1)

Environmental impact: reservoirs in general were considered to be one of the more environmentally positive supply options presented. Some participants had personally visited reservoirs for recreational activities (sailing, diving, bird watching) and were keen to note that reservoirs provided environmentally positive spaces for people to enjoy. This positive environmental outcome of reservoirs was a key factor considered in participants' evaluation of the options.

"What would you rather have, a housing estate or a reservoir?" (Manningtree, 55+ years, ABC1)

Efficiency (energy and amount of water supplied): participants noted that the water provided for this option was the same as for most of the others and was energy efficient (ranking second out of six) which was considered when evaluating this option and comparing it to the other options.

Lead times: again, there was some scepticism that a large infrastructure project could be completed within the timescales detailed. As with other options, participants expressed some concern that long pipework could be particularly prone to delays and additional costs. A couple of participants queried whether a reservoir in South Lincolnshire would still be a viable/ good option in 15 years' time, wondering whether changing climate patterns would mean that there would not be as much water sourced via this option as anticipated.

"What is to say in 15 years the investment doesn't generate the water required, it's a long time to know what the weather is doing." (Dover, 35-54 years, C2DE)

"It going to take a long time to get up and running…this is an issue now." (Harrow, 18-34 years, C2DE)

Proximity and local benefit: because one of the key benefits of reservoirs, was the development of a positive environmental site (recreational, wildlife), participants tended to consider the location of the reservoir when evaluating the option. Participants in Manningtree (East) felt closer to the Grafham Reservoir compared to the South East Strategic Reservoir and therefore felt that this option felt a little more relevant to them/ their area.

"It is the closest." (Manningtree, 55+ years, ABC1)

"I had it as number one because it is the closest…I think a lot of the cost is pumping the water." (Manningtree, 55+ years, ABC1)

Water source: overall, participants felt that reservoirs were a 'natural' way to source and store water and were positive towards this.

South East Strategic Reservoir

Views towards reservoirs were positive. Reaction to this option often focused on the positive environmental impact of reservoirs and the 'natural' feel of using reservoirs.

Cost: compared to the other options, the South East Strategic Reservoir option was noted as the lowest cost option, delivering 100 million litres of way per day. Whilst not cited as the key reason for like of this option, the cost was a clear driving factor.

Disruption: the fact that this option required less pipework than other options evaluated suggested to participants that it would be a less disruptive option. Whilst they understood that the site of the reservoir could impact some houses, this tended to be outweighed by the fact that the reservoir would provide positive environmental site for wildlife and recreational activities. The use of the River Thames to transfer water was also seen as a positive (compared to the other options which involved pipework to transfer water).

"…does impact houses but then you get a reservoir to use…." (Harrow, 35-54 years, ABC1)

Environmental impact: as discussed above, reservoirs in general, were considered to be one of the more environmentally positive supply options presented. Some participants had personally visited reservoirs for recreational activities (sailing, diving, bird watching) and were keen to note

that reservoirs provided environmentally positive spaces for people to enjoy. This positive environmental outcome of reservoirs was a key factor considered in participants' evaluation of the options.

"I like the idea it has multiple uses, it's a recreational site and it has habitats for wildlife." (Manningtree, 55+ years, ABC1)

"They are creating recreation sites…it's a positive impact on people's lives and the cost is quite low." (Harrow, 35-54 years, ABC1)

Efficiency (energy and amount of water supplied): participants noted that the water provided for this option was the same as other options, but that it was the most energy efficient option (ranking first out of six). This was a factor considered when evaluating this option and comparing it to the other options. Participants found the size of the reservoir impressive. Whilst a couple queried whether there could be any problems in filling it, overall participants found it reassuring that such a large amount of water could be stored.

"Most efficient and that is what it is all about, 100 million litres of water…." (Harrow, 35-54 years, ABC1)

Lead times: participants were less likely to mention lead times as a concern for this option. Reaction to the other options explored in the research suggests that this may be because less pipework is required for this option, meaning that participants are less likely to express cynicism towards completion of works. Additionally, a couple of participants felt that the local area would be keen on having a reservoir nearby, so may be less likely to object to it than some of the other options explored. A couple of participants also reflected that because some of the work required was an expansion to an existing water treatment works, the project would be less likely to come across planning application delays, when compared to options that required brand new facilities.

"Less risk and objection if it already exists." (Dover, 35-54 years, C2DE)

Proximity and local benefit: proximity and local benefit of the reservoir was a key factor in participants' evaluation of this option. Whilst participants in Manningtree (East) group had been positive towards the South Lincolnshire Reservoir option as they felt it was relatively close to their area, some participants in this group felt that the South East Strategic Reservoir was further away, and therefore felt less relevant. In contrast, participants in Dover (South East) and Harrow (Central) felt that the South East Strategic Reservoir was relevant to them because compared to other options it was sited relatively nearby. Participants liked the idea that people in the Affinity Water area (and the South East region in general) would benefit from the recreational/ wildlife site that the reservoir would provide. A couple of participants also liked the idea that it would generate jobs in the South East region. With proximity in mind, a few participants queried

whether Affinity Water customers would receive any benefits if they wanted to visit the reservoir for recreational activities suggesting free admission or car parking.

"…potential of bringing work into our local area." (Harrow, 18-34 years, C2DE)

Water source: overall, participants felt that reservoirs were a 'natural' way to source and store water and were positive towards this. In Dover (South East) and Harrow (Central) there was also positive feedback around using the River Thames again suggesting that proximity of the option, and first-hand knowledge/ experience of the water source drives appeal.

"More viable as more local." (Dover, 35-54 years, C2DE)

"Permanent supply from the Thames." (Dover, 35-54 years, C2DE)

Transfer from River Severn to River Thames

Views towards transfer from the River Severn to the River Thames were fairly negative with most citing concerns regarding the negative environmental impacts, and the building work required for new pipework.

Cost: whilst cost for this option was not cited as the key reason for limited appeal, it was noted that it was one of the higher costs presented across all the options. When combined with negative environmental impacts and the building work required, participants reacted negatively to this option.

Disruption: given that this option required long pipework, it was often considered to be one of the most disruptive.

"It is one hell of an engineering project." (Manningtree, 55+ years, ABC1)

Environmental impact: the potential negative environmental impacts related to this option (riverbed scouring and impact on eco-systems) were key concerns for participants, especially when considered in combination with the cost, efficiency and pipework required (compared with the other options). Participants also noted that a negative environmental impact would be the new pipework required which they anticipated would disrupt countryside.

"Disruption to the actual rivers themselves is enough to put you off." (Dover, 35-54 years, C2DE)

"Not feeling that….it is disrupting nature." (Harrow, 18-34 years, C2DE)

Efficiency (energy and amount of water supplied): the fact that this option would not supply any more water than other options and was ranked fifth out of six in terms of energy efficiency

was considered a compounding factor when evaluating this option. There were also more broadly, concerns that options that used long pipework would be susceptible to leaks, making them less efficient in the long-run.

"It is second from the bottom for energy efficiency." (Harrow, 35-54 years, ABC1)

Lead times: as with all options, participants were sceptical that lead times for building that required pipework were achievable. Given that this option involved long pipework (when compared to other options), this was often a sticking point for participants. Participants also reflected that the lead time was not dissimilar to other options (15 years) that they felt were less harmful (e.g. fewer negative environmental impacts, lower cost, more energy efficient).

"It doesn't make sense, it is going to take 15 years and then add on costs as well, why pay more for less?" (Harrow, 35-54 years, ABC1)

Proximity and local benefit: participants queried why water was being brought to the South East region from another area of the country. Given the negative environmental impact, and disruption of pipework, that this option would require, they struggled to justify the idea of bringing in water from another area of the country.

Water source: not all participants immediately related this option with a way of transferring water from an area of the country that receives more rainfall than the South East. Some participants thought that water sources were an issue across the country, so were often initially confused about why water would be transferred between the River Severn and River Thames. Overall, the negative environmental impacts and pipework required outweighed the benefit of bringing water to the South East region from an area of the country that receives more rainfall.

Transfer by Grand Union Canal

Views towards transfer by canal were positive often focusing on the fact that the canal already exists and the environmental benefits of improving the canal itself, and surrounding area. Also, some participants noted the positives of recycling water through effluent re-use.

Cost: compared to the other options, transfer by Grand Union Canal was recognised as being the third lowest cost for delivering 100 million litres of way per day. Whilst this was considered alongside other factors, it was not cited as the key driving factor for the appeal of this option.

Disruption: participants noted that this option required very little pipework and used an existing canal, therefore it was considered one of the least disruptive options.

"Sounds like the least disruptive of them all, same pipework." (Harrow, 18-34 years, C2DE)

"Using the resources that are already there, building would be minimal." (Dover, 35-54 years, C2DE)

Environmental impact: participants felt that the potential to improve the canal and surrounding area (e.g. footpaths) would have a positive environmental impact for both wildlife and people. Some wondered whether testing the water and making improvements could improve the habitat for wildlife, and others (often older participants) expressed a nostalgia for enjoying the canal for leisure activities. Given that the canal already exists, they struggled to identify negative environmental impacts.

"All those canals were built, it's a good idea to use them." (Manningtree, 55+ years, ABC1)

Efficiency (energy and amount of water supplied): some participants were surprised that this option ranked third out of six for energy efficiency assuming that this was related to the treatment of the water. A couple of participants wondered whether water would need to be pumped at any point of the canal or whether the natural gradient meant that this was not required. The fact that this option ranked third was considered alongside the other factors but not raised as a concern. A couple of participants noted that as this option used effluent re-use there was a double benefit: using an existing canal and recycling water.

"When I realised it used effluent re-use as well it is my top one." (Harrow, 18-34 years, C2DE)

Lead times: participants were often surprised at the lead time – especially the planning time – required for this option. They had assumed that because the canal was already there, it would be quicker than other options to put in place. Once explained that timescales reflected water quality investigations and modifying the canal they understood why planning time was required. However, there was a hope amongst some that because canal transfer was used elsewhere in the UK, learnings could be made to expedite this option if put in place.

"Got an existing canal so three quarters of the work is done." (Harrow, 35-54 years, ABC1)

"It has already been done so 5 years may be the worse it can be (pre-design)*." (Harrow, 18-34 years, C2DE)*

"It could be up and running in 9 years." (Manningtree, 55+ years, ABC1)

Proximity and local benefit: a couple of participants noted that using the Grand Union Canal to transfer water could have a positive impact for people living near the canal, but overall, the location of the canal did not emerge as a key point – perhaps because the canal itself already exists.

Water source: when thinking about water, participants tended to focus positively on the fact that the water would be transferred via an existing watercourse that was originally designed for transfer of items. Comments regarding the initial source of the water (Minworth Waste Water Treatment Works) did not emerge.

Desalination

Views towards desalination were mixed. Whilst participants felt that in the short term, this option was not efficient enough, they did feel that with research, development and advances in technology, this could be a viable option for the future with some sense of this option having a 'futuristic' appeal as a potential technological fix.

Cost: participants noted that this was the costlier option (some spontaneously mentioned high cost), and when coupled with fact that desalination would provide less water and was the least energy efficient, there was very limited appeal for this option in the short term.

"Desalination costs the most and doesn't even apply to us." (Harrow, 18-34 years, C2DE)

"It is very expensive." (Manningtree, 55+ years, ABC1)

Disruption: participants recognised that this option required the building of a new plant, and therefore anticipated that it would be disruptive, but overall, this was not considered to be as disruptive as building a long pipe (as seen in other options evaluated)

Environmental impact: whilst participants expressed limited concern regarding the siting of a desalination plant, there were queries around the impact of putting extracted salt back into the sea. There was appetite to know what environmental impact this would have. Some participants also expressed concern over any related carbon emissions.

"The waste, what is it going to do…will it be monitored?" (Dover, 35-54 years, C2DE)

"We have no idea what the impact will be on us and the environment." (Harrow, 18-34 years, C2DE)

"If it's continuously on then there will be noise and carbon emissions." (Harrow, 35-54 years, ABC1)

"What is the waste that it pushes out to sea?" (Manningtree, 55+ years, ABC1)

Efficiency (energy and amount of water supplied): energy efficiency and water provision of desalination was a key discussion point for this option. Some participants were aware at a spontaneous level that desalination used a lot of energy having come across this type of

information in the media. They noted that this option was the least energy efficient, provided the least amount of water per day across all the options and could not be switched off. This led to queries around whether in the future desalination could be made more energy efficient, perhaps with the use of hydro energy. Overall, energy efficiency was a key factor in participants concluding that desalination was not an option considered right for putting in place now, but something that should be researched as a potential solution when made more energy efficient.

"Not enough water, it isn't solving the problem." (Harrow, 35-54 years, ABC1)

"Doesn't produce enough water for the cost." (Dover, 35-54 years, C2DE)

"15 million (litres of water) *is nothing if people use 100 a day..." (Harrow, 35-54 years, ABC1)*

Lead times: whilst participants reflected that the lead time for this option was relatively short, overall, they felt that time should be put into research and development to make desalination more energy efficient.

Proximity and local benefit: participants in Manningtree (East) noted that this option would have greatest benefit to water provision in their local area. Across the groups, this group were slightly more positive to the idea of desalination suggesting that the perceived local benefit was a key driver of attitudes towards this option. Other groups were less positive, feeling they were paying for another area to benefit.

"It only does one part of the region." (Harrow, 18-34 years, C2DE)

Water source: the fact that desalination uses the sea, was a key positive point for this option across the groups. Participants frequently noted that the UK is an island, and therefore it makes sense to look at the sea as a source of water. This led some to wonder whether desalination could be put in place as a 'back-up' to provide an option that was not so heavily reliant on rainfall combined with shorter lead time. Some participants were also aware that desalination was used in other countries, so felt that it was an achievable option. However, the energy efficiency, cost and limited amount of water produced were key sticking points.

"It is not relying on rainfall it is taking water from the sea." (Harrow, 35-54 years, ABC1)

"They could roll it out while building the other options." (Harrow, 35-54 years, ABC1)

"The sea is a wonderful resource that we should be using but it has to work properly." (Manningtree, 55+ years, ABC1)

Ranking

The **most** popular options **in all four groups**, based on a range of factors were (in no particular order):

- Transfer by Grand Union Canal
- South East Strategic Reservoir
- South Lincolnshire Reservoir

The key rationale for the **appeal** of these options when compared to the others were:

Factor	Transfer by Grand Union Canal	South East Strategic Reservoir	South Lincolnshire Reservoir
Low cost and efficient	Lowest costed three options all providing 100 million litres of water per day and ranking first, second and third out of six in terms of energy efficiency of the options.		
Least disruption and least potential for extended lead times	Less pipework required compared to other options.		
	Canal already exists. *Potential to expedite by learning from other UK canal transfers.*	Use of River Thames to transfer water.	Grafham reservoir already exists. *50km pipework required, but positive attributes of this option outweigh this.*
Positive environmental impacts	Improvements to canal could improve wildlife habitats and recreational activities.	Reservoirs as sites for wildlife habitats and recreational activities. Making positive spaces for local people. Greater sense of local benefit amongst Harrow (Central) and Dover (South East) groups.	Reservoirs as sites for wildlife habitats and recreational activities. Making positive spaces for local people. Greater sense of local benefit amongst Manningtree (East) group.
Using water sources/ watercourses that feel more local/ natural	Canal already exists, feels like a more 'natural' way of transferring water when compared to pipes.	Reservoirs feel like a more 'natural' way to source/ store water. Use of the River Thames has local appeal for Harrow (Central) and Dover (South East) groups.	Reservoirs feel like a more 'natural' way to source/ store water.

The **least** popular options in **all four groups**, based on a range of factors were (in no particular order):

- Effluent re-use
- Transfer from River Severn to River Thames
- Desalination

The key rationale for the **limited appeal** of these options when compared to the others were:

Factor	**Effluent re-use**	**Transfer from River Severn to River Thames**	**Desalination**
Higher cost, less efficiency	Highest costed three options ranking fourth, fifth and sixth out of six in terms of energy efficiency of the options.		
	Provides 100 million litres of water a day but more negative attributes compared to other options that also provide 100 million litres of water per day. Long pipework could be susceptible to leaks in the future.		Provides 15 million litres of water a day and more negative attributes compared to other options that provide more.
Disruptive with potential for extended lead times	Long pipework required, anticipate that this is prone to delays which could extend lead times and costs.		*Short lead time outweighed by concerns regarding efficiency.* *Could time and investment be put in place to research/ develop more efficient desalination?*
Negative environmental impacts	Impact of new pipework being built. *Idea of recycling existing water outweighed by dislike for overall concept of recycling waste water.*	Potential riverbed scouring and impact on eco-systems feel like significant harms. Impact of new pipework being built.	Queries regarding the impact of putting salt back into the sea and carbon emissions.
Using water sources/ watercourses that feel less local/ natural	Waste water as the water source is key barrier for some (unable to overcome the concept of re-using waste water). Transferring water by pipe feels less natural	Transferring water by pipe feels less natural than a watercourse.	Greater appeal in Manningtree (East) *Using a natural resource (the sea) outweighed by concerns regarding efficiency, and queries around putting*

	than a watercourse. *Question why waste water cannot be recycled locally (to avoid pipework).*		*extracted salt back into the sea.*

Final comments

At the end of the focus groups, participants were asked to identify key points of interest they would like fed back to Affinity Water. Participants' final thoughts focused on Affinity Water working together with other water companies, making customers aware of how to reduce water usage in the home and wanting to see a sense of urgency given the long lead times of the options presented.

Working together: participants frequently noted a desire for water companies to work together to meet the water challenges. There was the feeling that water is very important and therefore managing water challenges should not only be one water companies responsibility.

"Sounds like they should be working with the government more if everyone else is running out of water…where is the funding?" (Harrow, 18-34 years, C2DE)

"The government needs to be involved, this is life or death." (Harrow, 18-34 years, C2DE)

Awareness: participants welcome more information on how to reduce water usage in-home. Particularly, participants mention education of children in schools and for Affinity Water to have a continuous programme of water education compared to the perceived sporadic handing out of water saving devices. There were comparisons to previous behaviour changes through education e.g. food waste recycling using a kitchen caddy.

"My children are terrible for leaving taps on." (Manningtree, 55+ years, ABC1)

"Raise awareness and share knowledge." (Dover, 35-54 years, C2DE)

"They should focus on handing out the water saving devices." (Harrow, 35-54 years, ABC1)

"I was in Australia and they were all aware of the shortage of water…I know that it is more extreme but it does meant that they use water much more efficiently in their houses than we do." (Manningtree, 55+ years, ABC1)

Urgency: given the perceived long lead times of the options presented, participants were keen for Affinity Water to start work as soon as possible. This is tied in with the visibility of leaks with some participants requesting Affinity Water to focus on updating pipework.

"Get a move on, make a decision." (Harrow, 35-54 years, ABC1)

"Update the old pipework." (Harrow, 35-54 years, ABC1)

For more information

3 Thomas More Square
London
E1W 1YW

t: +44 (0)20 3059 5000

www.ipsos-mori.com
http://twitter.com/IpsosMORI

Appendix RR.A4.3

Action ref AFW.RR.A4

SR Brett – 20 Ml per Day. A summary of the options considered and preferred option selected

Community (WRZ)	Reference	Scheme Name	Description	Main Driver	Delivery AMP	Total Scheme Cost (£m)	Delivery Programme	Dependencies	BENEFITS - Manage supply deficits	Advantages	Desavantages	Option Appraisal	BENEFITS -Operational resilience	BENEFITS -Operational resilience(Shock or Stress)	BENEFITS -Operational resilience Number of properties	BENEFITS -Opex Benefit	BENEFITS -Opex and Resilience Benefit Narrative	Assumptions	Environmental/Social	Folder evidence	Evidence Environmental/Social	Modelling done	Actions
Brett (8)	SR-B0	Do nothing	Accept the 20Ml/day reduction with no alternative supply	EA request outside the WINEP process for a change of up to 20 Ml/d reduction in abstraction in the Brett Community	AMP7	N/A	SR - Brett	Environment Agency requirement for reduction in abstraction	Reduction in Water Available for Use (WAFU) of 20Ml/day Supply Demand deficit - a deficit would put customers at risk and would not meet our primary objectives as a water company to protect customer supplies	No advantages	Will reduce regional resilience No acceptable, customers supply will be put at risk	Not acceptable Not able to meet supply Demand Balance	N/A	N/A	N/A	N/A	N/A	Our investigation and options appraisal conclude that our current abstraction licence need to be reduced by 20Ml/day	N/A	N/A	N/A	N/A	N/A
Brett (8)	SR-B1	Desalination (AfW only)	Build a 20Ml/day modular new treatment plant	EA request outside the WINEP process for a change of up to 20 Ml/d reduction in abstraction in the Brett Community	AMP7	110.2	SR - Brett	Identification and purchase of land Funding and supply chain to deliver new treatment plant on time	Maintain current level of WAFU Possibility to increase plant capacity due to modular approach	Can be started in AMP7 - Planning and construction Will reduce the risk of Interruption to supply due to water resource shortage Reduce reliance of Horley Cross and Arleigh Water Treatment Works Will Improve regional resilience Possibility to further increase capacity Possibility of regional collaboration in AMP8 if neighbouring Water company have a need	Environmental Impact of new plant OPEX of running the Plant	Preferred option (but uncertain over when in AMP8 the scheme would be ready)	Reduce reliance on Horsley Cross Reduce reliance on Ardleigh	Greater flexibility to respond to event such as: - Extended Summer Demand - Leakage outbreak - Drought - Asset failure - Support neighbouring Water companies	40,000	Greater Opex than current - £1.3M per annum	The running cost of the treatment plant will be greater Opex than treating 20Ml/day coming from the borehole sources	Construction time will be 24 to 36 months The modular construction will enable potententia growth in capacity for our own or our neighbours use	High environmental impact and carbon footprint: Intakes - Marine life Brine - Disposal Energy	https://affinitywaterltd.sharepoint.com/:f:/t/P_pr19/EhvGtqlAjzVGkKTtOF68RUYBHQT3L3ZFi70OeNvaVMiSTQ	https://affinitywaterltd.sharepoint.com/:f:/t/P_pr19/EvITrX3-nkVDuIz6ijtgT-UBEdPS84aX2Ek_J5VmflgVrA	https://affinitywaterltd.sharepoint.com/:f:/t/P_pr19/EpHir4gsrexJjeBwAOf88LwBA3IgM_zdUnCzM1LreZiciw	There is an uncertainty over when this scheme might be ready by and thus further work required to determine that better- Locate a site - Gather evidence of environmental impact of desalination plant - Demonstrate that Anglian Water could potentially joint the scheme in the future - Modelling to justify the need of the 20Ml/day WAFU
Brett (8)	SR-B2	Desalination (Joint proposal with Anglian Water)	Build a modular new treatment plant in partnership with Anglian Water	EA request outside the WINEP process for a change of up to 20 Ml/d reduction in abstraction in the Brett Community	AMP7	N/A	SR - Brett	Anglian Water (AW) Support, funding and supply chain to deliver new treatment plant on time	Maintain current level of WAFU Possibility to increase plant capacity due to modular approach	Will Improve regional resilience	Environmental Impact of new plant OPEX of running the Plant Time required to do a join proposal with Anglian Water and unclear when Anglian might need it Anglian Water Business Plan already submitted Public consultation required	Not possible in AMP7 and uncertainty over when in AMP8	Reduce reliance on Horsley Cross Reduce reliance on Ardleigh	Greater flexibility to respond to event such as: - Extended Summer Demand - Leakage outbreak - Drought - Asset failure - Support neighbouring Water companies	40,000	Greater Opex than current £1.3M per annum	The running cost of the treatment plant will be greater Opex than treating 20Ml/day coming from the borehole sources	N/A	High environmental impact and carbon footprint: Intakes - Marine life Brine - Disposal Energy	https://affinitywaterltd.sharepoint.com/:f:/t/P_pr19/EhvGtqlAjzVGkKTtOF68RUYBHQT3L3ZFi70OeNvaVMiSTQ	https://affinitywaterltd.sharepoint.com/:f:/t/P_pr19/EvITrX3-nkVDuIz6ijtgT-UBEdPS84aX2Ek_J5VmflgVrA	https://affinitywaterltd.sharepoint.com/:f:/t/P_pr19/EpHir4gsrexJjeBwAOf88LwBA3IgM_zdUnCzM1LreZiciw	- Locate a site - Gather evidence of environmental impact of desalination plant - Demonstrate that it is not possible to engage Anglian Water now to build the new plant in AMP7 - Modelling to justify the need of the 20Ml/day WAFU
Brett (8)	SR-B3	Joint transfer scheme with Anglian Water – direct	Build a transfer in partnership with Anglian Water	EA request outside the WINEP process for a change of up to 20 Ml/d reduction in abstraction in the Brett Community	AMP7	N/A	SR - Brett	Anglian Water (AW) Support, AW Water resource availability ,funding and supply chain to deliver work on time	N/A	Environmental - advantagous over desalination	Time required to do a join proposal with Anglian Water who are already planning to expand their network Anglian Water Business Plan already submitted Construction time 5-10 years Longer public consultation required as more parties involved	Not possible in AMP7 and uncertainty over when in AMP8 Not acceptable(reduction in regional resilience)	N/A	N/A	40,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Brett (8)	SR-B4	Joint transfer scheme with Anglian Water – indirect (Ardleigh)	Change the in the Ardleigh Water Works, trigger a further change in take from Ardleigh 70/30 or 100% (26Ml/d)	EA request outside the WINEP process for a change of up to 20 Ml/d reduction in abstraction in the Brett Community	AMP7	N/A	SR - Brett	Anglian Water (AW) Support, AW Water resource availability, funding and supply chain to deliver work on time	N/A	Environmental - advantagous over desalination	Time required to do a join proposal with Anglian Water who are already planning to expand their network Anglian Water Business Plan already submitted Construction time 5-10 years Longer public consultation required as more parties involved	Not possible in AMP7 and uncertainty over when in AMP8 Not acceptable(reduction in regional resilience)	N/A	N/A	40,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix RR.A4.4
Action ref AFW.RR.A4
Correspondence with the Environment Agency

OFFICIAL SENSITIVE

Paul Hickey
Deputy Director - Water Resources
Environment Agency
Sapphire East
550 Streetsbrook Road
Solihull
West Midlands
B91 1QT

25th June 2018

Dear Paul,

AMP7 Brett Sustainability Reduction

At our joint meeting with Defra, Ofwat, DWI and Environment Agency in London on 8th June 2018, you offered to follow up on our concerns regarding the potential AMP7 sustainability reduction in the River Brett catchment. I thought it would be helpful to outline our understanding of this potential reduction, as we are seeking urgent clarification of these expectations.

WINEP1, issued March 2017, included a red sustainability change with no associated volume for our Higham, Lattinford, Shelley, Stoke-by-Nayland and East Bergholt sources. This was then revised to an amber sustainability change in WINEP2 (September 2017) of 2.597Ml/d against the daily peak licence for Higham, Lattinford, Shelley and Stoke-by-Nayland. East Bergholt remained with a red level of certainty with a sustainability change volume of 2.466Ml/d provided. This information was used in preparing our draft Water Resources Management Plan published on 16th March 2018. WINEP3 (29th March 2018) included the same amber change as WINEP2. East Bergholt was removed as a sustainability change from WINEP3 and is now included for investigation and options appraisal only.

Summary Table of East Region Sustainability Changes

WINEP	Level of Certainty	Sources	Sustainability Change (daily licence)
WINEP1 (31/03/2017)	Red	Higham, Lattinford, Shelley, Stoke-by-Nayland and East Bergholt	No value provided
WINEP2 (29/09/2017)	Amber	Higham, Lattinford, Shelley, Stoke-by-Nayland	2.597 Ml/d

	Red	East Bergholt	2.466 Ml/d
WINEP3 (29/03/2018)	Amber	Higham, Lattinford, Shelley, Stoke-by-Nayland	2.597 Ml/d

Affinity Water Limited | Registered Office: Tamblin Way, Hatfield, Hertfordshire, AL10 9EZ | www.affinitywater.co.uk | tel 01707 268111 | fax 01707 277333

Registered in England No. 2546950

OFFICIAL SENSITIVE

The River Brett has also been included on WINEP3 for investigation and options appraisal with a completion date of 31st March 2021 and for implementation of adaptive management scheme. This has been given an amber level of certainty.

We understand that the EA will be looking to implement AMP7 sustainability reductions through licence changes in 2021, with an effective date of 2024.

Draft Water Resources Management Plan

Our East Region (water resource zone 8) does not currently have a supply-demand deficit, having a small surplus.

Summary of Draft Water Resources Management Plan Surplus (WRZ8)

Year	DYAA (Ml/d)	DYCP (Ml/d)
2020/21	5.84	6.66
2024/25	5.62	6.39

Our draft Water Resources Management Plan (dWRMP) and associated technical report (1.4 Sustainability Reductions) included our approach to accommodating a sustainability reduction in WRZ8. This was based on the WINEP2 volume of 5.07Ml/d; utilising our surplus and reverting to a 50:50 share of Ardleigh Reservoir with Anglian Water from 2030. This agreement requires five years written notice to be given to allow Anglian Water time to adapt to the change in volumes.

Ardleigh Deployable Output based on different share with Anglian Water

Ardleigh	DYAA (Ml/d)	DYCP (Ml/d)
70:30	7.84	10.94
50:50	13.06	18.24

It should be noted that there are potential Larson-Skold corrosivity issues within our network of utilising greater volumes of Ardleigh derived water in WRZ8. Investment would be required to address this issue. Metaldehyde is also a key consideration in relation to transfer options. We are writing to Defra on this matter, as it would be very helpful to learn if targeted bans on the sale and/or use of metaldehyde are to go ahead before business plans are submitted.

Investigation and Options Appraisal

We recognise that the North Essex Chalk WFD groundwater body failed the 2015 cycle 2 assessment for Groundwater Balance Tests and that the surface waterbody does not support good status for hydrology. An investigation was completed in AMP3 with Anglian Water and Essex and Suffolk Water and we have been in discussions with them regarding AMP7 works.

We are including funding in our PR19 submission for an investigation and options appraisal in AMP7, to revisit the conclusions of the AMP3 study and assess any new evidence relating to the impact of our abstraction. We consider that it is important to fully understand the impact of our abstraction to inform any decision making around the location and volume of any future reductions. The current deadline for the investigation and options appraisal of 2021 is likely to limit the level of detail that this project can achieve and may impact quality of the conclusions. We consider a longer period for completion of this work is needed to develop options that will deliver the most benefit for the River Brett. We believe that if any significant

reduction in abstraction is confirmed by this work as being required, then this would best be addressed through the regional Water Resources East project.

We note that the Environment Agency's response to our dWRMP does not include any comments or recommendations with regard to our approach to the River Brett sustainability reductions.

Revised Water Resources Management Plan and PR19 Submission

In preparing for our revised WRMP and costs for our business plan submission, we queried with the Ipswich office whether the 2.597Ml/d sustainability reduction on WINEP3 included the utilisation of river support from our Shelley source, as per the existing licence provision. Following this query, we were notified of an error on WINEP3 relating to the volume of sustainability change included for our sources. We have been advised (email dated 25th May 2018) that based on modelled scenarios utilising the Essex Groundwater Model, a reduction of between 15.09Ml/d and 20Ml/d may be required to address the flow deficit in this catchment. This is a significant reduction given our deployable output for WRZ8 is 38Ml/d (DYAA) and 52.75Ml/d (DYCP) and would result in us immediately going into a supply-demand deficit in 2024.

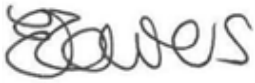
In view of the short notice we have had to consider the potential supply/demand deficit in our East Region we are currently proposing to include the costs in our draft Business Plan for a desalination plant, to be implemented in the event the sustainability reduction is confirmed. We also anticipate the need for an earlier cessation of our agreement with Anglian Water to revert to a 50:50 share of Ardleigh from 2025. At the joint meeting with Defra, EA, Thames and Anglian Water on 19th June 2018, Anglian Water indicated any transfer to the Brett or earlier cessation of the current Ardleigh agreement would also

trigger a desalination plant for them. As this constitutes a material change in our WRMP we propose to further consult.

We would be grateful for your assistance in securing an urgent resolution to this issue, as it will have a material impact on our business plan and customer bills. To be clear we are seeking confirmation that the EA will not seek sustainability reductions other than those that were included in WINEP3 (2.6Ml/d) and an extension of the date for completion of the investigation and options appraisal for the River Brett to 2024.

I look forward to hearing from you regarding clarification of this sustainability change and investigation/options appraisal date.

Yours sincerely,



Ellie Powers
Senior Asset Manager – Water Resources

cc. David Howarth, Tom Nichols, Rudi Liu, Anna Mason (Environment Agency)

Ellie Powers
Senior Asset Manager - Water Resources
Affinity Water
Tamblin Way
Hatfield
Herts
AL10 9EZ

5th July 2018

Dear Ellie

AMP7 Brett Sustainability Reduction

Thank you very much for your letter of 25th June 2018. It was helpful to have the information collated.

You were seeking confirmation that the sustainability change for the River Brett will remain the same as included in WINEP3, and requesting an extension to the timescale for the investigation and options appraisal until 2024. After reviewing all available information, it is our view that the sustainability change requirements should remain the same as was included in WINEP3 (2.6 Ml/d), and that the investigation and options appraisal completion date should also remain the same as in WINEP3 (31st March 2021). I can confirm that requirements for the other water companies involved will also remain the same as in WINEP3.

As you are aware, the River Brett water body meets criteria for the impact of abstraction to be considered as causing serious damage, so actions need to be identified and implemented as soon as possible. Therefore, it is necessary to keep the current completion deadline of 31st March 2021.

I acknowledge that the timescale is limited. It is important for all the water companies involved to work together, and with the Environment Agency, to agree the best course of action required to achieve our common objectives for this catchment. This could be coordinated through the Water Resources East group, so long as the scale of discussion reflects the timescale set out in WINEP3.

Should the agreed outcomes of the investigation and options appraisal vary from the requirements in WINEP3, we can discuss whether they can be incorporated within AMP7 or whether they need to be planned for AMP8 with an early start on implementation.
I trust that this clarifies the EA's requirements for the Brett catchment, that sustainability change volume remains the same as in WINEP3, and that the completion date for the investigation and options appraisal remains 31st March 2021.

Please keep my colleagues informed of any emerging issues from your discussions with other water companies, and with Defra.

Yours sincerely

Paul Hickey CEnv FIWater Deputy
Director Water Resources
The Environment Agency, Horizon House, Deanery Road, Bristol, BS1 5AH

OFFICIAL SENSITIVE

Paul Hickey
Deputy Director - Water Resources
Environment Agency
Sapphire East
550 Streetsbrook Road
Solihull
West Midlands B91 1QT

9th July 2018

Dear Paul,

AMP7 Brett Sustainability Reduction

Thank you for your letter dated 5th July confirming that the sustainability change volume for the Brett catchment will remain as WINEP3 (2.6Ml/d with an amber level of certainty) and that the completion date for the investigation and options appraisal will remain as 31st March 2021.

We remain unclear as to the position should the investigation and options appraisal conclude that greater sustainability reduction is required as referenced in the Environment Agency's e-mail dated 25 May 2018. Your letter states that action may be required in AMP7 even though the Agency does not intend to include the greater level of reduction in WINEP. The Agency's position appears to be a departure from the regulatory approach that WINEP is intended to support through the identification of amber and green measures to be included in companies' business plans[1].

As we have previously indicated, the delivery of a sustainability reduction of this level (between 15.09 Ml/d and 20 Ml/d) would have significant cost implications for our business and ultimately for our customers. We are therefore seeking confirmation from the Agency that delivery of any sustainability reduction greater than 2.6 Ml/d would only be considered for inclusion in our next water resources management plan, for delivery in AMP8.

If this cannot be immediately confirmed, we request, as a matter of urgency, a meeting with the EA, Defra and Ofwat to clarify the process, in order that we can finalise our customer consultation and business plan.

Yours sincerely,

Mike Pocock
Director of Asset Strategy

cc. David Howarth, Tom Nichols, Rudi Liu, Anna Mason (Environment Agency) Sebastian Catovsky (Defra), Colin Green (Ofwat)

[1] Section 9.4.3 of *Ofwat's Final Methodology for the 2019 Price Review* and the Environment Agency's letter regarding WINEP dated 29 March 2018.

creating a better place
for people and wildlife

Environment Agency

Mike Pocock
Director of Asset Strategy
Affinity Water
Tamblin Way
Hatfield
Herts
AL10 9EZ

Date: 19th July 2018

Dear Mike

AMP7 Brett Sustainability Reduction

Thank you for your letter of 9th July 2018. I've set out below the positions that could arise depending on the outcomes of the investigations and options appraisal for achieving sustainable abstraction for the River Brett.

Firstly, I would like to stress that the immediate priority is the progression of the investigation and options appraisal with the other two water companies so there is an agreed catchment approach to the sustainability changes required and any other improvement/mitigation actions required.

Depending on the outcome of the investigation and options appraisal, there are three sustainability change positions. I've set them out below and how we expect them to be progressed.

1. Sustainability change value remains 2.6Ml/d. The action to achieve this will then be implemented in AMP7 as it is planned for in your WRMP.

2. Sustainability change value of greater than 2.6Ml/d but within the supply-demand surplus of the water resources zone. If the option to meet this level of sustainability change is technical feasibility and the knock on implications on deployable output can be managed then we would expect the sustainability change to be delivered in AMP7. The cost of doing so would be accommodated through the cost adjustment mechanism that Ofwat have requested each water company propose to handle uncertainty in PR19.

3. Sustainability change is greater than the supply-demand surplus of the water resources zone. The implications of this will obviously depend on how big the sustainability change is but it will be a material change to the WRMP. The options appraisal will have identified what is technically feasible and cost beneficial to deliver between the three water companies. All water companies need to take into account the objectives of the RBMP, which for the River

Brett is for flow to be supporting GES by 2021 so improvement actions need to be implemented as soon as possible. If the implementation of the whole sustainability change needs a longer timescale then an interim sustainability change and/or mitigation measures will be needed to demonstrate a 'pathway to good'.

The water body objectives will be reviewed for the next RBMP in 2021 so there is a possibility of extending the objective date to 2027 but to do this it needs to be demonstrated that everything possible has been done to achieve the original objective date of 2021. Therefore at this stage, we cannot guarantee a delay until AMP8 but if the agreed timescales for achieving a cost beneficial, technical feasible solution to unsustainable abstraction cause a delay into AMP8 that may not be unreasonable. Early start/transitional funding may also be available in PR24 to meet tighter timescales.

In summary, your customer consultation and business plan need to include the sustainability change and investigation/options appraisal requirements confirmed in my previous letter of 5th July but with the acknowledgement that there is some uncertainty on the sustainability change value which will be accommodated by a cost adjustment mechanism in AMP7 or by the agreement of an extended completion date for the delivery of the sustainability change and extension of the WFD objective.

My colleagues look forward to working with you on this catchment based approach to achieving sustainability in the River Brett, including working with the other two water companies involved, which I are understand are amenable to this way forward.

Yours Sincerely,

Paul Hickey CEnv FIWater
Deputy Director - Water Resources
Environment Agency

Paul Hickey
Deputy Director - Water Resources
Environment Agency
Horizon House
Deanery Road
Bristol BS1 5AH

9 August 2018

Dear Paul,

AMP7 Brett Sustainability Reductions

Thank you for your letter dated 19 July 2018 following our conference call with Nicola Poole on 12 July 2018 where we agreed it would be helpful to set out a clear position from which to go forward in AMP7.

We agree that the immediate priority must be to progress the investigation and options appraisal and we have already initiated this. We have contacted Anglian Water and Essex and Suffolk Water regarding this and we will explore a funding mechanism for the project as costs were not included in AMP6. The project will begin with a review of all previous studies and modelling. We are also undertaking some monitoring on the Brett associated with the current requirement to provide river support from our Shelley source. This information will be shared with the EA and the other companies in due course.

Your letter lists three sustainability change positions depending on the outcome of the investigation and options appraisal. We comment on these below and have added a fourth change position, being that if the appraisal concludes that there is no need for a sustainability reduction.

1. Sustainability change value remains 2.6 Ml/d. We confirm that our Business Plan provides for delivery of this during AMP7.

2. Sustainability change value of greater than 2.6 Ml/d but within the supply-demand surplus of the water resources zone. The supply-demand surplus is currently 5.84 Ml/d. We are required to make a compensation flow discharge of 2.16Ml/d at Shelley. We therefore believe that the maximum additional sustainability change value that could be achieved under this change position is 1.1 Ml/d. This is not included in WINEP3, which we believe places it outside of the cost adjustment requested by Ofwat. We will, however, include it in our Business Plan and will propose a bespoke cost adjustment mechanism for it.

3. Sustainability change is greater than the supply-demand surplus of the water resources zone. This would cause a supply deficit in a zone where consumption and leakage are already low. This would therefore represent a material change in our WRMP

and will require consultation with stakeholders. If this is the conclusion of the investigation we will seek to agree technically feasible options and timescale for delivery as part of the options appraisal. As you are aware we have already been exploring options to secure additional water from our neighbouring water companies. Anglian Water has informed us that they would be unable to provide an additional transfer. We are still discussing with Essex & Suffolk Water a potential raw water transfer of up to 5Ml/d. As this would still not address the potential full deficit indicated from the groundwater modelling and in the Agency's email of 25th May, there may still be a significant supply deficit requiring a desalination plant or similar located in the estuary. It would not be technically feasible to deliver such a solution within AMP7 but we note the comment in your letter that work would need to start during AMP7.

4. No change in deployable output although mitigation measures may be required. We have included costs for river restoration and habitat enhancement on the Brett based on the WINEP3 *amber* level of certainty and a cost adjustment mechanism should no sustainability reduction be required.

As we discussed during our call with Nicola the Environment Agency's decision not to make changes to WINEP3 to reflect all the potential sustainability change positions creates some risk and uncertainty for us and our customers. Ofwat's Final Methodology for PR19 is predicated on water companies including investment in their plans to deliver green and amber measures included in WINEP3 and requests an uncertainty mechanism is included for amber measures. Ofwat's Final Methodology does not envisage companies having to meet environmental requirements during AMP7 that are not identified on WINEP3.

As we have noted above, in relation to the second sustainability change position, which involves a relatively modest additional sustainability reduction, we will seek to include the costs of delivery in our Business Plan and will propose a bespoke uncertainty mechanism for these costs.

We have reached the conclusion, however, that we cannot include in our Business Plan the costs for delivery of a solution in relation to the third sustainability change position. These costs would be very significant and as such would impact significantly on our customers' bills. In the absence of any sustainability reduction being identified as required in WINEP3 we have not been able to carry out any customer consultation to verify support for bill changes to reflect this requirement and do not believe that Ofwat will allow us to include these costs. We will be explaining this position in our Business Plan submission.

I hope the above is helpful in explaining our approach to our Business Plan. I should be grateful if you would confirm you agree with our understanding of the possible sustainability change positions before we submit our plan to Ofwat.

We look forward to working with you and your colleagues on this project during AMP7.

Yours sincerely

Mike Pocock
Asset Strategy Director
Affinity Water Limited | Registered Office: Tamblin Way, Hatfield, Hertfordshire, AL10 9EZ | www.affinitywater.co.uk | tel 01707 268111 | fax 01707 277333

Registered in England No. 2546950

creating a better place
for people and wildlife

Environment Agency

Mike Pocock
Director of Asset Strategy
Affinity Water
Tamblin Way
Hatfield
Herts
AL10 9EZ

Our ref:
Your ref:
Date: 16th August 2018

Dear Mike

AMP7 Brett Sustainability Reduction

Thank you for your letter of 9th August 2018. I acknowledge your comments on the sustainability change positions and your addition of a fourth position in relation to mitigation measures.

I can confirm that we understand your position of not including costs for a greater sustainability change in your business plan and agree that this should be explained in your submission.

I'm very pleased to see priority given to the investigation work together with the other water companies.

I wish you all the best for your upcoming retirement.

Yours Sincerely,

R. Aust

Richard Austen
Acting Deputy Director - Water Resources
Environment Agency

Appendix RR.A6.1
Action ref AFW.RR.A6
Moody's Financial Ratio Guidance

APPENDIX RR.A6.1

Moody's Financial Ratio Guidance

March 2019

Moody's Rating Factors

The Baa range represents investment grade rating and is the targeted range we have used for assessing financeability of the notional company structure

The Ba range is targeted for assessing the financeability of the actual company structure as the actual structure receives a notch up in rating group due to structural benefits provided by securitisation

Rating Factor	Weight	Aaa	Aa	A	Baa	Ba	B	Caa
Adjusted Interest Coverage Ratio (1)	12.5%	≥8x	4.5-8x	2.5-4.5x	1.5-2.5x	1.2-1.5x	1-1.2x	<1x
OR		OR	OR	OR	OR	OR	OR	OR
FFO Interest Coverage (2)		≥10x	7-10x	4.5-7x	2.5-4.5x	1.8-2.5x	1.5-1.8x	<1.5x
Net Debt / Regulated Asset Base (3)	10%	<25%	25-40%	40-55%	55-70%	70-85%	85-100%	≥100%
OR								
Debt / Capitalisation								
FFO / Net Debt	12.5%	≥40%	25-40%	15-25%	10-15%	6-10%	4-6%	<4%
RCF / Net Debt	5%	≥30%	20-30%	10-20%	6-10%	4-6%	2-4%	<2%

Notes:

(1) The Adjusted Interest Coverage Ratio is our preferred metric for water utilities where allowed revenues/tariffs are determined using a 'building block' or equivalent approach and where the components of allowed revenues/tariffs are consistently available and can be verified by from an independent source – in many cases, publications from the regulatory authority itself. For the numerator, Interest net of Inflation Accretion is added back to the extent it was deducted in calculating FFO. Capital Charges represent expenditures recovered in revenues that are not accounted for as operating expenses and are not treated as additional invested capital incrementing the RAB, including regulatory revenue profiling to smooth the impact of tariff increases on customer bills.

(2) In jurisdictions where regulatory revenues/tariffs are not determined with a 'building block approach' or where the regulatory information needed to calculate Capital Charges may not be consistently available, we use the FFO Interest Coverage, calculated (or for forward periods estimated) as (FFO + Interest Expense) / Interest Expense.

(3) For the utilities regulated under a RAB-based model where the RAB accurately represents the invested capital on which the water utility will earn a return over time, we measure leverage as Net Debt to RAB. For water utilities that (1) are regulated under tariff models without a RAB; (2) are regulated under a RAB-based model but where the RAB may not accurately represent the invested capital on which the water utility will earn a return over time (e.g. because of ex-post rate-setting); or (3) where RAB may not be consistently available, we use Debt to Capitalisation.

Appendix RR.A7.1
Action ref AFW.RR.A7

PR19 Actual Structure Financial Stress Tests

APPENDIX RR.A7.1

Tables showing the financial ratios and stress tests for capital structures at 80%, 75%, 70% geared and expected de-gearing

March 2019

Table 1

Actual Structure 80% Geared

				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
Covenants	***Trigger***	***Default***	***Measure***									
Class A Adjusted ICR	*1.3*	*1*	*Min*	1.8	1.5	1.6	1.8	1.8	1.9	1.8	1.7	1.4
Senior Adjusted ICR	*1.1*	*n/a*	*Min*	1.6	1.4	1.4	1.6	1.6	1.7	1.6	1.6	1.3
Class A RAR	*75%*	*n/a*	*Max*	71%	79%	73%	71%	71%	71%	73%	71%	80%
Senior RAR	*85%*	*95%*	*Max*	81%	88%	82%	81%	81%	80%	82%	81%	89%
Rating Agency		***Target***										
Moody's - Adjusted ICR		*1.4*	*Avr*	1.5	1.4	1.5	1.5	1.5	1.5	1.4	1.5	1.4
S&P - FFO/net debt		*7%*	*Avr*	9%	8%	8%	9%	9%	9%	9%	9%	7%
Ofwat's Metrics		***Target***	***Measure***									
Cash interest cover			*Avr*	3.8	3.5	3.6	3.8	3.8	3.8	3.8	3.7	3.4
Adjusted cash interest cover ratio (Ofwat)		*1.2 to 1.5*	*Avr*	1.7	1.4	1.5	1.7	1.7	1.7	1.7	1.7	1.3
Adjusted cash interest cover ratio (Alternative)		*1.2 to 1.5*	*Avr*	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Funds from operations / net debt (Ofwat)		*6% to 10%*	*Min*	9%	7%	8%	9%	9%	9%	9%	8%	7%
Funds from operations / net debt (Alternative)		*6% to 10%*	*Min*	7%	6%	6%	7%	7%	7%	8%	7%	5%
Return on capital employed (ROCE)			*Avr*	4%	3%	4%	4%	4%	5%	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 2

Actual Structure 75% Geared

				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
Covenants	***Trigger***	***Default***	***Measure***									
Class A Adjusted ICR	*1.3*	*1*	*Min*	2.1	1.5	1.8	2.1	2.1	2.1	2.1	2.0	1.5
Senior Adjusted ICR	*1.1*	*n/a*	*Min*	1.8	1.4	1.6	1.8	1.8	1.9	1.8	1.8	1.3
Class A RAR	*75%*	*n/a*	*Max*	66%	74%	68%	66%	66%	66%	68%	66%	75%
Senior RAR	*85%*	*95%*	*Max*	75%	83%	77%	75%	75%	75%	77%	75%	84%
Rating Agency		***Target***										
Moody's - Adjusted ICR		*1.4*	*Avr*	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.6	1.5
S&P - FFO/net debt		*7%*	*Avr*	10%	8%	9%	10%	10%	10%	10%	10%	8%

Ofwat's Metrics	***Target***	***Measure***								
Cash interest cover		*Avr*	4.1	3.7	3.8	4.0	4.0	4.1	4.0	4.0	3.6
Adjusted cash interest cover ratio (Ofwat)	*1.2 to 1.5*	*Avr*	1.8	1.5	1.6	1.8	1.8	1.8	1.8	1.8	1.4
Adjusted cash interest cover ratio (Alternative)	*1.2 to 1.5*	*Avr*	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Funds from operations / net debt (Ofwat)	*6% to 10%*	*Min*	10%	8%	9%	9%	9%	10%	9%	10%	7%
Funds from operations / net debt (Alternative)	*6% to 10%*	*Min*	8%	6%	7%	8%	8%	7%	8%	8%	6%
Return on capital employed (ROCE)		*Avr*	4%	3%	4%	4%	4%	5%	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 3

Actual Structure 70% Geared

				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
Covenants	***Trigger***	***Default***	***Measure***									
Class A Adjusted ICR	*1.3*	*1*	*Min*	2.2	1.6	2.0	2.2	2.2	2.3	2.1	2.2	1.5
Senior Adjusted ICR	*1.1*	*n/a*	*Min*	2.0	1.4	1.7	2.0	2.0	2.0	1.9	2.0	1.3
Class A RAR	*75%*	*n/a*	*Max*	62%	69%	63%	62%	62%	62%	63%	62%	70%
Senior RAR	*85%*	*95%*	*Max*	71%	78%	72%	71%	71%	71%	72%	71%	79%
Rating Agency		***Target***										
Moody's - Adjusted ICR		*1.4*	*Avr*	1.7	1.6	1.7	1.7	1.7	1.7	1.6	1.7	1.6
S&P - FFO/net debt		*7%*	*Avr*	11%	9%	10%	11%	11%	11%	11%	11%	9%

Ofwat's Metrics	***Target***	***Measure***									
Cash interest cover		*Avr*	4.2	3.8	4.0	4.2	4.2	4.3	4.1	4.2	3.7
Adjusted cash interest cover ratio (Ofwat)	*1.2 to 1.5*	*Avr*	1.9	1.5	1.7	1.9	1.9	1.9	1.9	1.9	1.5
Adjusted cash interest cover ratio (Alternative)	*1.2 to 1.5*	*Avr*	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2
Funds from operations / net debt (Ofwat)	*6% to 10%*	*Min*	10%	8%	9%	10%	10%	10%	10%	10%	8%
Funds from operations / net debt (Alternative)	*6% to 10%*	*Min*	9%	7%	8%	9%	9%	8%	9%	9%	7%
Return on capital employed (ROCE)		*Avr*	5%	4%	4%	5%	5%	5%	4%	5%	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 4

Actual Structure Expected De-gearing

				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
Covenants	***Trigger***	***Default***	***Measure***									
Class A Adjusted ICR	*1.3*	*1*	*Min*	2.2	1.6	1.9	2.2	2.2	2.3	2.1	2.2	1.5
Senior Adjusted ICR	*1.1*	*n/a*	*Min*	1.9	1.4	1.7	1.9	1.9	2.0	1.9	1.9	1.3
Class A RAR	*75%*	*n/a*	*Max*	65%	70%	66%	65%	65%	65%	66%	65%	71%
Senior RAR	*85%*	*95%*	*Max*	75%	80%	76%	75%	75%	74%	76%	75%	80%
Rating Agency		***Target***										
Moody's - Adjusted ICR		*1.4*	*Avr*	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6
S&P - FFO/net debt		*7%*	*Avr*	10%	9%	10%	10%	10%	10%	10%	10%	8%

Ofwat's Metrics	***Target***	***Measure***									
Cash interest cover		*Avr*	4.1	3.8	3.9	4.1	4.1	4.2	4.1	4.1	3.7
Adjusted cash interest cover ratio (Ofwat)	*1.2 to 1.5*	*Avr*	1.9	1.5	1.6	1.9	1.9	1.9	1.8	1.9	1.4
Adjusted cash interest cover ratio (Alternative)	*1.2 to 1.5*	*Avr*	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Funds from operations / net debt (Ofwat)	*6% to 10%*	*Min*	10%	8%	9%	10%	10%	10%	10%	10%	8%
Funds from operations / net debt (Alternative)	*6% to 10%*	*Min*	8%	6%	7%	8%	8%	7%	8%	8%	6%
Return on capital employed (ROCE)		*Avr*	4%	4%	4%	4%	4%	5%	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%

Appendix RR.A10.1
Action ref AFW.RR.A10

Ipsos Mori Triangulation Report June 2018

Affinity Water Ltd Customer Engagement Programme

Triangulation Report: Phase 2

PR19 CustEng-ARP-PH3 -TRGN-TREP-003

Issue | 21 August 2018

Job number 255741-02

Ove Arup & Partners Ltd
13 Fitzroy Street
London
W1T 4BQ
United Kingdom www.arup.com

ARUP

Contents

Page

1 Introduction and purpose 3
1.1 Purpose 3
1.2 Background and context 3
1.3 Approach 5
1.4 Weighting evidence in triangulation 9 10

2 Activity undertaken to support PR19 11
2.1 Overview 11
2.2 Operational data 13
2.3 Market research 14

3 Other information 17
3.1 Activities within the sector 17
3.2 Activities outside of the sector 21

4 Context and contextual findings 21
4.1 Phase 0 and 1 21
4.2 Phase 2 22

5 Overarching dWRMP and Business Plan findings 23
5.1 Draft WRMP findings 24 24
5.2 Business Plan Acceptability 32

6 Findings and Analysis - Performance Commitments 35
6.1 Comparison with pre-phase 2 (and PR14) 50

7 Conclusions and next steps 50
7.1 For the Business Plan and WRMP 50
7.2 For the next stage of customer engagement 52
7.3 For business-as-usual customer engagement 53

Appendices Appendix A
Triangulation Tool

Appendix B

Customer Outcomes and findings from throughout the customer engagement programme

1 Introduction and purpose

1.1 Purpose

This report sets out the data collected and analysed during this key phase of Affinity Water's Customer Engagement Programme for PR19. In this phase, the focus has been on testing and valuation of propositions with customers. This represents a critical stage in the Business Planning process. The aim of this report is to:

a) Clearly record all of the activities that took place during phase 2 and our findings from it,

b) Set out our conclusions and recommendations for Affinity Water (AW) in three key ways:

- To inform the Business Plan; understanding the implications of what customers have told us for the Business Plan itself;
- To inform the next phase of the Customer Engagement Programme (with respect to Market Research, Operational Data, and linked activities);
- Where appropriate, identify opportunities for business-as-usual customer engagement.

1.2 Background and context

Triangulation

Triangulation is described as the process of "using multiple and independent measures to examine a hypothesis or conclusion being investigated, with the intent of using multiple perspectives to minimise bias and maximise validity"[2]. Recent guidance for the Consumer Council for Water[2] set out four key conclusions for the application of triangulation. These are summarised below:

- The approach should be transparent and apply clear rationale
- It must be flexible for different needs and situations
- It must learn from contradictory evidence
- It must take deliberate steps to avoid confirmation bias.

On this basis, we have built on our approach to triangulation used for previous phases, and developed a triangulation tool to enable transparent triangulation of information from a wide range of sources.

Figure 1 reflects Ofwat's expectations of the types of data sources that should be considered to inform water company business plans. Affinity Water has decided to not carry out a full programme of economic research explicitly for the PR19 business plan. The decision is informed by:

- Its assessment of the value of PR14 WTP insight compared to the other methods deployed,
- new innovative methods designed and deployed for PR19 and,
- wider concerns in the market and from Ofwat on the value of willingness to pay analysis.

[2] ICF for CC Water, *Defining and applying 'triangulation' in the water sector,* July 2017 [2] ICF for CCWater, *ibid*

However, it has reviewed the economic research carried out across the industry, performed ongoing value for money surveys and specific willingness to pay exercises such as a WTP Interruptions and compensation survey.

That evidence, in combination with programme of work on operational data, and the extensive market research, alongside other wider industry studies has been triangulated in this report.

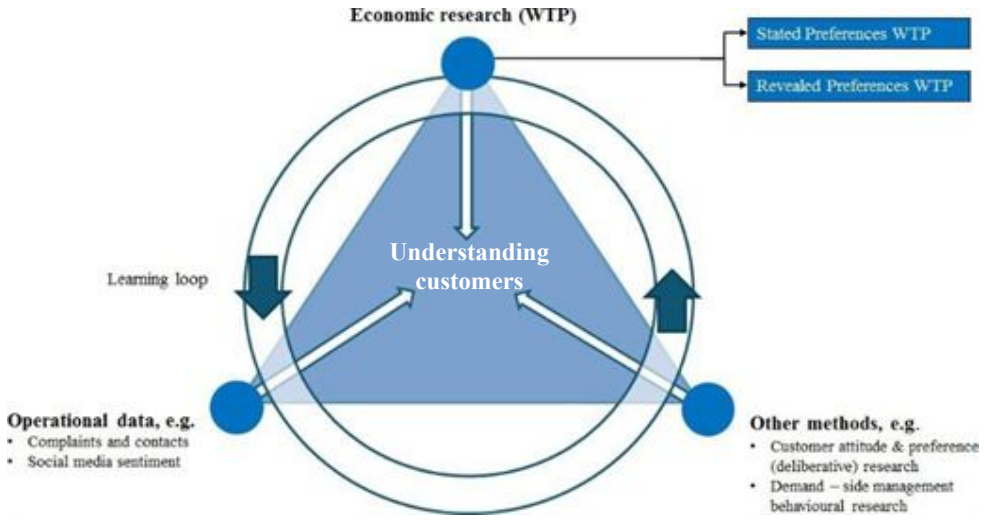


Figure 1: Triangulation Approach (Arup developed from Ofwat)

PR19 Customer Engagement Programme: Phase 2 objectives This report brings together the findings from phase 2 of the Customer Engagement programme, which was focused on "testing and valuing". The overarching purpose of the phase was to develop a robust quantitative base of information to understand customer issues.

The objectives of this phase were:

To consult and engage with a broad range of customers and stakeholders regarding the proposals set out in our Business Plan and Water Resources Management Plan to:

- Undertake further customer engagement relating to performance commitments where we do not have enough evidence.
- Understand the extent to which customers find different packages of service and bill levels acceptable.
- Undertake further exploratory operational data research as identified as part of the Phase 1 Triangulation.
- Seek views on our WRMP preferred and alternative plans.
- Triangulate findings from the different engagement activities and operational data findings to confirm priorities, and ultimately help define Affinity Water PR19 Performance Commitments.

The customer engagement programme is part of a wider programme for the development of Affinity Water's PR19 Business Plan for 2020-2025 and Water Resources Management Plan for 2020-2080. Customer outcomes and performance commitments have now been identified by Affinity Water. The proposed structure for the business plan has been developed. Affinity Water's main focus now is writing up the Business Plan as a whole; including making final decisions on performance commitment levels, outcome delivery incentives (ODIs) and

investment to deliver against these, based on a number of factors. Insight from the customer engagement programme will play an important part in these decisions.

1.3 Approach

The primary objective of this triangulation process is to synthesise all the information and feedback available from the different engagement activities and operational data findings to confirm customer priorities and support for PR19 Performance Commitments (PCs) and, ultimately seek customer acceptance of different packages of services and bill levels.

Building on our approach to the phase 0 and 1 triangulations and CCW guidance[3], for our phase 2 triangulation methodology we retained a seven-step process, shown in Figure 2. However, given the criticality of phase 2 engagement activities we additionally incorporated customer challenge workshops/working group sessions to support the seven-step process and the overall triangulation process. The objectives of the working groups/workshops were to:

- ensure robust and evidenced findings / conclusions are agreed, understood and championed by customer research team members; informing this triangulation report
- ensure the business (Affinity Water) is aware of and bought into the findings; appreciating the full impact they have on their area of the business / plan and;
- ensure CCG are assured of, and confident in, the accuracy of the data/evidence and informed of the business impacts.

The following working groups/sessions were held as outlined in Table 1.

Table 1: Summary of workshops and working groups undertaken

Description	Features/objectives	Attendees	Date
Workshop 1 (Customer engagement core team)	Summarising initial high level, set of customer engagement data findings and conclusions (for further testing and validation) Exploring potential challenges and questions these might raise for key stakeholders and customers Road mapping business plan / decision making committee interactions and deliverables; desired outcomes / impacts and what we need to present to enable these.	Customer engagement core team; Arup Ipsos Mori and Affinity Water	19/06/18

[3] Consumer Council for Water, 2017, Defining and applying 'triangulation' in the water sector

Workshop 2 – Key findings and conclusions	To summarise a more concrete set of customer engagement data findings and conclusions To explore potential challenges and questions these might raise for key stakeholders and customers To agree a storyboard / narrative and report contents page (in context customer / stakeholder outcomes; business plan narrative and decisions to be made)	Customer engagement core team; Arup Ipsos Mori and Affinity Water	26/06/18
Working groups - Business Plan Chapter Integration	To share the key findings from our customer engagement activity (the rationale / approach taken) To understand the possible synergies and contradictions with business plan chapter narrative To understand whether any customer engagement insights might strengthen the business plan chapter narrative / case To agree how activity in the business plan aligns to deliver on what customer want	Affinity Business Plan Chapter Leads, Business Plan Lead Author, Business Plan Programme Team, Representatives from our Customer Engagement Partners (Arup + Ipsos Mori / Accent / Accenture)	05/07/18

The seven-step process takes the research methods detailed in the dWRMP and Business Plans and combines and analyses the feedback of these into one report. We have created a triangulation tool (see Appendix A) to enable transparency and simplification of the triangulation process which includes these steps.

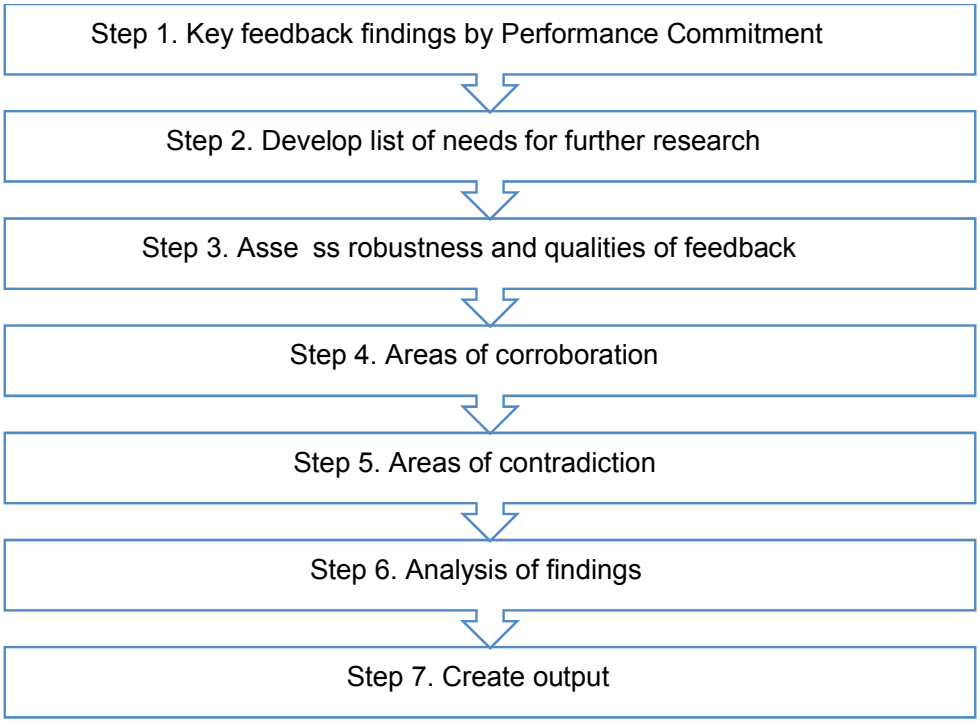


Figure 2: The Phase 2 triangulation process Each of the steps is set

out in more detail below:

Step 1. Key feedback findings by PCs

We have considered all the key findings from each feedback source relating to the research questions posed for a number of PCs. The final PCs and corresponding Outcomes are outlined in Table 2. This list of PCs and Outcomes was agreed by Affinity Water as part of the PCs Framework review process and reflected feedback from customers, stakeholders, business and OFWAT requirements.

To evidence this process and enable us to consider the adequacy of evidence base we have populated the feedback findings tab in the Phase 2 triangulation tool with customer insight and research evidence from each source against each research question and PC. The sources of information that were triangulated can be seen in Table 3 alongside the organisation who conducted the research.

The triangulation tool was reviewed and validated by appropriate researchers within Affinity Water, Ipsos Mori, Traverse Ltd and Accent who have undertaken the customer research for this phase. It was also reviewed by the CCG via CCWater. Data was collected in the spreadsheet, which was then used in the subsequent stages of analysis and drawing conclusions.

Table 2: Performance Commitments and Customer Outcomes

Outcomes	Performance Commitments (PCs)	Metric	Bespoke/ Common
Making sure customers and communities have enough water while leaving more water in the environment	Leakage	ML/d	Common
	Per Capita Consumption (PCC)	l/person/d	Common
	Abstraction Incentive Mechanism (AIM)		Bespoke (PR14)
	Sustainable Abstraction, average annual reduction	(Ml/d)	Bespoke (PR14)
	Environmental Innovation	Completing 8No. innovative pilot projects in our community	Bespoke
	River Restoration	To complete river restoration schemes	Bespoke
Supplying high quality water, you can trust	Water Quality Compliance, Compliance Risk Index (CRI)	The DWI's Compliance Risk Index (CRI).	Common
	Water Quality – Mean Zonal Compliance		Bespoke (PR14)
Minimising disruption to you and your community	Mains Bursts	No of bursts Per 1,000 km of pipe	Common
	Unplanned Outage	Lost capacity (flow rate)	Common
	Water Supply Interruptions >3hrs	average minutes lost per property per year	Common
	Risk of Severe Restrictions in a Drought	% of population at risk in a 1 in 200- year drought	Common
	Properties experiencing longer/repeated instances of low pressure	Water pressure less than 15m head	Bespoke
	Customer measure of experience (C-MeX)	We are consulting on the definition of C-MeX.	Common
	Developer measure of experience (D-MeX)	We are consulting on the definition of C-MeX.	Common

Providing a great service that you value	Customers in vulnerable circumstances satisfied with our service	Undertake a survey of Affinity Water's customers who are on PSR, receiving finance assistance and recorded as being on inflexible payment plans	Bespoke
	Customers in vulnerable circumstances who found us easy to deal with	Undertake a survey of Affinity Water's customers who are on PSR, receiving finance assistance and recorded as being on inflexible payment plans.	Bespoke
	False voids and gap sites		Bespoke

Step 2. Develop list of needs for further research

After the spreadsheet was reviewed and all relevant information was inputted, gaps in research or need for further evidence were determined. For each of these potential gaps, an approach was decided and further research was undertaken to ensure that the triangulation tool provides sufficient evidence and support to complete Steps 6 and 7 of the process to support final analysis and conclusions.

Step 3. Assess robustness and qualities of feedback

We have assessed the robustness and qualities of all feedback sources, using the triangulation tool. We have populated the qualities tab of the triangulation tool with all of the information available for a feedback source. The following feedback collection information will be used where available:

- Type of data
- Number of responses
- Period of feedback collection
- Response segmentation
- Targeted segmentation
- Prior knowledge of the water sector/ prior engagement
- Date of research

These topics have been summarised to assess the qualities and robustness of the feedback.

Step 4. Areas of corroboration

In this step, we have highlighted any areas of corroboration between feedback sources. We have completed the corroboration section of summary of findings tab of the triangulation tool, this will also include an analysis of this corroboration.

Step 5. Areas of contradiction

We have highlighted any areas of contradiction between feedback sources, by completing the contradiction section of summary of findings tab of the triangulation tool, this will also include an analysis of this contradiction.

Step 6. Analysis of findings

We have analysed the findings, areas of corroboration and areas of contradiction and consider the following questions:

- What does this mean for the business plan?
- What does this mean for the next stage of research?
- What does this mean for business as usual?

The answers to these questions will be collated in the triangulation tool (summary of findings tab).

Step 7. Create output

We have used the completed triangulation tool to create this triangulation research report, which include a detailed analysis of findings, and the other outputs detailed in the sections below.

1.4 Weighting evidence in triangulation

In developing our approach to triangulation, we have taken on board the CC Water guidance. Clearly qualitative and quantitative research play different roles in our understanding of customer views. When undertaking triangulation, we also think it important to take other factors into account; for example, the purpose and objectives of each research project, the extent and nature of stimulus and deliberation provided, and the type of sampling (some research will target types of customer). While operational data cannot be considered representative, it can also provide valuable insights and corroborative evidence.

Our approach provides the flexibility to incorporate different types of data and insight, including both qualitative and quantitative research and findings. As these types of data are not directly comparable, we do not believe weighting is helpful and have therefore decided not to apply weightings to the research sources.

Instead, we have built in a function to explicitly review contradictory evidence, and through an independent party supporting Affinity Water in triangulation, we are taking steps to avoid confirmation bias.

Whilst we are not attributing numerical weightings to evidence sources we have however, attributed percentages to views derived from quantitative research activities with a representative sample.

We have also considered stakeholder views in our triangulation. We have paid attention to stakeholder views on research activities where acceptability of services and bill levels have been sought from customers. The stakeholder views were mainly qualitative and not to be relied on in any statistical representative manner, however, views from regulatory stakeholders will have more of a significant impact on strategic decision making. Views from stakeholders

and customers have been considered in informing and influencing the design of the final bill impact acceptability proposals planned for phase 3.

2 Activity undertaken to support PR19

2.1 Overview

Phase 2 ran between March and July 2018. This report was drafted in July 2018, capturing the following activities undertaken to inform PR19:

Table 3: List of activities undertaken to inform phase 2 of the customer research programme

Source	Organisation	Type of data
Draft Water Resource Management Plan (dWRMP) discussion groups – final report	Ipsos Mori	Market research
dWRMP Online Survey final report	Ipsos Mori	Market research
Business Plan (BP) discussion groups final report	Ipsos Mori	Market research
BP acceptability survey – topline summary	Ipsos Mori	Market research
BP acceptability survey – final report	Ipsos Mori	Market research
WRMP and BP stakeholder forums final report	Traverse Ltd.	Market research
Future customers – secondary schools online survey	Affinity Water	Market research
Future customers – secondary schools focus groups	Affinity Water	Market research

Customer facing Affinity Water staff – online survey	Affinity Water	Market research
Exploration of supply outage compensation levels survey	Accent	Market research
dWRMP Consultation document	Affinity Water	Market research
BP Consultation document	Affinity Water	Market research
Other activities within the water sector	Arup	See section 3
Relevant activities outside the water sector and across the world	Arup	See section 3
Operational data outputs – case studies	Affinity Water	Operational data
Operational data – BAU to PR19 (CCG slides)	Affinity Water	Operational data
Social Media Statistics	Affinity Water	Operational data
Customer contact data	Affinity Water	Operational data
Value for Money survey	Affinity Water	Market research

The outputs from these activities are recorded in the following reports:

- Ipsos Mori for Affinity Water, *Draft Business Plan research, Qualitative research – report,* May 2018
- Ipsos Mori for Affinity Water, *Draft Water Resources Management Plan Research report,* May 2018
- Affinity Water, *Future Customers Secondary School Focus Groups,* June 2018
- Affinity Water, *Future Customers Secondary Schools Survey,* June 2018
- Affinity Water, *Our Plan for Customers and Communities: A summary of our*

Draft Water Resources Management Plan 2020-2080: Consultation Document, March 2018

- Traverse for Affinity Water, *Stakeholder Engagement Summary Report,* June 2018
- Ipsos Mori for Affinity Water, *Business Plan Acceptability survey,* June 2018
- Affinity Water, *Operational Facing Staff,* June 2018
- Accent for Affinity Water, *Exploration of Supply Outage Compensation Levels,* June 2018
- Affinity Water, *Our Plan for Customers and Communities: A summary of our Draft Water Resources Management Plan 2020-2080,* March 2018 • Affinity Water, *PR19 Customer Feedback Supporting Insight,* June 2018.
- Affinity Water, *Our future plans, consultation document*, April 2018. These reports form the basis of this triangulation report. Information from these reports is summarised and analysed in combination with this report. Individual reports provide information on findings from individual activities.

2.2 Operational data

Operational customer data was captured and analysed from the following sources:

Value for Money survey

The objective of this ongoing research is to provide a robust measure of 'value for money' and provide Affinity Water with interpreted data that can influence decision making and planning. Perceptions of value over time are measured and the drivers that affect perceptions are determined.

An annual summary report was analysed for 2017-2018 and published on May 10th 2018. This data includes:

- Telephone interviews with representative sample of customers
- c. 160 interviews per month
- 200 interviews per WRZ
- Telephone calls and interviews over a variety of seasons in different water resource zones.
- Large sample of over 2000 annually.

Social Media Statistics

This source tracks social media statistics including types of social media used, number of views and number of people completing quizzes.

Customer contact data

This includes a Customer Experience Improvement Board that builds on customer contacts and complaints and a Customer Feedback document that addresses some of Affinity Water's Business Issues and analyses their performance.

Operational data – BAU to PR19 (CCG slides), March 2018

A summary of customer engagement sources, industry – wide results, customer contacts and survey data were presented to the CCG in March 2018. Updates include unwanted contacts, service improvement plans and SIM performance.

The key messages from the analysis were:

- SIM survey performance across the industry has converged
- Affinity Water quantitative performance (unwanted contacts and written complaints) has significantly improved from 2015
- Whilst performance has improved the top drivers for points lost from SIM unwanted contact and complaints remains static since 2015. These drivers are:
  - Leakage
  - Payment plan
  - Interruption to supply
  - Pressure and flow problems

As part of BAU continuous improvement, the customer service team is changing its customer services model to adapt to changing customer needs. The new model will see significant use of internet/emails/webform and web chat and social media.

2.3 Market research

Qualitative market research

Focus groups and forums provided a deep insight into Affinity Water's customers' views. This qualitative technique ensured particular customer segments were reached and also provided a forum to discuss more complex, less top-of-mind issues.

dWRMP focus groups

A series of eight 1.5-hour focus groups were conducted with a sampled group of customers to measure and understand customer preference around some of the longer-term plans detailed in the dWRMP. Participants were sampled to include a range of ages and social grades and participants were reached out to through quota sampling to those unlikely to respond to the consultation. ABC1 refers to those living in a household whose Chief Income Earner is employed in administrative, or professional occupations and C2DE means households whose Chief Income Earner works in skilled or unskilled manual workers or dependent on benefits. Two groups each took place in Collindale/Edgware, Stevenage, Woking and Folkestone and participants were given a task to read an extract of the dWRMP before the discussion group. This qualitative research aimed to explore a breadth of views but does not seek to be quantifiable or statistically representative. This type of research offers insight into behaviours, perceptions, feelings rather than conclusions from a statistically representative sample. Some perceptions may not be factually correct, but these perceptions are vital in understanding their attitudes and views.

Business Plan focus groups

A series of eight focus groups were conducted with existing Affinity Water customers and two with future customers to test different potential business plan proposals with the aim of collecting insight, testing acceptability of different packages and exploring customers' experience of Affinity Water services. Participants were sampled to include a range of ages and social grades and participants were reached out to through quota sampling to those unlikely to respond to the consultation. ABC1 refers to those living in a household whose Chief Income Earner is employed in administrative, or professional occupations and C2DE means households whose Chief Income Earner works in skilled or unskilled manual workers or dependent on benefits.

This qualitative research aimed to explore a breadth of views but does not seek to be quantifiable or statistically representative. This type of research offers insight into behaviours, perceptions, feelings rather than conclusions from a statistically representative sample. Some

perceptions may not be factually correct, but these perceptions are vital in understanding their attitudes and views. The three draft plans were presented to each of the focus groups.

Future customer's secondary schools focus groups

Five discussion groups were conducted with 107 participants from a range of secondary schools across Affinity Waters' supply area. Engaging with future customers is a key part of the business planning process and these groups were used to establish their views and priorities directly relating to a number of proposed performance commitments. A background to Affinity Water was given, followed by an interactive game to explore supply and demand but the remainder of the session followed a similar approach to that with existing customer. Each session was led by a member of the Affinity Water Education Team with support from the PR19 Programme Team. Participants were guided through questions in a way that they could relate to understand better.

WRMP and BP stakeholder forums

A series of forums were conducted with 44 stakeholders across the three Affinity Water regions with the aim of exploring stakeholders' opinions and views of the dWRMP challenges, establishing which plans were preferred and understanding views on the performance commitments in the draft Business Plan.

A forum was planned in each of Affinity Water's eight community areas and invitations were issued to a full range of their stakeholders with the expectation that a varied set of stakeholders would attend. Stakeholder were geographically grouped and each invited to the forum for the region they represent.

Stakeholders were sent the dWRMP and Business Plan consultation documents in advance of the forum to read as a background to the session.

Quantitative market research

A series of surveys were undertaken to ask more closed questions to explore identified priority themes. This qualitative data provides quick, snapshot responses from a wide range of customers.

dWRMP Online Survey

An online survey of 1000 Affinity Water customers was conducted to measure and understand their preferences in relation to Affinity Water's long – term plans in the dWRMP. Surveys were distributed to customers located in all eight of Affinity Water's Water Resource Zones. Base sizes for the areas different dependent on population size. A representative sample of adult residents, aged 16- 75, as targeted to take part in this survey and survey data has been weighted to match the profile of the population by age, tenure, work status and Water Resource Zone, based on Census data. Data was weighted during analysis to the known population profile across areas across Affinity Water's service area.

Business Plan acceptability survey

A face-to-face survey was conducted with a representative sample (825n) Affinity Water's customers across the water resource zones, focusing on three main areas; views of Affinity Water's performance, attitudes towards potential changes in the Social Tariff provision and acceptability of three potential business plan proposals for 2020-2025. 825 customers were interviewed face-to-face across all of Affinity Water's water resource zones. The 'random locale' methodology selection methodology was used to choose participants. Sample points from across the eight areas were randomly selected in proportion to the population in each water resource zone. Quotas for each of these interviews were then set by age, gender and tenure. The survey was designed to provide a representative sample of customers across all areas Affinity Water serves rather than within each water resource zone. During analysis, survey data has been weighted to match the profile of the population by age, tenure, work status and Water Resource Zone, based on 2011 Census data.

Future customer's secondary schools online survey

Affinity Water conducted a survey with participants from a range of secondary schools across their supply area as they were keen to ensure engagement with school aged future customers was conducted. A broad range of schools were approached via the Education Team across the Affinity Water supply area but this does not constitute a representative sample of their customers. Affinity Water staff who are also customers, were also asked to encourage their children to participate. The survey was made up of questions and themes relating to the performance commitments and set out in a way that is easy for young people to understand.

Out of the 895 responses received, 489 of these were fully completed and analysis is based on all survey responses. The responses are presented unweighted (not older age group is under-represented).

Customer facing Affinity Water staff – online survey

The purpose of this survey was to explore customer insights and understand customer experiences of interaction with Affinity Water and the service received by gathering feedback from those who work directly with customers and stakeholders daily. 70 staff in total completed the survey, each of whom works directly with either Retailers, Developers, Customers, or the Community (through the Water Saving Squad who attend the community events). The split of staff who work with each of these groups can be seen below.

Retailers	12
Developers	20
Customers	22
Community	16
TOTAL STAFF	**70**

Exploration of supply outage compensation levels - survey

A sample of 502 online survey responses was obtained via a panel with most respondents located in Central region and balanced SEG groups. Respondents were weighted by gender, age and SEG to correct for the divergence between the population target profile and the achieved sample proportions. The younger age groups (16-29 years old) was underrepresented in this engagement.

The survey was built around a stated preference exercise that contained sequences of scenarios and a preference option at the end of either 'Interruption + compensation' or 'No interruption.' The key aim of this piece of research was to understand what level of payment will fully compensate customer for the inconvenience of a supply interruption.

Business plan consultation

dWRMP consultation

Affinity Water consulted with customers and stakeholders on their dWRMP in order to understand views and priorities that will influence future decision- making. The period of consultation ran between 19th March and 23rd May 2017. The dWRMP considers water availability in the context of depleting resources, a changing environment and changes in the ways customers use water.

Participants were asked to fill in an interactive document with questions around the supply demand balance and how Affinity Water should deal with future challenges. An option was given of filling in the interactive consultation document or sending views directly to Defra by post or email.

82 responses were received from regulators, customers and stakeholders.

Business Plan Consultation
Affinity Water consulted with customers and stakeholders on their Business Plan proposals between 16th April and 30th May 2018. The proposals aim to address requirements and expectations from stakeholders, regulators and customers. Participants were guided through a document that detailed Affinity Water's proposed 2020-2025 plans, following by three presented packages of options that required respondents to choose which plan/s were deemed favourable.

3 Other information

In addition to the work carried out specifically to support PR19, we have considered information and activities undertaken for other purposes in this phase of triangulation.

3.1 Activities within the sector

In our customer engagement programme, we have also considered other work which has engaged with customers more broadly on water issues in the UK. The following section summarises the findings from this research, which feed into our findings within this triangulation report:

Britain Thinks for Water UK, 'Attitudes to the Water Industry Report', (2018).

This report offers a broad-stroke image of wider public attitudes and engagement with the water sector. The report touches on general levels of engagement by the public with the water industry, people's experiences of water and sewerage provision, and future issues of the sector identified by customers. There were three main findings in relation to general public engagement with the water industry:

- Water is a low saliency issue for the public
- 75% of customers say they are satisfied with their water service and trust their water company
- Perceptions of the water industry as a whole are shaped by personal experiences of water services.

People's experiences of water and sewerage provision were found to be as such:

- Tap water considered to be safe and palatable compared to rest of world
- Provision of water thought to be reliable
- Bills are generally thought to be low compared to other utilities
- 76% of people satisfied with water industry, 75% with their water company. The report also found that the public thought the water industry would face the following challenges in the future:
- Ageing infrastructure
- Increasing demand due to population increase • Water conservation issues
- Bill increases.

These findings are useful for contextualising the findings of Affinity's customer engagement programme.

National Infrastructure Commission, Phase 2: Public research, May 2018

This report seeks public opinion wider infrastructure issues and provides evidence base for National Infrastructure Assessment.

Key relevant findings for the water sector includes:

- Reliability and quality of the UK's water supply is "taken for granted" and participant tended to be satisfied with the service and price of their bills
- Despite being satisfied with the quality of water infrastructure, participants felt constrained by the **lack of choice of water suppliers** and felt this limited their ability to negotiate on price
- Participants were receptive to **water reuse** as an alternative to reducing wasted water, with support for home adaptations making this possible
- There was support for adaptations to home infrastructure and technology that allowed individuals to do this easily, such as places to store used water in new homes
- Participants wanted **greater information** about what adaptations would involve (including what it would mean for saving water) and greater support to help individuals make changes
- **Water meters were** viewed as a way of reducing household water use, although participants with a water meter did not always check their water
- There were mixed views on the compulsory installation of **water meters** with 45% of survey respondents supporting this in principle and participants describing concerns that some groups could lose out through higher bills without wasting any more water e.g. if they have a large family or need to use water for medical purposes.
- 65% supported the compulsory installation of water meters in all homes if it helps address water leaks
- However, 61% of survey respondents opposed compulsory installation if it meant higher bills for their household
- 62% of survey respondents also agreed that people should be able to choose whether or not to install a water meter
- While participants recognised that individuals should take responsibility for their water usage, they felt water companies and the government could support individuals to do this.

National Infrastructure Commission - 'Preparing for a drier future' (April 2018)

Whilst this report need not seek customer views on these issues, it presents analysis from a key stakeholder. Key findings from this report includes:

- The UK is currently at high risk of experiencing a severe drought
- In order to mitigate this risk and increase the resilience of the water supply system there must be a concerted effort to reduce leakage, increase water efficiency, reduce demand through metering and invest significantly in critical infrastructure
- This approach should be able to increase capacity by a quarter.

Ipsos Mori Issues Index (April 2018)

The Issues Index report by Ipsos Mori contextualised the engagement of the public with the water sector against their engagement with other sectors. The main findings were:

- that concerns about the environment and pollution are rising in popularity amongst the public, following a decrease in popularity between 2006-2012.

- Despite this, the report also highlighted the fact that the Environment and Pollution remain very low down on the concerns of the public compared to other such concerns as the NHS, Brexit, Crime and Immigration.

CCWater, 'Customers' experiences of water supply interruptions following the freeze-thaw events of March 2018' (2018).

In response to the March 2018 freeze-thaw events, CCWater conducted a study into customer experience of the event. More than 1000 household and 260 nonhousehold consumers supplied by seven of the most affects companies (Affinity Water, South West Water, Thames Water, Severn Trent, Dwr Cymru, South East Water and Southern Water) were asked about their experiences. The key findings below summarise responses from the research.

- 19% of household and 9% of non-household received no communication about the interruption
- Receipt of water company information was recalled by 57% of household customers and 51% of non-household
- 10% of household customers affected by the event were much more dissatisfied with their water company than before the event. Interestingly, another 10% were much more satisfied with their company than before the event
- 65% of large consumers received no communication and 51% of water critical consumers the same
- 70% of respondents found the information communicated to them quite reliable or very reliable
- 74% of people didn't contact the water company at all during the event.

Ofwat, 'Out in the Cold': Water companies' response to the 'Beast from the East' June 2018 (2018).

This report from Ofwat reviewed companies' response to freeze thaw events in the UK in late February and early March 2018, which left over 200,000 customers in England and Wales without water for over 4 hours. The key findings include:

- Companies' performance was not directly linked to the severity of the weather
- Some companies did not have appropriate plans in place for this type of incident
- Better performing companies used real time information and monitoring systems to identify and manage the issues
- Co-ordination between companies that were seriously impacted was poor
- There were many examples of companies not communicating effectively with customers and stakeholders
- Where they saw better performance, companies communicated effectively with customers and key stakeholders, such as local resilience forums, councils and the emergency services, before, during and after the incident to ensure that they were able to prepare and to minimise the impact of disruption
- There was an inconsistent approach to identifying and supporting customers in vulnerable circumstances
- Some companies have proactively gone above statutory minimum payments to customers to reflect the level of disruption experienced and have paid out quickly

- Ofwat found that Affinity Water's performance largely met its customers' expectations, but there are still gaps and room for improvement. In particular, that includes better proactive communication with customers.

ComRes, 'Anglian Water, Severn Trent, South West Water and United Utilities- Nationalisation and Water Survey (2018).

Key findings from this survey included:

- There is low support for nationalisation of water and sewerage services compared to other services, only 31% supporting nationalisation whilst 41% support nationalisation of energy companies with 53% supporting nationalisation of public services such as NHS/prison services that have been privatised.
- However, there is more support for nationalisation, 42% when participants were presented with recent reports which suggests over 96% of all profits have been paid out to shareholders in the last decade. In this case only 19% oppose nationalisation.

Willingness to Pay survey - National Comparative Review of PR19 WTP, June 2018

The purpose of this report was to present a comparative anonymised review of stated preference (SP) willingness to pay (WTP) results for 13 water companies (excluding Affinity Water) from England and Wales. The purpose of performing the comparison in this report is to allow companies to see whether their own results are 'within the pack' or are outliers which may invite closer scrutiny by Ofwat or customer challenge groups.

Key findings are:

- Overall, the key change to household WTP appears to have been a widening of the range across companies, consistent with the divergence in methodologies, with a higher maximum WTP observed than at PR14, and hence a higher mean value, but with median WTP remaining fairly stable.
- At the company level, however, some significant changes in WTP have been observed, including some substantial increases and decreases.

Water industry: corporate behaviour of water companies, letter from the Secretary of State for Environment, Food and Rural Affairs, Jan 2018 Issues raised by the Secretary of State are related to financial resilience. These issues undermine public and customer trust in the industry.

- Off-shore financial arrangements
- Securitisation
- Highly geared structures
- High levels of executive pay
- High dividend payments

Despite perceived trust deficit from customers due to the above issues, an article from Utility Week dated 08/07/18 by Michael Roberts, CEO Water UK appear to suggest findings from the recent ComRes polling reveals that 86% of people trust their water companies overall.

National Infrastructure Commission, 'Data for the public good', (2017).

This report emphasised the potential that data analytics have in improving the resilience of the UK's critical infrastructure. Key messages from this report are:

- To improve resilience of UK infrastructure big data and data analytics must be embraced
- For this potential to be realised, regulators, network operators, and utilities providers must prioritise data in the day to day provision of services.

- In addition, the potential for resilience can be maximised by data sharing amongst the different stakeholders in critical infrastructure.

3.2 Activities outside of the sector

UK Customer Satisfaction Index (UKCSI), July 2018 Key findings from this report are:

- The latest average customer satisfaction score in the UK is UKCSI 77.9.
- The Utilities industry which includes most UK water companies is 74.7 which slightly down by -0.4 points from last July.
- Compared to 14 sectors included in the survey, Utilities is third from bottom. The worst performing sector for customer satisfaction is Transport which stands at 72.7 score

Key findings relevant to AW customer services team includes customer's top priorities for organisation to improve:

- 25.4% identifies 'making it easier to contact the right person to help' their top priority
- Followed by 23.4% who view 'better website navigation' a priority
- About 17% consider 'speed of response/resolution' a priority alongside quality of service

This latest survey indicates there is still more work to be done within the Utilities industry which includes the water sector. By way of comparison the best performing industries are Retail and Banking with both over 80 UKCSI score. There is a huge opportunity to learn from these high performing sectors.

4 Context and contextual findings

4.1 Phase 0 and 1

The context in which engagement takes place is an essential consideration when gathering and analysing findings. It provides a deeper richness of understanding and sets the scene for considering customer priorities by complementing 'what' customers are saying with 'how' and 'why' they are saying it.

In order for us to understand the phase 2 contextual setting, we looked back at what emerged from phase 0 and phase 1 and sought to build on this understanding as we progressed through the programme.

A number of themes emerged from phase 0 and phase 1 research that set the scene for analysing the data and understanding the background and context from which certain responses were drawn out.

The following themes were observed across the research sources.

1. Water supply is essential
    - The water supply is a constant feature of everyone's lives. Water is valuable to everyone, in that it's essential to run a household. It is dependable – and often taken for granted

- There is little sense that water will "run out" – though there are exceptions to this e.g. people who try to be as frugal as possible.

2. A lack of agency and engagement

   - People are users of water, rather than "customers" or "consumers". They do not engage in the service in the same way as they do with other utilities, like electricity or gas. They cannot shop around for better deals from alternative suppliers
   - They pay little attention to the bills they receive or the prices they pay. People's usage is disconnected from how much they pay, in terms of volume used and amount spent. There is no perceived benefit (or incentive) to them of being more engaged.

3. Scope to improve: information and choice

   - There is low awareness of Affinity Water and what the organisation does. People typically needed prompting to know that their supplier was Affinity Water, though there was a vague sense that the name had changed from something else
   - More could be done to promote Affinity Water and the services it provides – for example, free water saving devices, though it is unclear just how much this would benefit Affinity Water or the people they supply
   - Be more proactive and less reactive – tell customers what is happening as a result of their feedback
   - A half-open door – there's a vague sense that water could / should be better conserved, so customers are willing to listen.

There was evidence from the research outcomes that much depends on the detail provided by the facilitator and the stimulus shown or presented. In this context, customers views can be influenced depending on what they have seen and the trade-offs they make once they understand concepts that are less top-of mind- or include less intuitive data. One of the key challenges was the high number of responses that stated 'I don't know' or 'I don't care (much), just get on with it.' There was a general consensus that most people are happy to let Affinity Water get on with their job so long as they are kept informed.

4.2 Phase 2

Building on our understanding of customer context gained in phases 0 and 1, we take stock of the general context and sentiment as an essential backdrop to reporting our phase 2 findings. The following headline insights were observed with respect to the customer context:

- Affinity Water customers are broadly positive about different aspects relating to service, their water supply, including quality and reliability. Customers are overall (74%) either very satisfied (43%) or satisfied (31%) with the service they receive from Affinity Water. They are especially positive about reliability (91%); water is assumed to be "always there". Consequently, water is not something that is given much thought, particularly in comparison to other utilities where customers have more choices to make
- Water bills are considered good value for money (86%); and better value for money when compared to other utilities (29%). 87% report no problems with affordability and paying their bill on time
- All this translates into customer advocacy for proposed plans presented – specifically dWRMP and Business plan elements.

Echoing context findings in previous phases around lack of agency and engagement, the central challenges remain in phase 2 (backed by qualitative findings):

- Customers' self-reported knowledge of Affinity Water (and services) remains low; 70% don't know very much (54%) or nothing at all (16%). While they express some interest in what the company does, the most commonly held position - held by 51% - is contentment to "let Affinity Water get on with their job" as long as customers are kept informed about what the company is doing.
  In this context, customer views could be influenced by what information customers already had (familiarity of information) with and / or by what by what they are given (stimulus presented)
- Customers give little thought to water supply. Supply and demand factors caused confusion particularly as there is a perception there is enough water for everyone in the UK which is a 'wet country'
- The qualitative research revealed that Customers welcomed the opportunity to engage and provide feedback to Affinity Water and liked that Affinity Water have produced a future plan that addresses challenges sustainably. However, many questioned the value of their feedback as they felt the plan had already been decided on and customers felt they lacked the expertise to make these decisions.

With respect to stakeholders:

- As was the case with customers, it was difficult to gain commitment from stakeholders to participate in the scheduled stakeholder forums
- Stakeholders, by contrast with customers, were very articulate about the macro challenges facing Affinity and the water industry; specifically demand growth and climate change. Collaboration across industry was strongly advocated for results
- Outside of that, stakeholders tended to comment on their specific area of interest.

5 Overarching dWRMP and Business Plan findings

The Business Plan acceptability survey validated that stated outcomes strongly resonate (over 80%) with customers who rate all four outcomes as 'extremely important':

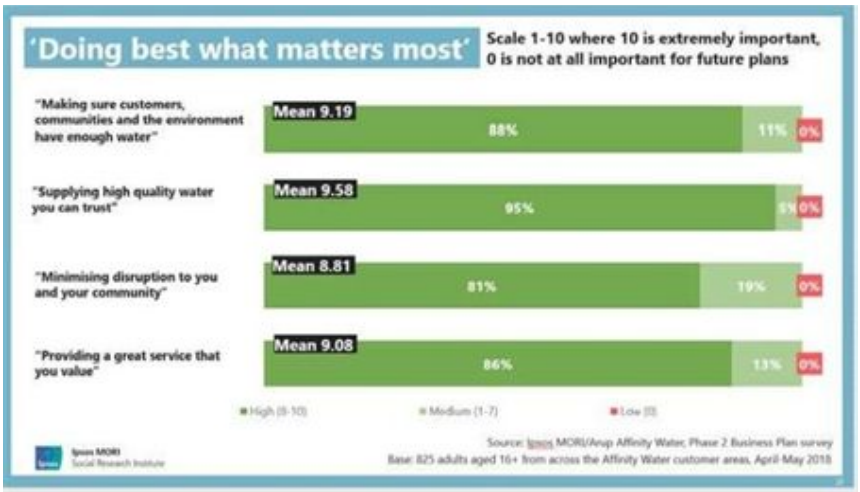


Figure 3: Relevance of Customer Outcomes; Business Plan Acceptability Survey, Ipsos Mori, June 2018

This sets an overarching context when exploring the findings from the dWRMP and Business Plan. Most customers found the four outcomes to be of high importance and relevance suggesting that Affinity Water understands its customers priorities and which areas require a future focus.

5.1 Draft WRMP findings

This section summarises findings from three research projects designed and conducted to measure and understand customer and stakeholder preferences and perspectives in respect of Affinity Water's long-term plans outlined in the draft Water Resources Management Plan (dWRMP). The dWRMP sets out how Affinity Water intends to manage its resources of water. More specifically, it describes how the company intends to ensure that its customers are supplied with sufficient water from 2020 to 2080.

This involves calculating predicted changes in supply and demand over the period 2020-2080; then using this data to develop a long-term strategy for ensuring that all users are supplied with sufficient water, whilst also meeting or exceeding targets set by regulatory bodies such as Ofwat and the Environment Agency. Supply issues which need to be taken into account include changes to water sources, climate change, and infrastructure. Demand issues which need to be taken into account include population growth, user behaviour and leakage.

As noted in Section 2, the engagement relating to the dWRMP consisted of:

An **online survey** of 1,000 Affinity Water customers aged 16-75, sourced from the Ipsos MORI customer panel between 23 April and 14 May 2018. Data were weighted at the analysis stage to the known population profile across areas served by Affinity Water

- A series of eight **focus group discussions** lasting 1.5 hours each, undertaken during March 2018. Participants were sampled to include a range of ages and social grades. Groups took place in Collindale/Edgware, Stevenage, Woking and Folkestone. A total of 66 customers were involved
- A series of **stakeholder forums** designed and delivered by Traverse on behalf of Affinity Water between March and May 2018. The forums were held across the three Affinity Water regions and a total number of 44 stakeholders took part. The forums aimed to explore different stakeholder opinions in depth to obtain a breadth of views, however, they were not intended to be quantifiable or statistically representative. The findings offer insight into the perceptions, feelings, and behaviours rather than quantifiable conclusions from a statistically representative sample
- A **formal consultation document** available for comment from customers and stakeholders.

Customers and stakeholders were presented with different 'stimulus' to gauge their views and appetite for various plan elements and overall packages – A Preferred Plan or Alternative Plan. An example of how these were packaged for stakeholders is shown below in Figure 4.

	Current situation (2015-2020)	Preferred plan (2020-2080)	Alternative plan (2020-2080)
Drought resilience	Our current position is to be able to cope with a 2.5% chance that we will need to use 'additional water', i.e. drought permits and/or emergency drought orders	Improve to 1.7% (1:60 year drought event)	Improve to 0.5% (1:200 year drought event) This would be without the use of standpipes in the streets or rationing the supply of water in a severe drought
Leaving more water in the environment (reducing abstraction)	In our last plan WRMP14, we committed to 42 Ml/day of sustainability reductions which we are on track to complete by the end of April 2018. The result will amount to a total reduction since 1993 of 63 Ml/day, some 7% of our resource base.	Reduce abstraction by 10 Ml/day In our PP we have included reductions in abstraction that in our view are based on robust evidence that they will achieve environmental benefits and that are cost beneficial.	Reduce abstraction by 39 Ml/day The AP has a higher cost and we consider this plan to also be higher risk. The AP represents a greater challenge to operational resilience by including a higher level of sustainability reductions.
Reducing leakage	Current leakage: 171 Ml/day This is 19% of total water in our pipes. 25% of this value is leakage within customer property boundaries. Reduction in current plan (2015-2020): 27 Ml/day (14% reduction) This is the largest percentage reduction in the industry. We are repairing 27,000 leaks per year.	Reduce by 11% (18 Ml/day) between 2020 and 2025 and then maintain this level until 2080.	Reduce by 15% (25 Ml/day) between 2020 and 2025 and then maintain this level until 2080.
Reducing our per capita consumption (PCC)	Current average PCC across the Affinity Water regions is 160 litres per person per day. (National average is 141 litres per person per day)	Reduce to 126 litres per person per day	Reduce to 120 litres per person per day (our ambition is 110 litres per person per day)
Impact on average customer bill (annual increase of these four options)		Drought: £3.00 (up until 2080) Abstraction: 90p (up until 2080) Leakage: £2.10 (up until 2080) PCC: £2.40 (up until 2080)	Drought: £4.20 (up until 2080) Abstraction: £1.30 (up until 2080) Leakage: £3.80 (up until 2080) PCC: £3.70 (up until 2080) (Our ambition of 110 litres per person per day will cost more)

Figure 4: dWRMP Detailed Comparison Poster; Stakeholder Engagement Summary Report, Traverse, June 2018

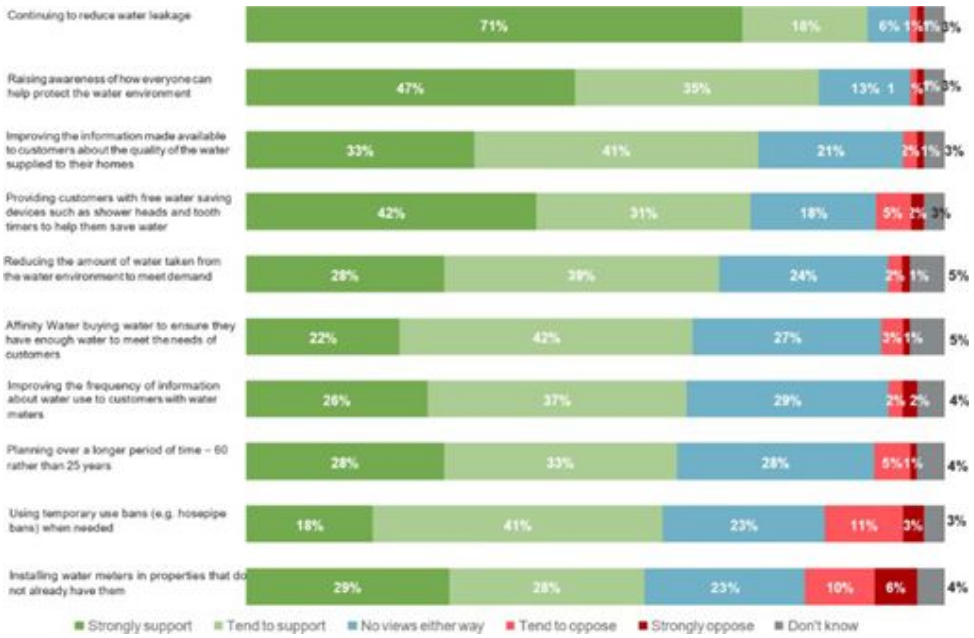
Customers participating in the survey and, separately, the qualitative research were provided with further detail about the main options being considered by Affinity Water in respect of the management of water resources (several of these were included as questions within the company's consultation on the dWRMP). They were told the approximate cost for each proposed option to help them make an informed decision but, in contrast with separate research relating to the Business Plan, these were presented in isolation, rather than as a package of commitments within a complete plan.

Group discussions found few outright objections to the themes of reducing leakage, reducing per capita consumption, reducing abstraction and enhancing drought resilience, but participants had difficulty making decisions as they struggled to understand much of the information provided. This was largely due to a lack of familiarity and context, and the intangibility of some of the content. For example, participants struggled to understand the themes of collaboration and sharing, and of sustainable abstraction. This led customers to query the value of the feedback they could give.

The following findings summarise the customer response to dWRMP plans presented; including areas of explicit agreement and contradiction. Where Stakeholder views either strongly align or differ, these have been noted.

5.1.1 *Reflections on elements on proposal elements presented in the dWRMP*

Figure 5 shows that customers are broadly positive about the different proposals offered in the dWRMP. They tend to support rather than oppose these, although the level of support varies from nine in ten (89%) in favour of the most popular proposal down to 57% for the least popular one.



Base: 1 ,000 adults aged 1 6-75 from across the Affinity Water customer areas

Figure 5: dWRMP Final Research Report, Ipsos Mori, June 2018

Customers are most supportive of Affinity Water continuing to find ways to reduce water leakage with nine in ten customers (89%) supporting this. Seven in ten (71%) strongly support this – the strongest feeling of support for any of the listed initiatives. The next most popular proposals were raising awareness of how everyone can help protect the water environment, with 82% support for this, followed by three- quarters support for improving the information available to customers about the quality of water supplied to their homes (74%), and providing customers with free water saving devices (73%).

In contrast, a *relatively* small number, three in five (59%), of customers support hosepipe bans. Only 18% strongly support this initiative, the lowest of all the proposals in the dWRMP. However, the least supported proposal is installing water meters in properties that do not already have them suggesting that some customers want some control and choice. Still, over half (57%) of customers are in favour of the extension of compulsory metering, and the margin of support to opposition is two to one.

Customers who have water meters and those in the 35-54 age category are more likely than other age groups to strongly support Affinity Water using hosepipe bans, with 21% of metered customers and 23% of middle-aged customers supporting this, compared with 16% and 15% respectively of the youngest and oldest groups of customers. The least supported proposal is installing water meters in properties that do not already have them but, still, a clear majority of customers - 57% - are in favour of this.

Around a third (32%) of the youngest customers and those with meters also tend to support installing water meters in properties without one, compared to 28% who think this overall. In addition, 16-34 year olds (46%), those living in rented accommodation (who tend to be younger) (49%) and customers in receipt of benefits (47%) were all more likely than average to strongly support being given free water saving devices such as shower heads and tooth timers to help them save water.

5.1.2 *Reflections on the overall dWRMP Plan presented*

Across questions **asking customers** about the different sets of options being considered by Affinity Water for inclusion within its dWRMP, between 10-15% of participants answered, 'don't know' and 5-10% made a suggestion to 'do something else'. As Table 4 shows, drought was mostly readily identified by customers as 'not a problem' - by 22% - four times the proportion who think the same of leakage. This is reflected in the relatively low proportion of customers - 48% - choosing one of the options presented. Otherwise, the majority of customers prefer at least one of the options presented in each theme (all options involved a bill increase of some degree).

Levels of customer preference, range from 43%, at most, to 13%. They are higher for the less expensive actions among competing sets of options (Table 4). The important exceptions to this are relatively high support for Option 2 to reduce leakage. Also notable is preference for a more ambitious plan to reduce abstraction – Option 2 – reflecting the lower bill increases involved compared to Option 1, and other themes.

Table 4: Customer dWRMP options presented and quantitative findings, dWRMP Phase 2 Report, Ipsos Mori, 2018

Theme	Option	Bill increase*	% prefer	% prefer any option	% 'not a problem'/ prefer 'something else' or 'none'
Reduce water leaks	Option 1 – reducing leakage by further 11%	£2.10	38	69	5 / 17
Reduce water leaks	Option 2 – reducing leakage by further 15%	£3.80	31		
Take less water from the environment	Option 1 – taking 10 million litres less	£0.90	28	71	9 / 10
Take less water from the environment	Option 2 – taking 39 million litres less	£1.30	43		
Reduce chance of severe drought	Option 1 – reducing chance to 1.7%	£3.00	29	48	22 / 14
Reduce chance of severe drought	Option 1 – reducing chance to 0.5%	£4.20	19		
Reduce water use by customers	Option 1 – reducing use to 126 litres	£2.40	34	60	13 / 16
Reduce water use by customers	Option 2 – reducing use to 120 litres	£3.70	13		
Reduce water use by customers	Option 3 – reducing use to 110 litres	£3.70+	13		

** Approximate bill increase per household bill every year until 2080*

While there is an important caveat to the presentation of data in Table 4– customers were trading-off options within, not between, themes, and were not choosing between packages or complete plans – the survey results further

underline the importance of leakage and how relatively more receptive customers are likely to be to bill increases which support reductions in leakage.

Like customers, stakeholders spent more time debating within options, versus between packages. The majority of stakeholders who gave a preferred dWRMP plan indicated they prefer the Alternative Plan over the Preferred Plan. Of the 35 stakeholders who completed a comment card, 22 indicated a clear preference between plans, and 15 of these selected the Alternative Plan.

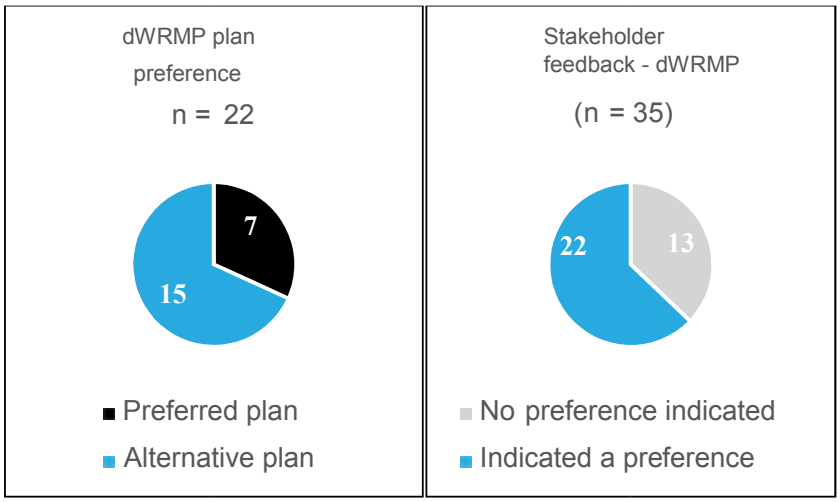


Figure 6: Stakeholder dWRMP Plan Section, Stakeholder engagement Summary Report, Traverse, June 2018

The Alternative Plan was considered to be 'more resilient' however the it was felt that the low bill impact of the options presented suggests water may be too cheap. As with customers, stakeholders spent time debating within options and expressed concerns over 'how; Affinity would be able to deliver the plan

- Stakeholders advocated for more ambition in Affinity Water's plans, and suggested that the plans could involve a stable, or increasing bill for customers, rather than bill reductions. Despite ambitions, stakeholders expressed over 'how' Affinity finds the capability and capacity to deliver these plans
- They were supportive overall of efforts to reduce water usage, ensure a resilient supply, and protect the environment. Stakeholder comments and suggestions were driven by their particular areas of expertise and interest
- In many forums, stakeholders requested greater information, clarity on the proposed targets, how they are defined and measured, and how they interrelate. They expressed concern regarding how possible underperformance on one target might affect other targets, as well as the ability to supply water in general.

5.1.3 dWRMP findings by theme

Leakage

- The majority of customers (nine in ten, 89%) support Affinity Water continuing to reduce leakage, with 71% doing so *strongly*. 71. This is the highest level of support for any aspect of the Business Plan covered in the survey.
- In terms of the different options proposed to reduce leakage, 38% of customers prefer **Option 1** - reducing leakage by a further 11% - compared to

31% who choose the more expensive Option 2 which would target a further 15% reduction. Leakage resonated strongly with customers and in the focus group discussions proposals to reduce leakage were supported by customers. Fixing leaks is a key priority; it is important as a top-of-mind, instinctively important issue to customers (and seen as a very visible sign of "under-performance" by Affinity Water), and this remains the case after deliberation and trading-off against other potential priorities. Stakeholders were more ambitious about reducing leakage; opting for the 15% reduction but shared concerns for the age of the water distribution network and the need for long term, sustainable fixes (which may dissuade customers and come at a high cost).

- Calls for efforts and policies to reduce leakage were motivated by recent local experience and sightings of bursts, but those wanting further action were also mindful of the cost and the impact on customers' bills. There was a sense that investment would reduce wastage, reducing the need to take water out of the environment or sourcing it from other suppliers etc. Tackling leakage is seen as the cornerstone of any plan to better manage water resources whether in the short, or the long term.
- Conversely, views on leakage varied among stakeholders. Some claimed reducing leaks to be a priority, whilst others suggested Affinity Water should focus on reducing demand rather than searching for leaks. Some stakeholders commented there is a diminishing rate of return in investing in leakage reduction. A few stakeholders mentioned infrastructure and conditions of pipes as important to address.
- The key stakeholders of the Environment Agency and Ofwat have been clear in their expectation for a 15% reduction in leakage.

Sustainability reductions

- Nine in ten customers (89%) say that the local environment is important to them personally, with half (50%) agreeing strongly. Similarly, two-thirds (67%) support Affinity Water reducing the amount of water taken from the water environment. Climate change and increasing demand (due to population growth) were top of mind for stakeholders.
- Despite the additional cost, both customers and stakeholders much prefer Option 2 - taking 39 million litres per day less from the environment - compared to Option 1 - 10 million litres less (43% choose Option 2, 28% Option 1).
- From customer group discussions, it is clear that protecting the environment, in general, is something customers are willing to say they support and policies in this area appear popular. However, it is hard for customers to engage with, they felt the language used was aimed at commercial companies and lacked detail to make it relevant to them. This made it hard to choose between alternative options. This led to a suspicion that Affinity Water may prioritise the environment over customers, and prompted some concerns about bill rises.
- As an important regulatory stakeholder, the Environment Agency's response to Affinity's dWRMP found Affinity's plans to lack ambition and even contravene legislation.

Drought

- **Option 1** - reducing the chance of severe drought to 1.7% - is preferred by 29% of customers while 19% choose Option 2 - moving to a 0.5% chance. However, 22% say that Affinity Water should do nothing because they do not think this is a problem.
- As with the environment, we similarly found scepticism about drought, climate change and demand growth. The UK is thought by customers to be a 'wet country' with an abundance water and some of the proposed changes appeared too far into the future to impact within customers' lifetimes. In our group discussions customers were also sceptical about how the proposals would be regulated and were unsure how they would monitor their own personal water usage.

  Stakeholders emphasised the importance of making customers aware of the problems that could be caused by climate change, such as saline intrusion (the movement of saltwater into freshwater aquifers), rising sea levels and extreme weather conditions, and what kind of impact this could have on water resources in the long term. An open conversation with customers on the actual cost of maintaining water supply during a drought was suggested, to find out if people are prepared to pay more.
- Stakeholders had mixed views on drought resilience, and requested more information on how droughts are defined and exactly what restrictions might be put in place.
- The Environment Agency's response to the WRMP highlights their concern around Affinity Water's ambition for improving resilience to drought, In particular, they want the company to do more, faster, to make progress with strategic long-term options with neighbouring water companies and to reduce its reliance on unstainable sources of abstraction. Ofwat's response has raised concerns about the efficacy of water trading options proposed.

Demand Management and Reducing Consumption

- Just under four in five customers (78%) say that they are careful about how much water they personally use. However, three in five (61%) feel they would be able to make some sort of reduction in their household water consumption, although these customers typically say they could only make a small reduction in usage.
- While none of the three options presented was able to attract the backing of a majority of customers, the least ambitious - Option 1 (reducing water use to an average of 126 litres) - was the most preferred one, chosen by 34%.
- The group discussions also found the overall aim of reducing consumption was generally supported and seen as a good idea by customers. Reducing usage by a quarter did, however, feel like a large reduction, especially for older age groups. Older customers tended to support the reduction to 110 litres daily consumption while younger groups supported a cut to 125 litres.
- During the groups, participants challenged Affinity Water's consumption figures, criticising the lack of comparative information and expressing surprise at how high these are. Customers recognised the importance of this area given its benefits in terms of the environment and lower bills, but expected

Affinity Water to encourage progress proactively by providing water saving devices and education.

- Reducing **PCC** was also a popular focus in stakeholder conversations, with many seeing it as beneficial to all aspects of the dWRMP and Business Plan. Stakeholders highlighted the need for greater communication to the public of information about the supply and demand for water, particularly personal PCC, and of Affinity Water's plans. However, some stakeholders felt that the reductions proposed are too high to be realistic. Participants made many suggestions regarding how to reduce PCC. These included:
    - targeting building regulations ○ involving local authorities and businesses ○ increase awareness of water usage
    - continue to develop water efficient technology and tools for households.
- Stakeholders emphasised resilience to extreme conditions and situations as a very important topic and key priority to ensure future supply. Some commented on the lack of clarity around the details of resilience.
- Some stakeholders commented that the supply and demand situation facing Affinity Water, and hence its solutions, are part of a broader political situation which requires political motivation to be solved. Specifically, a few suggested that, with sufficient political will, greater infrastructure for transferring water across the country can and should be developed, to aid water companies facing supply shortages.
- Some participants raised the issue of housing developments and the interaction between developers, local and central government, and Affinity Water. Some of these participants drew attention to perceived inconsistencies in how housing developments are carried out, especially in terms of how water efficient their designs are. A few commented that, whilst some housing developments are designed to be as water efficient as possible, others, which can be as close as across the road, may be designed very inefficiently.
- Ofwat has commented that it sees "limited ambition for demand management" in the DWRMP.

Environmental Pilot Projects

- The more modest **Option 1** - investing £2 million in local projects – is preferred by 39% of customers, ahead of Option 2 (£6million) which is favoured by 30%. This theme was not covered in detail in the group discussions but was a feature of discussions with customers in respect of the overall Business Plan.
- Spending money on **environmental pilot projects** was a popular focus for stakeholders, with many participants supporting the higher figure of £6m in Business Plan 2 However, stakeholders requested more information on exactly how this money would be spent and how good value for money would be ensured. Conclusions related to dWRMP can be found in Section 6.

5.2 Business Plan Acceptability

This section summarises findings from two research sources conducted to explore a number of different packages of options in the draft Business Plan, designed to gauge and test acceptability and explore customer preference. The research sources were:

- A series of 10 focus groups. 8 of these with existing Affinity Water customers and 2 with future Affinity Water customers. Participants were reached out to through quota sampling to those unlikely to respond to the consultation and were sampled to include a range of ages and social grades. Refer to section 2.3 (Market Research) for more information about this source. Participants were given a task to read an extract of the dWRMP before the discussion group
- An acceptability survey with 825 customers sampled from across the whole supply area. Customers were selected using a 'random locale' selection methodology where sample points from across either eight areas were randomly selected in proportion to the population in each water resource zone. Participants were interviewed face-to-face, in- home in April and May 2018 across the eight water resource zones. Refer to section 2.3 (Market Research) for more information about this source.

Three different Business Plan packages, J, K and L were presented to customers. Each plan is detailed in Table 5. The following findings include information from both sources detailed above.

Table 5: Three different Business Plans presented to customers as packages of options; dWRMP Final Research Report, Ipsos Mori, June 2018

Forecast personal bills	Fixing leaks	Sourcing sustainably	Reducing water use	Risk of interruptions	Severe drought restrictions	Environmental pilot projects	Reliability of water pressure
Plan J: £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: £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: £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
Currently: £167 per year in April 2018	-	-	160 litres per person per day	5% (1 in 20) per year	2.5% (1 in 40) chance per year	-	13 hours low pressure per year

Customers commented that the data in the plans was neither intuitive nor familiar and therefore struggled to come to terms with what was being presented. The lack of context around certain features of the plans, particularly cost, was obvious as participants struggled to understand whether £2 million was 'a lot' when comparing this to other costs or proposals.

Environmental pilot projects were presented as the only feature with associated costing attached. Throughout the research, customers were trading-off options within each of the packaged options rather than choosing between the plans as whole packages (Business Plan focus groups) creating difficulty when trying to gauge support for complete plans.

Initially, customers had mixed feelings about the exercise with some feeling like they had little control over what their water company does. However, participants began to compare and contrast plans as they saw different proposals. A number of observations were made about what areas customers focused on and which areas were, perhaps, more neglected.

- Participants focused largely on fixing leaks, environmental projects and reducing personal water use in the groups with some groups focusing on sourcing water more sustainably. Less time was spent discussing severe drought restrictions, reliability of pressure and risk of interruptions and these areas were not as highly prioritised.

- Levels of preference were higher for less expensive actions among competing sets of options with the exceptions of leakage and reducing abstraction. For leakage, the higher reduction was preferred and for reducing abstraction, customers called for a more ambitious target.

- Generally, older customers were most interested in the environmental aspects of the plan and the younger and future customers balanced these environmental views against cost savings. Future customers also remarked that customer experience was very important too.

Generally, all three plans were considered acceptable scoring between 74% and 78% (for 'very acceptable' or 'fairly acceptable') and no major concerns were raised, however, there was underlying scepticism around the idea of being able to improve outcomes and reduce the cost to customers.

Percentages for level of acceptability for each plan can be seen below.

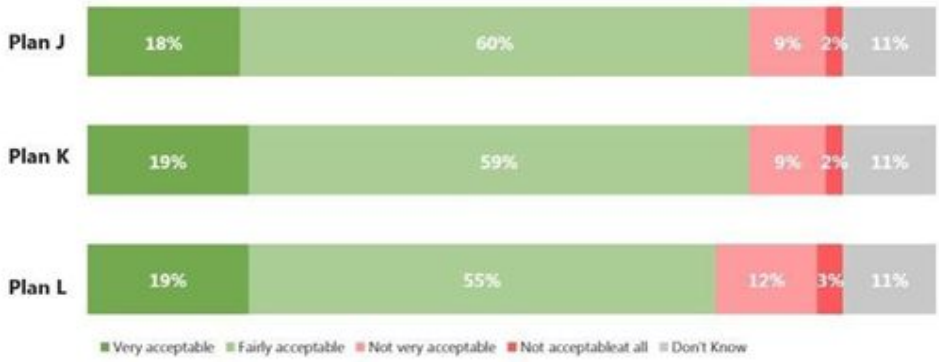


Figure 7: Levels of acceptability for each presented plan; dWRMP Final Research Report, Ipsos Mori, June 2018

Overall responses to the plans are summarised here:

- Plan J was most practically achievable and realistic; however, it was less ambitious than the others and the features presented did not create a plan that stretched targets enough.
- Plan L was considered the most aspirational plan which presented stretching, ambitious targets. This provoked questions around achievability and whether it is something that can practically be delivered. Some customers felt it was ‘too good to be true.’
- Plan K was the most popular plan overall with customers as it was recognised as having strong environmental credentials. Comments received suggested that it could do better in terms of cost savings.

6 Findings and Analysis - Performance Commitments

Table 6 displays our phase 2 triangulated findings from the sources detailed in Section 2 and Section 3. Each source has been analysed and explored to draw out themes and findings relating to Affinity Water's Performance Commitments. These detailed findings can also be found in our triangulation tool (Appendix A) which was used to gather information and make an assessment on the qualities and robustness of sources. Areas of corroboration and contradiction between feedback sources have also been highlighted.

Table 6: Phase 2 findings based on Performance Commitments

Performance Commitment/s	Findings – areas of corroboration	Findings – areas of contradiction
Water Quality Compliance - *Maintain current performance* Mean Zonal Compliance - *Maintain current performance*	80% trust the quality of the water they receive and prioritised receiving a high quality of water, but some expressed concerns about the chemicals added to water, particularly those who don't drink water from the tap *[dWRMP survey]* Clean/safe water was mentioned by most future customers when asked about what the most important thing about your water supply was. *[phase 2 future customers schools focus groups]*, the majority also recognised that clean/safe water is a crucial resource *[future customers school survey]* The smell and taste of water are the main causes of customer complaints around water quality *[Customer feedback Supporting Insight]* Of the positive drivers influencing value for money, water quality has risen significantly *[VfM 2017/2018 summary]* Tap water considered to be safe and palatable compared to rest of world *[Britain Thinks for Water UK]* When re-testing the outcome '*Supplying high quality water you can trust'* for phase 2, this outcome received a mean score of 9.58. [Phase 2 Business Plan acceptability survey]	

Leakage - *Leakage reduction of 11%(preferred dWRMP) or 15% (alternative dWRMP)*	71% of customers strongly back continuing to find ways to reduce leakage, 89% support. Leakage reduction proposals were supported by customers. *[dWRMP survey]* In terms of the different options proposed to reduce leakage, 38% of customers prefer Option 1 - reducing leakage by a further 11% - compared to 31% who choose the more expensive Option 2 which would target a further 15% reduction. *[dWRMP survey]* Leakage is an emotive issue. Customers shocked at level of leakage, perceive it as 'very high' and do not appreciate being asked to save water or temporary restrictions because of this. *[phase 2 future customers schools survey].* There is high support for compulsory metering, 65% if it helps with addressing water leaks *[Ipsos Mori research for NIC, May 18]* Leakage is seen as a visible sign of underperformance and a key part of the 'contract' between company and customers. *[dWRMP/BP qual research]* Many participants felt that both 11% and 15% leakage reductions were too modest. *[Business Plan focus groups]* Customers make the connection between reducing leakage and protecting the environment but also recognise the individual benefit of keeping costs low. *[Business Plan focus groups]* Operational data shows there has been a little more claimed contact on external leaks in 2017/2018 with 27% claiming this as the main reason for contact. *[VfM 2017/2018 Summary]*	Varying views from stakeholders on leakage. Higher leakage reduction was more popular with some seeing it as a top priority while others worried about short term fixes. Some saw leakage as being of little interest to customers. *[stakeholder BP/dWRMP focus groups]* Costs for leaks were presented in % (not the number) and customers struggle to trade off against other areas. They don't understand the investment required *[Business Plan acceptability survey]* Business Plan with highest level of leakage less acceptable to customers (but still 74% support) *[Business Plan acceptability survey]* 61% opposes compulsory metering if it means higher bills *[Ipsos Mori research for NIC, May 18]* Difficult to interpret and understand leakage data without any context. Data was unfamiliar and unintuitive *[Business Plan focus groups]*

Per Capita Consumption (PCC) - *PCC reduction to 129 l/p/d(preferred dWRMP) or 124 l/p/d (alternative dWRMP). Both figures are targets by the end of AMP7*	The majority of future customers agree that there is a need to save water *[phase 2 future customers schools survey]* and also they agreed that individuals should be careful about the amount of water they use *[future customers schools focus groups]* The overall aim of reducing consumption was generally supported and seen as a good idea by customers *[dWRMP focus groups]* 78% say they are careful about how much water they personally use and 61% of participants said they felt they would be able to make a small reduction in household water consumption. Of the three options presented, none of them received a majority backing. *[dWRMP survey]* Many stakeholders advocate a strong focus on water efficient infrastructure in household *[WRMP/BP stakeholder forums]* The general public appear to be open to water reuse as an alternative to reduce wasted water *[Ipsos Mori research for NIC, May 18]* Participants did not think they as individuals wasted water and saw little benefit in turning off taps when brushing teeth for example. They did not understand how Affinity could track individual water use as meters are not mandatory. *[Business Plan focus groups]* Negative reactions when the idea of mandatory restrictions on personal water use was suggested but were more perceptive to Affinity Water helping them reduce their consumptions by incentives/technological solutions. *[Business Plan focus groups]* Public awareness of personal water use is key to reducing PCC *[WRMP/BP stakeholder forums]* Water meters were seen as a positive way of encouraging individuals (66%) to reduce their	Most customers feel that they are already efficient users of water, 40% feel that they cannot use less than at present *[dWRMP survey]* Reduction targets are very ambitious *[WRMP/BP stakeholder forums]* Reducing personal water use directly equated with issues of leakage and participants rejected onus being put on them to save water. Companies should be more responsible for saving water. *[Business Plan focus groups]*

	water use by participants that both had personal experience of water meters and those that did not *[Ipsos Mori research for NIC, May 18]*	

	The data trends (63%, 2014 – 66%, 2018) from VFM survey appear to suggest attitudes to water meters may be improving slightly [VfM 2017/2018 summary]	
PC: Environmental Innovation - Target will be on the completion of the pilot projects. We will offer a base and enhanced pilot project proposal	82% supported raising awareness of how everyone can help protect the water environment *[dWRMP survey]* Nearly 70% supported investment in local environment pilots, term environment seen as particularly positive *[dWRMP survey, stakeholder BP/dWRMP focus groups]* The higher figure proposed (£6 million) was favoured by most stakeholders as they saw spending money on environmental pilot project important *[stakeholder BP/dWRMP focus groups]* Difficulty in making decision about whether to prioritise these. Some scepticism about the effectiveness of projects and the cost. *[Business Plan focus groups]* Varying views expressed as to who was a role in protecting the environment, but generally agreement that it is both the responsibility of the individual and of the water company - 89% of customers think Affinity Water should do more to save water and reduce wastage through leakage and bursts and 86% agreed that individuals should be careful about the amount of water they use *[future customers schools focus groups]*	Further detail requested on environmental pilot projects to determine value for money *[dWRMP survey and focus groups, stakeholder BP/dWRMP focus groups]* 39% prefer the £2m investment, 30% prefer the £6m investment, 30% other/don't know. *[dWRMP survey]* The connection between the money spent on environmental pilot projects and the proposed reductions in abstraction is not clear. [*stakeholder BP/dWRMP focus groups]* Schools' is a polarising feature of pilot projects (considered duplicated by some) *[Business Plan focus groups]* It's unclear exactly what these 'pilot projects' are, where they will be or how their impact will be measured. *[stakeholder BP/dWRMP focus groups]*
PC: Sustainable Abstraction - *10.22 ML/D (preferred*	Customers generally supported Affinity Water in taking less water from the environment and 43% favoured the more ambitious option (taking 33 million litres less per day) but customers noted that	Customers only prioritised reducing abstraction after they understood what it

plan) or 39 ML/D (alternative plan) PC: AIM - *Maintain current performance*	the cost difference between options was minimal compared to other proposals such as leakage. *[dWRMP survey]* Abstraction hard to engage with and suspicion that the environment might be prioritised over customers. *[dWRMP focus groups]* Customers felt that the alternative option was unclear and presented as inferior by Affinity Water. *[dWRMP focus groups]* General ambivalence as to how this area should be prioritised given the low levels of knowledge. *[Business Plan focus groups]* The targets seem low in comparison to past abstraction reductions. Good to reduce abstraction as much as possible but could lead to supply shortages if other targets aren't met. *[dWRMP/BP stakeholder forums]* A slight majority of future customers agree in taking less water from rivers and just less that majority agreed that we must take less water from aquifers *[future customers schools focus groups]* Nine in ten customers (89%) say that the local environment is important to them personally, with half (50%) agreeing strongly. Similarly, two-thirds (67%) support Affinity Water reducing the amount of water taken from the water environment. *[dWRMP survey]* When re-testing the outcome '*Making sure you have enough water, while leaving more water in the environment'* for Phase 2, it received a mean score of 9.19. [Business Plan Acceptability Survey].	was, the wording was jargon heavy and vague. *[dWRMP survey]* Abstraction hard to engage with and suspicion that the environment might be prioritised over customers. *[dWRMP focus groups]* Stakeholders cautioned support in abstraction reduction with concern about possible knock-on effects on the environment and on supply levels. In addition other stakeholder felt that higher reductions are not achievable due to anticipated demand growth *[dWRMP/BP stakeholder forums]*
PC- River Restoration - *TBC*	77% of customers visit the water environment at least once a year, with 41% visiting every month *[dWRMP survey]*	

PC: C-Mex - *TBC*	Majority of customers are very/satisfied with the service they receive from Affinity *[Business Plan acceptability survey]* When re-testing the outcome '*Providing a great service that you value,'* for Phase 2, it received a score of 9.08. [Phase 2 Business Plan acceptability survey]	49% agree that their household water bills are too expensive these days *[dWRMP survey]* Some customers find water bills too expensive; in some cases bills received

	Since 01/04/2016 to date we have received 244,498 items of customer feedback of which 89% have responded with very satisfied or satisfied, 8% very dissatisfied or dissatisfied and 3% neither *[Customer feedback Supporting Insight]* Customers stressed the importance of good customer service, particular when they need to directly contact Affinity Water *[BP focus groups]* Household customers generally feel positive about the service they receive from Affinity staff and the manner in which they engage with them – knowledgeable, helpful and understanding and help save the environment *[operational facing staff survey]* Customers who had contact with Affinity Water generally had a positive experience, however, those who didn't receive great service they suggested improvements around greater ownership of issues; resolving complaints quicker; resourcing more call operators; improved online service provision; more regular email updates and water meter readings *[operational data]* Customer service expectations are higher among younger, future customers who prefer text, online and social media as well as TV and celebrity advertising *[future customers schools focus groups]* The company achieved 6th position in the industry UKCSI survey (pre July 5th score) *[Customer feedback Supporting Insight],* Customers take their water supply for granted and knew little about Affinity Water beyond the name. *[Business Plan focus groups]* Customers have a limited awareness and understanding Affinity and the service it provides; with limited interaction (beyond billing) *[Future customers schools survey]* Customers want to know more about services available to support them, for example social tariff information, water saving, bill payment options, leakage and comparative data *[Business*	following water meter installation *[operational data]* There are very few complaints about price perception *[operational data]* Positive perceptions of affordability are not shared by all; specifically unstable income earners, large families / households (where fluctuation is greater), retail and developer customers *[operational facing staff survey]* Of the negative drivers influencing value for money, perceived bill change, no choice in having a meter and contact with Affinity Water have increased significantly. This means these areas have an increasingly negative impact on value for money *[VfM 2017/2018 summary]* The VfM survey suggests that external factors are influencing customers outlook on value for money and indicators of ambivalence toward VFM are growing. *[VfM 2017/2018 summary].* Across the UK, there is lower customer

	Plan focus groups]	satisfaction in the Utilities sector than other sector *[UKCSI Survey]*

	Customers feel Affinity do not communicate effectively with them (right content, frequency, mode and method – e.g. 'Keep Track of the Tap' campaign); and specifically during interruptions *[dWRMP/BP focus groups and operational data]* Customers increasingly want to use online methods of contact; specifically future customers *[Business Plan focus groups]* Household customers generally see water as affordable (87%)" a good deal"; and when compared to other utilities (29% better value; 57%same value) *[Business Plan acceptability survey]* The majority of future customers agreed that the cost of water is important to them *[phase 2 future customers schools focus groups]* Many believe that plan and costs are already set and they are not expert enough to make a judgement about cost and value for money *[dWRMP focus groups]* Amongst non-households, the evidence suggests that WTP has increased since PR14. *[WTP review]* Operational data shows that of the minority of customers who have contact Affinity Water in the last year, 9 out of 10 customers found it easy to access their services. *[VfM 2017/2018 summary]* In January – March 2018, there was a strong dip on strong positive satisfaction, potentially a result of cold weather interruptions and associated publicity. *[VfM 2017/2018 summary]* Operational data suggests customers need to be communicated with effectively and positively to persuade customers to have a meter installed as those who have chosen to have a meter are more positive about them than those who don't have one. *[VfM 2017/2018 summary]*	
PC: D-Mex -*TBC*	When developers were asked about what customers talk to them about, some of the positives included receiving help in using online service and receiving good technical support. However, there were significantly more negative comments from customers	

	including cost too high, unclear	

	information, poor website, long waiting times on phone and delays in construction. *[customer facing staff online survey]*	
PC: PSR – Satisfaction - *Performance target to be consistent across the AMP* PC: PSR – Ease - *Performance target to be consistent across the AMP*	63% are in support of Affinity Water spending more on the Social Tariff to support more customers and 47% of customers are in favour of increasing overall bills to support more people but the level of support varied. *[Business Plan acceptability survey]* Support is higher still among those in households that receive Benefits (72%) and among customers who feel water bills are better value for money (76%). *[Business Plan acceptability survey]* Views on this issue are complex and can be influenced by the stimulus *provided in the questioning.* *[Business Plan acceptability survey]* 50% agreed that the discount offered through social tariff should be larger for households with lowest incomes, whilst 32% prefer the current model [Business Plan acceptability survey]. Views on this varied across different groups for example between ABC1 and BME groupings are slightly in favour of the current fixed model. *[Business Plan acceptability survey]* Nearly a quarter of Affinity Water customers could be considered vulnerable. They are more likely to be over 65 years old and living in single person households. *[VfM 2017/2018 summary]* In the VfM, of the 16% that worry about being able to pay their bill, 10% are not considered vulnerable. (Whereas 17% could be considered vulnerable but are not worried.) *[VfM 2017/2018 summary]*	34% of participants opposed a bill increase to support higher spending on the Social Tariff to reduce bad debt suggesting this support is dependent on framing. *[phase 2 BP acceptability survey]* 39% believe Affinity should not add anything to water bills but continue to support 50,000 customers *[phase 2 BP acceptability survey]* 35% of participants opposed a bill increase to support higher spending on the Social Tariff to reduce bad debt suggesting this support is dependent on framing. *[phase 2 BP acceptability survey]*

PC: False Voids & Gap Sites - *Maintain current performance*	Most customers are happy for Affinity Water to "just get on with the job" *[dWRMP survey]* Household customers generally see water as affordable (87%)" a good deal"; and when compared to other utilities (29% better value; 57% same value) *[Business Plan acceptability survey].*	

	The majority of future customers agreed that the cost of water is important to them *[future customers schools focus groups]* Many believe that plan and costs are already set and they are not expert enough to make a judgement about cost and value for money *[dWRMP focus groups]*	
PC: Supply Interruptions - *Three options on performance levels:* *1. 12 minutes at the start of the AMP, moving to 6 mins in year 3* *2. 10 minutes at the start of the AMP, moving to 3 mins in year 3*	1/3 of customers have previously experienced an interruption to their supply, largely in their homes with 58% of these causing no impact on the household *[Supply outage compensation levels survey]* Those who hadn't previously experienced an interruption required a high level of compensation suggesting an interruption to supply may not be as bad as they expect. *[Supply outage compensation levels survey]* Future customers particularly valued an uninterrupted supply as an important part of the service provided to customers. *[Business Plan focus groups]* When re-testing the customer outcome '*minimising disruption to you and your community*' for Phase 2, it scored an average of 8.81. [Phase 2 Business Plan acceptability survey] ½ of customers found current compensation for unplanned interruptions as 'about right' and the other ½ felt it was 'far/too little'. As expected, there was higher acceptance with higher compensation offered. The duration of the interruption had little impact on this. *[Supply outage compensation levels survey]*	

3. 12 minutes at the start of the AMP, moving to 10 mins in year 3	There is higher acceptance of planned interruptions over unplanned interruptions with most customers finding compensation for these as appropriate. *[Supply outage compensation levels survey]* Overall, compensation level of £25.20 per household needed to ensure 70% would choose the 'interruption + compensation' option over 'no interruption.' The oldest customers require a substantially higher level of compensation than other age groups. *[Supply outage compensation levels survey]*	

	Some stakeholders commented that, when interruptions do occur, good use of social media and other means of communication to customers are essential for mitigating the impact *[BP/dWRMP Stakeholder forums]* Many stakeholders commented that the risk of interruptions is of relatively low importance to them and to other customers, given the low probability of interruptions in all three plans *[BP/dWRMP Stakeholder forums]* Almost 90% of participants responding to the Value for Money survey stated they had not experienced any kind of problem, including interruptions, in the last 12 months. *[VfM 2017/2018 summary].* Value for Money survey data that states customers often tell Affinity Water they are satisfied with the service because they are not experiencing problems or interruptions. *[Value for Money 2017/2018 summary]* Ofwat found that Affinity Water's performance largely met its customers' expectations, but there are still gaps and room for improvement. In particular, that includes better proactive communication with customers *[Out in the Cold, Ofwat, June 2018]*	

PC: Mains Bursts – *Maintain current performance* PC: Unplanned Outage – *Maintain current performance*	Most customers are happy for Affinity Water to "just get on with the job" *[dWRMP survey]* Household customers generally see water as affordable (87%)" a good deal"; and when compared to other utilities (29% better value; 57% same value) *[Business Plan acceptability survey].* 1/3 of customers have previously experienced an interruption to their supply, largely in their homes with 58% of these causing no impact on the household *[Supply outage compensation levels survey]* Vast majority see their water supply as reliable but a small proportion disagree. *[future customers schools online survey]*	Most future customers agreed water companies should do more regarding leaks and burst pipes. *[future customer schools focus groups]*

PC: Low Pressure - *Three options: -* *6.5 hours* *8.7 hours* *10 hours*	20% of customers reported having experienced 'low pressure on a regular basis in the last 5 years' *[Business Plan survey]* Customers find plans that improve water pressure acceptable, in the round *[Business Plan survey]* Operational data indicates that there may be ongoing issues with only a minority of customers experiencing low pressure [VfM 2017/2018 summary]	Some stakeholder felt that this area was of low significance to customers, as they believed that most customers do not have water pressure issues or that they would not notice temporary reduced pressure *[Business Plan stakeholder workshop]* Not highly prioritised in many groups as level of interruption deemed acceptable *[* *Business Plan focus groups]*

PC: Risk of Severe Restrictions - *Drought measure to 1 in 60/80 (preferred dWRMP) or 1 in 200 (alternative dWRMP)*	29% of customers prefer Option 1, 19% prefer Option 2, 51% other/prefer another. *[dWRMP survey]* Customers feel that hosepipe bans are an acceptable method for managing resources, despite perceiving that they happen more frequently than reality. *[future customers schools focus groups]* Stakeholder participants had mixed views on drought resilience, and requested more information on how droughts are defined and exactly what restrictions might be put in place *[BP/dWRMP Stakeholder forums]* When re-testing the outcome '*Making sure you have enough water, while leaving more water in the environment'* for Phase 2, it received a mean score of 9.19. [Business Plan Acceptability Survey]. The UK is currently at high risk of experiencing a severe drought. *[NIC, April 2018]*	Drought not seen as a problem, as we live in a wet country [dWRMP focus groups]

6.1 Comparison with pre-phase 2 (and PR14)

Overall, the findings from phase 2 were consistent with and corroborated our understanding of customer drivers from work at previous phases. In addition, we were able to obtain more quantifiable data, and build an understanding of views in response to specific propositions put forward by Affinity Water.

Drawing comparisons to PR14, we feel that we have seen three main areas of evolution of customer views:

1. There has been a greater acceptance of metering than at PR14. Though, still over half (57% of customers are in favour of the extension of compulsory metering [dWRMP survey]
2. Customers are slowly asking for a greater personalisation of communications. This was particularly evident in the future customer's survey and focus groups
3. There is a greater acceptance of reducing water use by customers, although overall the least reduction was chosen (with 34% supporting a reduction to 126 litres a day from 160).

7 Conclusions and next steps

7.1 For the Business Plan and WRMP

Customer insight will be used, alongside stakeholder input, technical, environmental and commercial considerations to inform both the PR19 Business Plan and the Water Resources Management Plan.

Business Plan

In order to support the use of insight in the business plan, as set out in section 1, we have carried out a workshop with each of the business plan chapter leads to explore the data and information that will inform that the decisions that they are integrating into the plan.

In order to enable key customer insights to be integrated into the final business plan, we have triangulated the findings from phase 2 with findings from previous phases to enable clear messages to permeate throughout the plan. These are summarised below, and shared in more detail in appendix B.

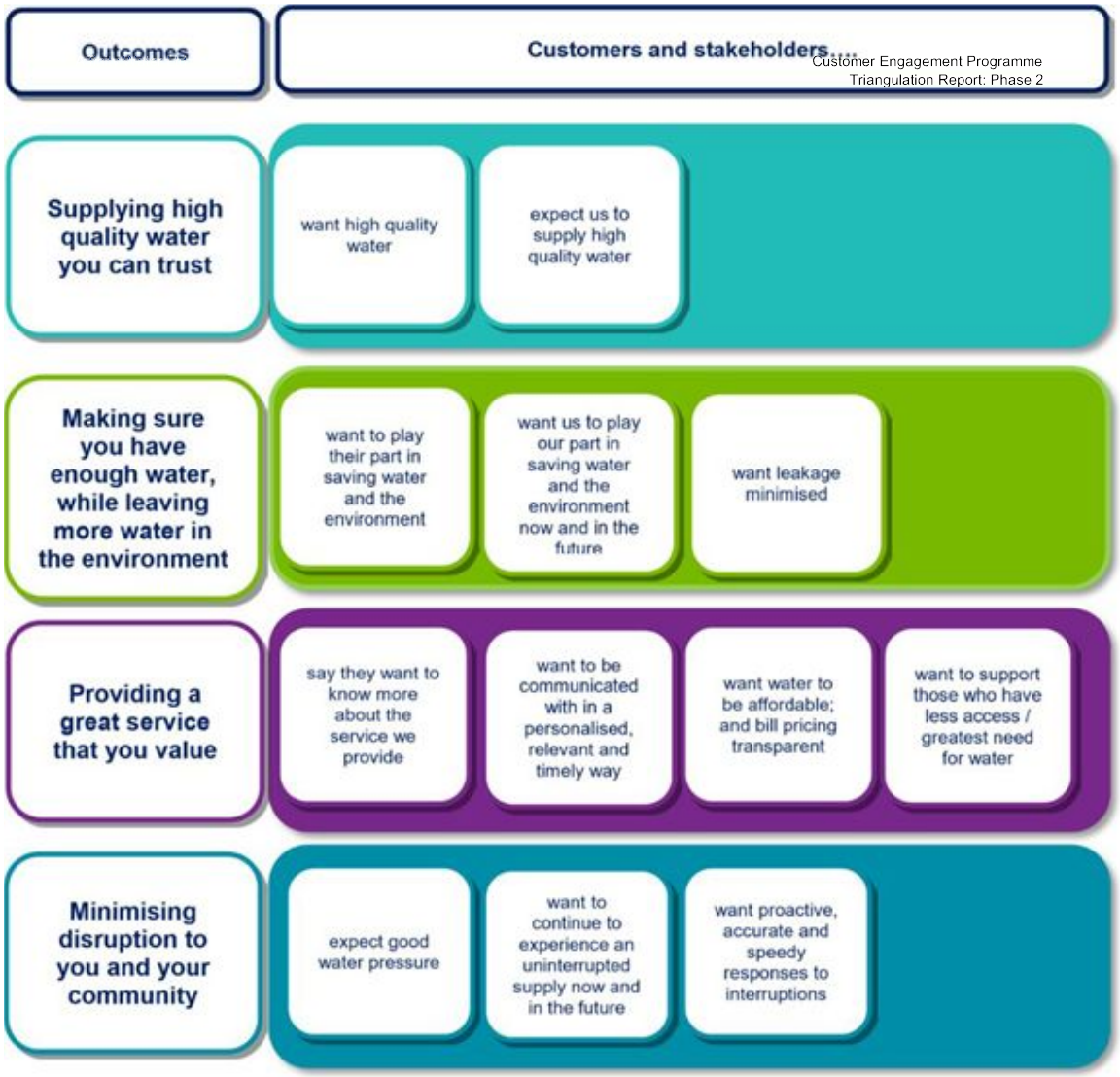


Figure 8: Key findings from across the customer engagement programme linked to customer outcomes

Figure 9: Workshop with findings aligned to proposed investments in a draft business plan chapter

These findings have been collaboratively reviewed in our workshop to explore how the draft proposals in the plan respond to customer preferences. This exercise helped to confirm that, across the plan, there are proposals that respond to all of these insights, at least in part.

As customer insight alone is never the only consideration for decision making, where alternatives have been presented to customers, it is difficult to give a clear view on which

should be taken forward. This is most pertinent when it comes to performance commitment levels. For example, with respect to leakage, whilst more customers preferred 11% leakage (38%) to 15% leakage (31%), Affinity Water must also

take into account stakeholder views. Both the Environment Agency and Ofwat are clear that they expect a 15% leakage reduction.

Overall, the findings on Business Plan Acceptability survey and qualitative demonstrate that customers generally find all of the plans presented acceptable. This suggests that Affinity Water ought to expect customer backing for whichever one, or combination of these, is chosen.

Water Resources Management Plan

On the dWRMP, customers are broadly positive about the different proposals offered; they tend to support rather than oppose these, although the level of support varies from nine in ten (89%) in favour of the most popular proposal down to 57% for the least popular one. The most popular proposal is leakage reduction and the least is extension of compulsory metering.

The aspects of water resources management that impact customers the most, and are most tangible to them, are likely to be their main focus and priorities in respect of the Water Resources Management Plan. As we have found in earlier phases of PR19 market research, the potential for improvement and focus for Affinity Water comes more in operational matters – i.e. 'how' (and 'how much') it does things – rather than in the broad strategy – the 'what'.

Stakeholders, who have a clearer understanding of the macro challenges, were more able to discern between plans, but also tended to comment on individual options and targets rather than the plan as a whole.

Stakeholders have an appetite to stretch plan targets and be more ambitious.

Many stakeholders support the partnership approach (across industry and with customers) to reduce PCC to 110 litres per person per day. They believe a reducing personal consumption has a positive knock on impact for other options presented. High leakage and PCC suggests the price of water might be too low. This research also points to the centrality in customers' eyes of a strong, but affordable, commitment to reducing leakage within Affinity Water's WRMP and the wider Business Plan.

7.2 For the next stage of customer engagement

The key part of phase 3 is to the test acceptability of the Final Plan (Figure 10) and associated household bill impact with customers. This will be undertaken via an online survey of 1000 customers from early July to end of July 2018.

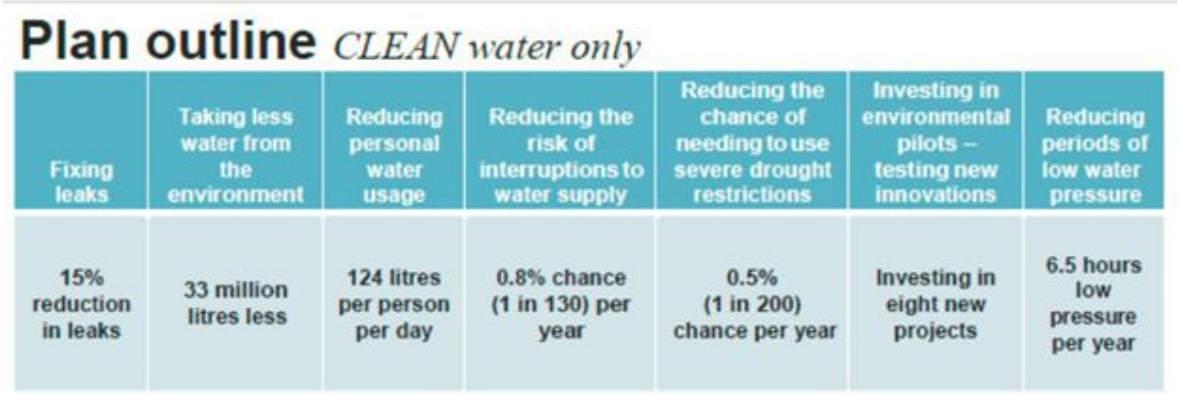


Figure 10: Final Plan

There are however, gaps which have been identified during phase 2 and will need addressing in the next phase of the customer engagement activities. The topics are:

- Additional market research to confirm customer acceptability of Social Tarif Proposal. This survey will be incorporated onto the final bill impact acceptability survey
- Community/customer engagement with Affinity Water senior management including CEO and Chairman. The engagement will be undertaken with a small group of customers via three events, from early July to the third week in July 2018
- Talking about resilience in general with customers. This will be undertaken via customer focus groups and will happen from July into September 2018
- Acceptability testing on proposals relating to delivery water resource to support long-term resilience. Customer evidence is required to confirm acceptability of the proposed long-term investment for the Upper Thames Resource development. This will be undertaken via an online survey of about 500 customers.

7.3 For business-as-usual customer engagement

As outlined in Section 2, a significant proportion of phase 2 engagement involved preparing and presenting various stimulus representing business plan propositions to customers (and stakeholders). In general, customers struggled to engage with the information presented – requiring further time to explain and work it through with participants. As noted in our phase 1 report (and a finding for Affinity), customer engagement activity would benefit greater focus on communication planning and strategy to ensure engagement is delivered in the most engaging and meaningful way.

As we discovered in earlier phases of PR19 market research, the potential for improvement and focus for Affinity Water comes more in operational matters – i.e. 'how' (and 'how much') it does things – rather than in the broad strategy – the 'what'.

These findings underline the importance of communicating water resources

management and technical water issues in ways which are tangible to customers and stakeholder, building awareness of the premise behind change, and being clear on the detail of what change will involve.

In light of this, the following recommendations are proposed for incorporating as BAU into future market research:

- Carrying out workshops to understand different stakeholder (regulator, business, customer) needs in advance of engagement design in order to strike the right balance – in particular securing sufficient pace for briefing and educating research participants
- Being clear about segmentation (disaggregation) from the outset and designing this into the engagement process
- Developing alternative ways of presenting information and testing these with target participants in advance (relatable frames of reference for people e.g. reference to litres, bath-fulls, umbrella days)
- Cognitively testing survey questionnaires before fieldwork commences
- Staging a ‘pause’ within qualitative fieldwork with client and stakeholder feedback – sharing observation
- Considering verbal or film debriefing of participants as well as written material to create more engagement findings
- Using Phase 2 surveys and exploiting their enhanced robustness to capture customer priorities as well as acceptability
- Paying careful attention to ‘order effects’ within surveys and the burden created by lengthy engagements (e.g. 20-minute data-heavy surveys, 2 hour discussions, and pre-tasks)
- Collecting permission to re-contact research participants - using follow-up qualitative research post survey
- More ongoing customer education and two-way conversations, to enable more meaningful engagement.

Essential for the above enhancements to be possible, is greater lead in and planning time as well as stronger collaboration across stakeholder groups with vested interests.

Appendix A

Triangulation Tool

PR19 CustEng -ARP-PH2 -TRGN-TREP-003 | Issue | 21 Aug

Appendix B

Customer Outcomes and findings from throughout the customer engagement programme

Appendix RR.A10.2

Action ref AFW.RR.A10

Supplementary report to Ofwat from the Affinity Water Customer Challenge Group (29 March 2019)

PR19 – IAP stage - CCG Report

Supplementary report to Ofwat from the Affinity Water Customer Challenge Group

29 March 2019

About this report

This is a report prepared for Ofwat by the Affinity Water Customer Challenge Group (CCG) about Affinity Water Limited's (AWL) response to Ofwat's Initial Assessment of Plans (IAP). The members of the CCG at 1 April 2019 are listed at Annex A. Our Terms of Reference can be found on AWL's website.[4]

The IAP is part of Ofwat's process for considering AWL's PR19 Business Plan submission for the period 2020/25. In relation to PR19 Ofwat has asked the CCG to provide:

'*independent challenge to the company and independent assurance to Ofwat on the quality of the company's customer engagement for PR19, and the degree to which this is reflected in its business plan'.*

The CCG submitted its primary PR19 report to Ofwat on 3 September 2018[5]. That report explains in more detail the CCG's role in the PR19 process and the approach taken to challenging and assuring AWL's customer engagement for PR19.

In relation to the IAP stage in the PR19 process the CCG has been asked to undertake assurance of additional customer engagement AWL is carrying out between 31 January and 1 April 2019 and to provide a report to Ofwat, also by 1 April. In an email to all CCG Chairs[6] Ofwat advised that they were asking:

'*CCGs to submit by 1 April a short and focussed report covering any aspects of the re-submission [of the business plan] that require comment on the quality and influence of related customer engagement.*

Ofwat added that

'Documents released to companies today make clear which parts of the resubmitted business plans will require assurance from the CCG.'

The CCG's has reviewed and commented on AWLs responses to **16** action points Sections 2 and 3 of this report. Section 2 deals with the 2 action points where Ofwat asked the company to obtain assurance from the CCG. Section 3 covers the 14 action points which we have selected to review because they either a) relate to matters the CCG considered in some depth in its September 2018 report; or b) Ofwat has

[4] https://stakeholder.affinitywater.co.uk/docs/CCG-terms-of-reference.pdf

[5] https://stakeholder.affinitywater.co.uk/docs/CCG/CCG-Business-Plan-Report-Complete-final%202%20September-11am-Linked-Version.pdf

[6] Ofwat email to CCG Chairs 31 January 2018

mentioned the CCG, but without asking that we provide assurance; or c) we are currently involved in advising and challenging AWL, e.g. the revisions to the draft Water Resources Management Plan (rdWRMP) which is completed in May 2019.

Contents

1. Summary

2. Method and approach

3. Action points where Ofwat requested CCG assurance – (2)

AV.A1 Affordability and acceptability of bill profile 2020/25

AV.A2 Affordability and acceptability of bill profile 2025/30

4. Action points the CCG has asked to review – (14)

AV.A3 Social tariff cross-subsidy research

AV.A4 Performance Commitment on achieving the BSI standard

AV.A5 Performance commitment on increasing registrants on the Priority Services Register (PSR)

OC.A3 Value for Money survey performance commitment

OC.A11 Leakage reduction target

OC.A27 Water pressure performance commitment level

OC.A32 Performance Commitment on customer satisfaction with services for customers in vulnerable circumstances

OC.A34 Performance Commitment on customers in vulnerable circumstances' experience of dealing with AWL

OC.A33 Performance level for PC on customer satisfaction with services for customers in vulnerable circumstances

OC.A35 Performance level for PC on customers in vulnerable circumstances' experience of dealing with AWL

OC.A36 Customer evidence for PC on 'environmental projects'

OC.A46 Mean Zonal Compliance – proposed retention of PC

CMI.A1 Potential strategic supply options and engagement

RR.A10 Steps taken to address CCG concerns

Annex A – List of CCG Members at end March 2019

Annex B – List of documents received and reviewed in relation to this report

Annex C – CCG PR19 test areas

Acronyms and abbreviations

AWL	Affinity Water Limited
BP	Business Plan
dBP-	draft Business Plan
CCG	Customer Challenge Group
CCW	Consumer Council for Water
IAP	Initial Assessment of Plans
KPI	Key Performance Indicator
Ofwat	Office of Water Services
ODI	Output Delivery Incentive
PC	performance commitment
PR19	Price review 2019
PSR	Priority Services Register
WRMP	Water Resources Management Plan
dWRMP	draft Water Resources Management Plan
rdWRMP	revised draft Water Resources Management Plan

1. Summary

- We have reviewed AWLs responses to **16** Ofwat IAP action points.

- We **provide positive confirmatory assurance on the action AWL has taken** on the two action points where Ofwat specifically asked AWL to obtain assurance from the CCG (**AV.A1** and **AV.A2).**

- We **note** that the company now proposes a lower level of charges for clean water (without inflation and sewerage charges). The average water bill is now projected to reduce by 1.6% between 2020 and 2025 (instead of increasing by 2.1%) and will further reduce by 2.0% between 2025 and 2030 (instead of increasing by 3.1%). The details of the proposal are set out in AWLs response to **RRA10,** which we have reviewed. The revised average bill level now proposed by AWL was effectively tested with customers in Spring 2018 as part of 'Phase 2' of AWL's customer engagement programme. We remind Ofwat of the assurance we have previously provided on that research in our September 2018 report.[7]

- We note and **welcome** that AWL has decided to improve and extend its performance commitments (PCs) to customers in several areas:

    - Increasing the level of its performance commitment on leakage reduction so that leakage is reduced by 18.5% by 2025, instead of 15% proposed in its Business Plan;

    - Adopting a new performance commitment to maintain the BSI certification 18477 for Inclusive Services between 2020-25;

    - Increasing its target performance levels for bespoke PCs concerned with satisfaction with services and experience of dealing with AWL amongst customers in vulnerable circumstances to 90%, instead of 82% proposed in September 2018;

    - Accepting the new 'Common Performance Commitment' proposed by Ofwat in relation to its Priority Services Register (PSR), and setting a target to increase the number of customers on the PSR from 2.5% in 2018 to 7.22% of customers by 2025, instead of both the increase to 6.3% of

[7] https://stakeholder.affinitywater.co.uk/docs/CCG/CCG-Business-Plan-Report-Complete-final%202%20September-11am-Linked-Version.pdf

customers proposed by AWL in September 2018, and 7% proposed by Ofwat on 31 January 2018.

- Retaining its present PC to undertake an annual survey of customer perceptions of 'value for money', with appropriate changes made to the methodology for this survey, seeking advice from the CCG on this;

- Introducing a new bespoke PC on resilience relating to disruption to customers as a result of unplanned interruptions to IT systems and online services, an area where customers have experienced problems with performance in the past few years.

- We note that as part of the research AWL has conducted to respond to Ofwat's AV.A1 and AV.A2 action points it asked customers for their views on the acceptability of several new performance commitments that are now included in the Business Plan in response to Ofwat's IAP. These include four aspects relating to AWL's services and support for customers in vulnerable circumstances, IT system and service downtime and strategic water resource development.

1. Method and approach

1.1 Background

On 31 January Ofwat published its Initial Assessment of Plans (IAP) submitted by all water (and sewerage) companies in September 2018. These plans were required as part of Ofwat's periodic review of companies' price limits, a process which ends in December 2019 when Ofwat will have decided the prices water (and sewerage) companies can charge their customers between 2020 and 2025. This periodic review process is called 'PR19'.

Ofwat has given companies detailed assessments and 'action points', most of which require responses by 1 April 2019. Although this process is being called a 'resubmission' of the business plan companies are responding to discrete questions about their proposed plan. This includes requests for more evidence or research to be done, or for changes to be made to elements of their plan such as performance commitments or targets.

AWL has been asked to obtain assurance from the CCG of evidence of engagement with customers about the bills that were proposed by AWL in September 2018. We are asked to provide a report to Ofwat by 1 April.

Ofwat has not set out any specific requirements as to the format of responses or scope and approach that CCG reports should take. Only a few of the 'action points' they have published for companies refer specifically to CCG assurance being required, but most do not make any reference to CCGs. In an email to CCG Chairs on 31 January 2019 Ofwat said:

'We recognise that time is very limited, so expect companies and CCGs to work together constructively, effectively and pragmatically as you and they develop responses to our initial assessment of business plans.

Below we explain the decisions we have made about the scope of our work on this task, and our approach to providing any 'assurance' requested by the company and Ofwat.

1.2 Agreeing the scope of our report

In February 2019 members of the CCG reviewed and noted Ofwat's assessment of AWL's business plan[8] and that AWL had been given many Action Points to respond to. Only two of those action points (AV.A1 and AV.A2) require the company to obtain assurance from the CCG.

[8] https://www.ofwat.gov.uk/regulated-companies/price-review/2019-price-review/initial-assessment-of-plans/

Mindful that Ofwat has used the word '*pragmatic'* in their request to us, and the limited time for this exercise we considered that beyond addressing the two action points where Ofwat has specifically asked the company to obtain assurance from us it is a matter for us to decide what other matters we wished to, and could, review in the time available between 31 January and 1 April 2019.

We initially agreed[9] to review AWLs responses to **10** of the Ofwat action points, including the two action points (AV.A1 and AV.A2) where Ofwat had required the company to obtain assurance from us. The other action point responses were selected by us because they related to matters the CCG considered in some depth in its September 2018 report, or Ofwat has mentioned the CCG but without asking that we provide assurance, or, as in the case of the revisions to the draft Water Resources Management Plan (rdWRMP) we are currently involved.

During March the Chair requested that the CCG could review a further **6** responses, bringing the total number of company action responses we have reviewed to **16.** These are set out below:

Ofwat Assurance requested Action points – (2)

AV.A1 Affordability and acceptability of bill profile 2020/25
AV.A2 Affordability and acceptability of bill profile 2025/30

Action points the CCG has asked to review – (14)

AV.A3 Social tariff cross-subsidy research
AV.A4 Performance Commitment (PC) on achieving the BSI standard
AV.A5 PC on increasing registrants on the Priority Services Register (PSR)
OC:A3 Value for Money survey performance commitment
OC.A11 Leakage reduction target
OC.A27 Water pressure performance commitment level
OC:A32 PC on customer **satisfaction** with services for customers in vulnerable circumstances
OC:A34 PC on customers in vulnerable circumstances **experience of dealing** with AWL
OC:A33 Performance level for PC on customers in vulnerable circumstances **satisfaction** with AWLs service
OC:A35 Performance level for PC on customers in vulnerable circumstances **experience of dealing** with AWL
OC.A36 Customer evidence for the PC on 'environmental projects'
OC.A46 Mean Zonal Compliance – proposed retention of PC
CMI.A1 Potential strategic supply options and engagement
RR.A10 Steps taken to address CCG concerns

[9]The CCG Chair circulated a proposed course of action and scope to CCG members and AWL on 31 January 2019. At its meeting on 13 March 2019 the CCG confirmed its agreement to the approach to the task and reviewed written responses from AWL to various Ofwat IAP action points.

The CCG's comments on **16** action points are addressed in Sections 2 and 3. Section 2 deals with the 2 action points where Ofwat asked the company to obtain assurance from the CCG. Section 3 covers the other action points which we have selected to review.

1.3 Our approach to assessment and 'assurance'

Our approach to providing any judgement, assurance or comment on the company's responses to Ofwat's action points has been to:

- confirm we have reviewed the company's response in as final form as has been possible in a parallel reporting exercise;
- confirm, if we are able, that AWL has undertaken the action requested by Ofwat in an appropriate way, having regard to their PR19 methodology;
- provide Ofwat with any relevant information or observations we have on the matter, including reference to issues we have raised with the company and relevant issues referred to in our September 2018 report.

We also agreed that if we were expected to provide a judgement about the *quality* of any new customer engagement in the company's responses we would apply and refer to the 'test areas' which we used in our report for Ofwat in September 2018.[10] These test areas were designed to address the requirements Ofwat had set out for effective customer engagement in its policy statement on customer engagement (May 2016). The role of CCG's is primarily to comment on the effectiveness of customer engagement at this price review not to endorse company plans.

Bearing in mind the scope of the action points we agreed to review the most relevant of our PR19 test areas for this task are 5, 7, 11 and 12, set out below. The full list of all our agreed test areas for PR19 is included in Annex C for reference:

Test Area 5	Has the company presented its customers with realistic options?
Test Area 7	Has the engagement with customers been sufficiently diverse, involving the using of methods appropriate and effective for engaging with a diverse range of customers. Does this include customers in circumstances that make them vulnerable? Has the company considered the most effective methods for engaging different customers, including those that are hard to

[10] See Annex C

	reach?
Test Area 11	Is the proposed plan affordable for current customers, future customers and those struggling or at risk of struggling to pay? How well does the company understand what affordability looks like for its customers, and do customers support the approach they have taken?
Test Area 12	Vulnerability - Is the company's approach to vulnerability targeted, efficient and effective? CCG view on the quality of planned support for customers in vulnerable circumstances, taking into account Ofwat's February 2016 Vulnerability Focus report.

In view of the discrete and informational nature of AWLs responses to Ofwat's action points we have not sought to provide 'Red', 'Amber' or 'Green' ratings as we did in our September 2018 report. Rather we have used our 'test areas' as guides to judge whether to comment on the company's responses.

1.4 Working process adopted

Our approach to this task has involved the following key stages:

31 January	Initial briefing for members after the publication of Ofwat's IAP
12 February	Outline approach to the task circulated by the Chair following meetings with AWL following up company communication of 9 February
20-22 February	4 members reviewed and commented on/challenged draft survey designs used by AWL to respond to AV1 and AV2
26 February	AWL Board agreement to the scope of the CCG review (i.e. the initial proposal from the Chair for the CCG to review 10 action points)
8 March	Drafts of some AWL responses circulated to CCG members for comment/queries
13 March	CCG meeting to review company responses to 10 action points in our initial agreed scope, queries raised and discussed with the company. AWL tabled updates on its proposed bill profile and other matters it intended to change in its business plan submission. CCG requested sight of 2 further action point responses relating to the performance levels for PCs measuring vulnerable customers' satisfaction with AWL services.
18 March	Draft CCG report circulated to members and AWL for comment by 22 March
20 March	CCG Chair requested sight of 4 additional action point responses likely to relate to matters in the CCG's September

	2018 report, or relating to issues raised at the meeting on 13 March (leakage, low pressure, environmental projects and MZC)
21 March	CCG Chair attended AWL board meeting and discussed and received queries and comments on the draft report
28 March	Final versions of some action point responses received by the Chair. Revisions and redrafting

In parallel with the above some members of the CCG have been involved in a sub-group concerned with the revised draft Water Resources Management Plan (rdWRMP) and thus those members have been able to comment on AWL's response to action point CMI.A1 which relates to that task.

1.5 Sources of information

To develop this report, we have referred to the documents and sources which are also listed in Annex B. These include:

- Ofwat's published IAP for AWL
- Ofwat's briefing for CCG Chairs on the IAP process
- Drafts of company responses circulated to CCG members on 8 March and 15 March and 'final' versions circulated to the Chair on 28 March 2019. For some responses we have seen 2 or 3 drafts as well as the final version and comments and queries have been raised at a meeting with AWL and by email.
- CCG report to Ofwat September 2018 and related evidence base, including AWLs September 2018 business plan.
- Drafts of survey designs (for the survey being used to inform AWL's responses to AV.A1 and AV.A2)
- Topline and full report from Verve[11] presented at CCG meeting on 13 March and circulated on 15 March
- Information presented to the CCG's rdWRMP sub-group meetings.

[11] Market research contractor for AV.A1 and AV.A2

2. Review of AWL Action Point responses where CCG assurance was required by Ofwat

AV.A1 – Affordability and acceptability to customers of AWL's proposed bill profile 2020-25

Topic	Reference	Ofwat 'action point'
Addressing Affordability and Vulnerability	*AFW AV.A1*	*Affinity Water proposed a higher bill than what it tested [sic] with customers and it also proposed a different bill profile for the 2020 to 2025 period. The company should provide sufficient and convincing evidence that it has engaged with its customers on affordability and acceptability of its proposed bill profile for the 2020 to 2025 period. Affinity Water should demonstrate that its customers find its proposed bill profile acceptable and affordable. This should include testing of the combined water and wastewater bill. Affinity Water* ***should confirm that testing will be assured by its CCG*** *and conducted in line with social research best practice.*

CCG response to AV.A1

The CCG have reviewed AWL's response to AV.A1.

We can provide assurance to Ofwat that AWL has undertaken the research with customers described in its response to AV.A1. The research tested customer views on the acceptability and affordability of proposed bills and proposed profile of bill increases between 2020 and 2025. The survey included a 'base' proposal for the future average water bill (clean water only) without inflation that is in line with the amounts presented in the Business Plan in September 2018, being £170.90 in 2019/20 and £174.40 in 2024/25.

We also note that the survey tested a variety of proposed bills, and profiles, including with inflation and the expected level of bills for three different wastewater service providers who serve AWLs customers.

We appreciate Ofwat's conclusion that the bill AWL proposed in its business plan had not been specifically tested with customers for its perceived affordability and acceptability. In our initial PR19 report to Ofwat[12] we noted the range of different proposed bills that AWL had shared with us and tested with customers in 2018 and noted that the final proposed bill had not actually been tested with customers. In Annex D is an updated table for reference showing the value of bills proposed and tested with customers at different stages since Spring 2018.

[12] https://stakeholder.affinitywater.co.uk/docs/CCG/CCG-Business-Plan-Report-Complete-final%202%20September-11am-Linked-Version.pdf

Ofwat has now asked the company to show that '**its proposed bill profile'** presented in the Business Plan is considered acceptable and affordable by its customers. Our understanding is that AWLs '**proposed bill profile'** is that presented as 'Profile 1' in the latest survey (by Verve), the key findings from which are summarised in AWL's response to AV.A1. The final report of that research with customers indicates[13] **bill Profile 1 was considered acceptable by 81% of customers and affordable by 76% of customers taking part in this survey** (when the responses to the proposed bills for clean water only and without inflation are considered). We note that levels of acceptability and affordability decline when inflation and the expected level of sewerage charges are added.

We note that AWL also commissioned research to test customer views on an alternative bill profile which did not feature in its Business Plan. This is referred to as 'Profile 2' in the research and would see the clean water only, without inflation, bill rise from £170.90 to £179.60 between 2020 and 2025. There does not appear to us to be any material difference in customer views on the acceptability of bill Profile 2, although it seems to be considered marginally less affordable by customers.

The sample size used by AWL for this additional research appears sufficient and appropriate for the size of their customer base and we note that their chosen research supplier (Verve) has provided professional comment in their final report to the effect that the sample size is sufficient. Verve have also highlighted where different responses to questions between sub-groups are and are not statistically significant. We note that the research design did not ask customers to indicate preferences *between* Bill Profile 1 and Profile 2. Instead each was tested independently with half of the sample of customers, and the results were compared.

We have considered carefully whether the research methods used by AWL in their response to AV.A1 (and AV.A2) meets Test area 7 in our PR19 test areas. Test area 7 requires us to consider whether the research methods used are appropriate to include customers in circumstances that make them vulnerable. In this case the research was conducted entirely using online methods.

Overall, taking all the considerations set out below into account we consider the use of an online only research method was sufficient on this occasion for this purpose. Below we explain the factors we have considered to arrive at this view.

First, we note the discussion of this issue in the final research report (see Verve final report, page 3). This highlights that online methods can be more inclusive for some vulnerable customers, and the present relatively high extent of digital inclusion such that an online research method might not prevent the sample from being representative.

Second, we note the analysis in the Verve final report of demographic and other social/economic characteristics, which shows that whilst the affordability of bill Profile 1 is consistent across most demographics the results suggest that the bill is

[13] Final report, Verve, listed as document 14 in Annex B

'*considered significantly less affordable for customers who receive benefits; 63% agreed it was a fairly or very affordable proposal, compared with 76% overall' (see Verve Final report page 8)'*

This would indicate there are enough numbers of customers who rely on income from welfare benefits to form a sub-set for comparative purposes, and that the sample has captured customers in receipt of benefits which the CMA has recently highlighted is a strong indicator of low income, and vulnerability.[14]

Third, the timescale within which AWL was asked to respond to Ofwat's action point was a very short one in which to test the acceptability and affordability of its proposed PR19 business plan bill profile with a representative sample of customers. We do not see how AWL could have realistically used a face to face in home method of research.

Fourth, we note from their response to AV.A1 that AWL is intending to undertake further research with customers in April and May to prove the acceptability and affordability of the bill profiles it has submitted in its revised BP (see below) once it has the final waste-water bills from sewerage service providers, and that this will include the use of face to face methods.

Finally, and most significantly, AWL has decided to change its proposal for the level of customer bills. Their proposal is now for their average bill (in real terms) to be £170.50 in 2019/20 reducing to £167.80 in 2024/25. This is less than most of the proposals the company has consulted its customers about since Spring 2018 (see Annex D). The company is now proposing a level and profile of bills that is in line with a proposal tested with customers as 'Plan L' in Phase 2 of the customer engagement programme in Spring 2018. We comment further on this in relation to RR:A10 below. As the bill level associated with 'Plan L' is lower than that submitted by AWL in its BP in September 2018 it might be reasonable to expect the objective levels of customer acceptability and perceived affordability to improve.

AV.A2 – Affordability and acceptability to customers of AWLs proposed bill profile 2025-30

Topic	Reference	Ofwat 'action point'
Addressing Affordability and Vulnerability	*AFW AV.A2*	*Affinity Water has provided insufficient evidence that it has engaged with customers on bills beyond 2025. For example, although it has provided a long-term view of its forecast bills for the next three asset management plan (AMP) periods to 2040, there is insufficient evidence of engagement with its customers on these long-term bill profiles after the 2020 to 2025 period. Furthermore, there is insufficient evidence of*

[14] **Consumer Vulnerability : challenges and potential solutions, CMA, 28 February 2019** . . The Competition and Markets Authority found a strong correlation between customer vulnerability and characteristics of low income, disability or aged over 65, (all of which are factors associated with receipt of income from welfare benefits).

		how acceptable customers find the long-term bill profile. The company should undertake customer engagement on long-term bill profiles for the 2025-30 period and provide sufficient evidence to outline customer support for each of the profiles tested. Affinity Water should ***confirm that testing will be assured by its CCG*** *and conducted in line with social research best practice.*

CCG response to AV.A2

The CCG have reviewed AWL's response to AV.A2.

We can provide assurance to Ofwat that AWL has undertaken the research with customers described in its response relating to AV.A2.

We have engaged with this action in common with our engagement on AV.A1 and these comments should be read in conjunction with our response to AV.A1 above.

We note Ofwat has simply asked the company to '*provide sufficient evidence to outline customer support for each of the profiles tested*'. This is a slightly different requirement to that Ofwat posed for AV.A1.

The company is submitting a full copy of the research report with its response which should provide sufficient evidence. The research tested customer views on the acceptability and affordability of proposed bills and the proposed profile of bill increases between 2025 and 2030. The company's response summarises the levels of customer 'support' in terms of acceptability for each of two bill profiles tested for clean water bills with and without inflation.

Our understanding is that AWLs **proposed** bill profile from its September 2018 business plan is that used as 'Profile 1' in the survey. Profile 1 was considered acceptable by 74% of customers surveyed and affordable by 73% of those surveyed. We note that Profile 2 was considered acceptable by 81% and affordable by 78% of customers surveyed. Levels of acceptability and affordability declined for both Profile 1 and Profile 2 when inflation was added.

We refer Ofwat to our response on AV.A1 for further comment relating to the use of an online survey method and the extent to which the evidence base for this research is likely to include customers who are vulnerable as a result of using the online method.

Also, as noted in our response on AV.A1 the company is now proposing a lower level of bills in the period to 2025 and beyond. This is also considered under RRA.10 below.

The various documents provided to us are listed in Annex B and the Final Report from Verve forms part of the company's response to the IAP action points.

3. Review of AWL Action Point responses which the CCG decided to review

This section comments on 14 AWL action points which the CCG decided to review. These action points were selected either because the matters concerned issues the September 2018 CCG report had examined in some depth and/or Ofwat's action referred to the CCG report in some way, without asking us to undertake assurance. Some action points were selected when it became clear that AWL was proposing some new performance commitments which had not featured in their September 2018 BP.

AV.A3 – Social tariff cross-subsidy research

Topic	Reference	Ofwat 'action point'
Addressing Affordability and Vulnerability	*AFW AV.A3*	*Affinity Water has provided insufficient evidence on social tariff cross-subsidy research – little evidence has been provided on what customers were asked, the different levels of cross-subsidy they were presented with, and the levels of support these gathered. The company should undertake customer engagement on different levels of social tariff cross-subsidies and provide sufficient evidence to outline customer support for the same.*

CCG response to AV.A3

The CCG have reviewed AWL's response to AV.A3.

We support the company's statement that the evidence required by Ofwat was submitted within its September 2018 Business Plan. We do not consider the company needs to undertake further customer engagement. It has already provided sufficient evidence, in our view, to outline customer support for its proposals, which is repeated in its response to AV.A3.

We also direct Ofwat to our report submitted to them on 3 September 2018 which set out clearly the work the CCG had done to advise and challenge the company on its proposed policies for supporting customers having trouble paying their bills, including through provision of a social tariff funded by higher bills for other customers (cross-subsidy). On page 42 and 43 of our September 2018 report we said:

- '*AWL has undertaken three waves of quantitative research with representative samples of customers to establish customer support for the maintenance and potential expansion of the current social tariff as proposed in the BP*[15] . *The first*

[15] Ipsos MORI, January 2018, 500 Customers; Ipsos MORI May 2018 825 customers and Ipsos MORI July 2018

survey in January 2018 established that 75% of customers supported the company providing support and assistance to customers in financial difficulty, with 65% in favour of paying more, through their water bills, to enable the company to continue to offer a social tariff. The second survey asked a range of questions about support for customers in debt and specifically asked a question of extending the coverage of the social tariff scheme. AWL's customers were asked if they supported adding £1.50 or £3 a year to bills to enable either 25,000 or 48,000 more customers to be assisted by the scheme. These options each only secured a minority of support, which together suggested that support for an additional £1.50 added to bills might only be 47%. Notably 39% of customers in this survey did not support an increase in bills to increase the coverage of the social tariff. The third survey, in August 2018 made it clear that bills already include £3 to cover the cost of the social tariff scheme under which 51,000 customers have capped water bills if they are on a low income. Customers were asked specifically if they supported an increase to their bill of an additional £1.50 so that AWL could assist an additional 25,000 customers by 2025, 60% of customers surveyed supported this and 6% said they did not mind.' .

More generally in the introduction to our September 2018 report to Ofwat we stated:

'*In relation to AWL's support for customers who are vulnerable or have difficulty paying their bills the company has undertaken good analysis of need and planning for the proposed services and activities in its BP.* ***The company has established that customers and stakeholders support the approach they propose to take and have demonstrated effective engagement with relevant expert stakeholders and customers to design their services.*** *AWL's Inclusive Services Strategy, which underpins the proposed bespoke performance commitments in the BP, will be a significant business change for AWL'*

Our report in September 2018 also outlined in full the process we had undertaken to arrive at those opinions and referred to all the documents we had reviewed, including the full results of all the research on social tariff issues the company undertook in 2018.[16]

AV.A4 – Performance Commitment on achieving the BSI standard

Topic	Reference	Ofwat 'action point'
Addressing Affordability and Vulnerability	*AFW AV.A4*	*Affinity Water has stated that it will achieve the British Standards Institution (BSI) standard for inclusive services by 2020 but has not provided a Performance Commitment or plan on how it will do so.*

[16]https://stakeholder.affinitywater.co.uk/docs/CCG/CCG-Business-Plan-Report-Complete-final%202%20September-11am-Linked-Version.pdf

		The company should propose a Performance Commitment on achieving the BSI standard for fair, flexible and inclusive services for all and maintaining it throughout the 2020 to 2025 period

CCG response to AV.A4

The CCG have reviewed AWL's response to AV.A4.

We note that the company has agreed to introduce a performance commitment that it will maintain the BSI accreditation 18477 for inclusive services, which it says in its response to AV.A4 was substantially achieved in February 2019.

We note Ofwat comments that the company has not provided a plan on how it would achieve the BSI standard. We direct Ofwat to our September 2018 report, which set out the work the CCG had done to advise and challenge the company on its proposed policies for supporting customers in vulnerable circumstances. That included reviewing the plan the company had developed for achieving the BSI standard. We specifically considered whether the company's approach to vulnerability was targeted, efficient and effective and what the CCG's view of the quality of planned support for customers in vulnerable circumstances was, taking into account Ofwat's February 2016 Vulnerability Focus report. We assessed the company's business plan as meeting those expectations.

Our review of the company's plan for improving its service to vulnerable customers enabled us to take the view that its proposed performance commitments to improve customer satisfaction amongst vulnerable customers involved significant business change and therefore were stretching. Ofwat's methodology indicated that a significant business change might amount to a stretching commitment and we set out our reasoning on this in our report.

Relevant extracts from our September 2018 report for Ofwat are below:

*'In relation to AWL's support for customers **who are vulnerable** or have difficulty paying their bills the company has undertaken good analysis of need and **planning** for the proposed services and activities in its BP. The company has established that customers and stakeholders support the approach they propose to take and have demonstrated effective engagement with relevant expert stakeholders and customers to design their services. **AWL's Inclusive Services Strategy, which underpins the proposed bespoke performance commitments in the BP, will be a significant business change for AWL**.*[17]

and

[17] https://stakeholder.affinitywater.co.uk/docs/CCG/CCG-Business-Plan-Report-Complete-final%202%20September-11am-Linked-Version.pdf

'*The company has developed and provided the CCG with adequate opportunities to challenge proposals for an '**Inclusive services strategy'** described in Chapter 7 of the BP submission. This covers support services the company will deliver for customers in vulnerable circumstances. The strategy also covers proposed support for customers who have difficulty affording their water bills, including the provision of a 'social tariff' scheme which provides a significant reduction in bills for customers who have difficulty paying their bills and meet certain criteria. (see also Test area 11 above)*

The Business Plan includes a proposed bespoke performance commitment based on customer satisfaction with the services provided by the Priority Services Register (PSR).

***The company has made a commitment to significant business change, before 2020, by seeking and achieving independent accreditation from BSI (18477) that it meets the requirements of that standard for Inclusive Service provision**.'*

AV.A5 – Performance commitment on increasing registrants on the Priority Services Register (PSR)

Topic	Reference	Ofwat 'action point'
Addressing Affordability and Vulnerability	*AFW AV.A5*	*Affinity Water has not proposed a performance commitment on Priority Services Register (PSR) growth. It is proposing to increase its PSR reach from 2.5% in 2019/20 to 6.3% of households in 2024/25. We consider this to be an insufficiently ambitious target. In addition, the company has checked no PSR data over the past two years.* *We propose to introduce a Common Performance Commitment on the Priority Services Register (PSR): The company should include a Performance Commitment which involves increasing its PSR reach to at least 7% of its customer base (measured by households) by 2024/25 and committing to check at least 90% of its PSR data every two years.* *For further information on the performance commitment definition, and reporting guidelines, please refer to 'Common performance commitment outline for the Priority Service Register ("PSR")', published on the initial assessment of plans webpage.*

CCG response to AV.A5

The CCG have reviewed AWL's response to AV.A5.

We note that Ofwat has decided to introduce a common performance commitment and level of expectation in terms of proportion of customers registered across all water companies in England and Wales.

We note the company has agreed to make a specific performance commitment in this area and is proposing to achieve 7.22% of its customers registering on its

PSR by 2024/25.

We commented in our September 2018 report that the company was planning to significantly increase the number of customers registered on its PSR as part of a range of initiatives aimed at improving its services for vulnerable customers. At that time Ofwat had not indicated that it expected all water companies in England and Wales to make a performance commitment to increase the number of customers registering on PSRs, or that companies should achieve at least 7% of their customers registered by 2024/25.

We specifically noted in our September 2018 report several aspects of how AWL had arrived at its business plan proposals in this area, our intention being to provide assurance that the proposal was based on analysis and consultation with customers and stakeholders:

'*AWL undertook comprehensive analysis of a range of external data (from Acorn, RNIB, Experian and government data on indices of deprivation and health inequalities) to identify the gap between the number of customers in its supply areas that might potentially benefit from its priority services, and the priority services register. They have used this analysis to set a target to significantly increase to 'circa 92,000' the number of customers on their PSR by 2025, from 25,000 in 2018*[18] *and set out a plan of action designed to achieve that.* ***Achieving that level of take up represents a stretching goal,*** *though take up is not a business plan Performance Commitment the plan commits to this goal and supporting actions.'*

We also noted that:

'*AWL have been working collaboratively with other utilities, including UK Power Networks locally and the water and energy industry trade body led projects to identify how to bring about improved data sharing between utilities to maximise take up and use of individual company's PSRs*

AWL consulted widely with a comprehensive range of charity and other stakeholder organisations in its area during this review. It approached discussion with those stakeholders in a very open way (we remotely observed a meeting with stakeholders at first hand as if it was a market research focus group, and it was independently facilitated).'

[18] P120 V4 BP – the company had advised us in June 2018 their goal was an increase to 100,000 as shown in document 70 – Appendix 5. The figure could therefore change again in the final BP.

OC.A3 – Value for Money survey performance commitment

Topic	Reference	Ofwat 'action point'
Delivering Outcomes for Customers	*AFW OC.A3*	*The company should provide justification for discontinuing its PR14 Value for Money PC (R-A2: Value for money survey). If sufficient justification for discontinuing the PC cannot be provided, the company should continue its PR14 Value for Money PC.*

CCG response to OC.A3

The CCG have reviewed AWL's response to OC.A3.

We note that the company has decided to maintain its performance commitment to measure customer perception of the value for money of the service they receive from Affinity Water, in addition to the customer surveys required for the new CMEX measure. The company has undertaken in its response to work with the CCG in developing a new survey design to measure customer views of value for money in future which is fit for purpose.

Our understanding is that the company had proposed ending this performance commitment on the basis that if it maintained the **current** rolling survey of customer views, which it commissioned initially in 2015 to fulfil the performance commitment it gave in its current (AMP6) business plan, this would duplicate with elements of the new survey data being commissioned in relation to the new CMEX performance commitment monitoring arrangements Ofwat is developing for use from 2020. The CCG would only wish the company to continue with its original 'value for money' survey alongside the monitoring for CMEX **if** the data gathered is used and useable by the company. We would also be unhappy about expenditure on research which duplicated as this would not be good value for customers' money. We have previously commented to the company in our Annual Reports [i] that we had concerns about and had challenged the company on the usability of the chosen methodology for the value for money survey, in its present form. The value for money index is built up using customer views on a range of matters outside AWL's responsibilities which the company is not capable of influencing, e.g. energy bills. We have also queried whether the value for money index has been used by and is capable of being used to drive the business due to the chosen methodology. For example, in our Annual report for 2017/18 (page 3) we said:

'*We can provide assurance that the value for money survey is undertaken by the company. However, we have not seen evidence to show that the survey is used by the company as originally intended to help it make decisions about improving delivery and service to customers.*

We have challenged the company to show how it was using the insight from this survey to develop its PR19 business plan. We are satisfied that the company has referred to

the evidence from this survey, although at a relatively late stage in the development of their evidence base.'

As the company is now maintaining this performance commitment, we will challenge the company to ensure that the design of the research in future will result in a tool which is useable and used by AWL and does not duplicate with CMEX.

OC.A11 – Leakage reduction target .

Topic	Reference	Ofwat 'action point'
Delivering Outcomes for Customers	*AFW O.:A11*	*Leakage: The company should reconsider its proposed service levels and ensure that they are stretching and meet the upper quartile values or provide compelling evidence to demonstrate why this level cannot be achieved. Based on the forecast data provided by companies in the September 2018 business plan submission the upper quartile values are 75 litres/property/day and 5.42 m3/km of mains/day. The company should clearly set out the evidence and rationale for the revised targets.*

CCG response to OC.A11

We note that AWL has reconsidered its proposed service levels on leakage reduction and is now targeting an 18.5% reduction (in absolute terms) over AMP7 from 162.2 Ml/d in 2019-20 to 132.2 Ml/d in 2024-45, instead of its initial BP proposal of a 15% reduction target.

Throughout the customer engagement programme AWL carried out in 2017/18 on both its business plan and its dWRMP it received strong feedback from customers and stakeholders that they wished to see more action on the part of the company to reduce leakage.

We noted in our September 2018 report that notwithstanding its 14% reduction target in AMP6 Affinity Water had a fairly high level of leakage in 2017/18 in terms of litres of water per property per day (that leaks). Whilst leakage in AWL's supply area of 115 litres per property per day was below the overall industry average, it was the 5th highest, amongst 18 companies in England and Wales, and many other companies have lower levels of leakage. AWLs September BP commitment to reduce leakage by 15% over 5 years was in-line with a challenge posed by Ofwat (that companies should propose to reduce leakage by *at least* 15%). However, we observed that if all other companies made similar or greater reductions in future AWL could remain the 5th highest company for leakage even with a 15% reduction. Achieving an 18.5% reduction in leakage by 2025 could therefore improve AWL's comparative performance, depending of course on the reduction targets of other companies.

OC.A27 – Low Pressure

Topic	Reference	Ofwat 'action point'
Delivering Outcomes for Customers	*AFW O.A27*	*Properties experiencing longer or repeated instances of low pressure: The company should either use the original DG2 and long list definition or provide further evidence to support its view that the updated definition is a better and more appropriate measure for the company, for wider stakeholders and for customers. In particular the company should refer to trend analysis which may be potentially more difficult and the poor current levels of performance in this*

CCG response to OC.A27

The CCG have reviewed AWLs response to OC.A27. We understand that the company has now decided to propose an additional bespoke performance commitment for low pressure using the existing definition/measure called 'DG2' (and that proposed PC has a financial ODI). The bespoke performance commitment for low pressure (non DG2) which was included in the Company's Business Plan from September 2018 is retained but now has a non-financial ODI. The company's account of this decision appears in their response to OC.A3, but we have not reviewed that response.

Our September 2018 report for Ofwat commented on the original proposal for performance commitment on low pressure. AWLs proposal was to reduce the average hours of low pressure per property per annum from 12 hours to 8.7 hours. This was prima facie a service level improvement. We had also seen evidence from analysis of operational data that the problem of low pressure was a significant feature of customer complaints, it was therefore right for AWL to make a commitment to improve its performance.

However, it was not easy for us to see how stretching or difficult the proposed performance improvement would be to achieve, in the absence any comparative information on this measure. The company showed us data that in terms of the number of properties per 10,000 properties which are below a reference level of water pressure (DG2) AWL has 'the worst' performance amongst the water companies in England and Wales and is an outlier. **Together with the customer complaint data this supported the case for a performance commitment to improve service to customers.** As part of the Business Planning process AWL also agreed to consider a KPI for this area which would enable it, and us, to see how many customers are affected by low pressure problems because an overall average 'hours per annum' can disguise extreme problems experienced by a few customers.

We have noted Ofwat's concerns that the proposed new bespoke measure relating to properties experiencing low water pressure (instead of using the established measure called 'DG2') makes the PC less transparent to stakeholders and customers, as well as making trend analysis difficult for the company and wider stakeholders. The company seems to have responded to this concern by adopting the DG2 method of definition for one of its PCs, which may also address the request the CCG had made for a KPI for the number of properties experiencing low pressure.

OC.A32 Performance Commitment on customer satisfaction with services for customers in vulnerable circumstances

Topic	Reference	Ofwat 'action point'
Delivering Outcomes for Customers	*AFW OC.A32*	*Customers in vulnerable circumstances satisfied with our service PC: The company should split this PC into 2 PCs, one for financial and one for non-financial support scheme support. This would support more transparent measurement and reporting than the current PC proposes. In addition, the company should provide additional evidence on the sample size used in the monthly survey to determine the PC target and provide external assurance that the survey will be conducted in line with social research best practice.*

CCG response to OC.A32

The CCG have reviewed AWL's response to OC.A32. We have raised several queries with the company with the aim of clarifying their response.

We note that the company has agreed to split this PC into two PCs as requested by Ofwat.

We note too that the company has made an additional commitment to go beyond simply surveying PSR customers who are in contact with them by introducing a periodic proactive satisfaction survey for both groups of customers in vulnerable circumstances who have not contacted AWL within 12 months. We welcome this initiative as it will increase the quantity of feedback from customers, improve the representativeness of the survey and enable the company to identify any customers who may need assistance who have not been in contact with them recently.

OC.A34 Performance Commitment on customers in vulnerable circumstances' experience of dealing with AWL

Topic	Reference	Ofwat 'action point'
Delivering Outcomes for Customers	AFW OC.A34	*Customers in vulnerable circumstances who found us easy to deal with PC: The company should split this PC into 2 PCs, one for financial and one for non-financial support scheme support. This would support more transparent measurement and reporting than the current PC proposes. In addition, the company should provide additional evidence on the sample size used in the monthly survey to determine the PC target for and provide external assurance that the survey will be conducted in line with social research best practice.*

CCG Response to OC.A34

The CCG have reviewed AWL's response to OC.A34. We have raised several queries with the company with the aim of clarifying their response.

We note that the company has agreed to split this PC into two PCs as requested by Ofwat.

We note too that as with OC.A32 the company has made an additional commitment to go beyond simply surveying customers in vulnerable circumstances who are in contact with them by introducing a periodic proactive satisfaction survey for both groups of customers in vulnerable circumstances who have not contacted AWL within 12 months. We welcome this initiative as it will not only improve the representativeness of the survey but enable the company to identify any customers who may need assistance who have not contacted them recently.

OC.A33 Performance level for PC on customers in vulnerable circumstances satisfied with our service

Topic	Reference	Ofwat 'action point'
Outcomes for Customers	*AFW OC.A33*	*Customers in vulnerable circumstances **satisfied with our service** PC. The company should revise its performance level for this PC to at least meet current satisfaction levels.*

CCG Response to OC.A33

The CCG have reviewed AWL's response to OC.A33 and our comments are included with our comments on OC.A35 below.

OC.A35 Performance level for PC on customers in vulnerable circumstances experience of dealing with AWL

Topic	Reference	Ofwat 'action point'
Outcomes for Customers	*AFW OC.A35*	*Customers in vulnerable circumstances who **found us easy to deal with PC**. The company should revise its performance level for this PC so that it is more stretching and provide justification for the level of stretch as well.*

The CCG have reviewed AWL's responses to OC.A33 and OC.A35. Although Ofwat's action points are slightly different, and the proposed performance commitments and performance levels are concerned with slightly different questions, the substance of the AWL's responses is common to both matters.

We note that AWL is now proposing to set a higher target performance level for both these new bespoke performance commitments of 90% customer satisfaction/found us easy to deal with. **The CCG welcomes the company's proposal to improve the performance commitment level**. Below we discuss our consideration of whether the revised proposal(s) address Ofwat's expectations that the performance level at least meets current satisfaction levels/is more stretching.

AWL originally proposed target levels of 82% satisfaction/found us easy to deal with.

In its responses to OC.A33 and OC.A35 AWL has set out how it considers its revised proposal, for a performance level of 90%, is at least meeting current satisfaction levels (for OC.A33) and is more stretching (for O.A35).

We commented on the performance commitment relating to satisfaction with PSR services (OC.A33) in our September 2018 report . We observed we had seen .data which suggested the proposed performance commitment level of 82% might not have been in line with, and could even have been lower than, performance being achieved in 2018.[19] This had tended to suggest to us that the proposed forward target of 82% customer satisfaction was not stretching.

However, we also noted that:

*'This is a new bespoke performance commitment measure **so there is no baseline of data available to judge if the proposed performance commitment level of 82% is stretching.'***

We commented that the data we had seen was arguably not comparable and the company was also planning to significantly increase the population of customers who

[19] An AWL paper circulated to the CCG on 5 June 2018 suggested 82% was the performance the company was achieving on its 'Rant and Rave' customer feedback/survey for 2017/18

are on its PSR, who would form a significant proportion of the customers represented in this survey.

We note from the company's responses to OC.A33 and OC.A35 that after undertaking further analysis it now considers that its current performance on this measure/these measures would be higher than 82%, as proposed in September.

The company's comments explain how the current data it has points to a range in satisfaction ratings from customers, according to the channel used to collect feedback, ranging from 68% to 91% and 92%. We recognise that the current results may not be comparable with what AWL might expect to see when the proposed performance commitments are in place due to expected changes in the size of the group of customers surveyed, the expansion of methods used to capture customer feedback (beyond simply SMS surveys) to include letters and emails. Those changes will improve inclusivity of the company's approach to gathering customer feedback and they now commit to including pro-active contact with vulnerable customers who have infrequent contact with the company.

In selecting to adopt 90% as the performance level for both OC.A33 and OC.A35 the company has adopted a figure at the upper end of the range of its current performance measured with all customers via the one channel which is currently generating the most positive feedback. This appears to us to be a realistic approach which the company has explained in its response.

We note that AWL has also decided to change its approach to gathering customer feedback so that in future it uses a 0-10 band rating system (where 10 is good) instead of a 1-5 band system. This appears to be a simpler approach than presented in September 2018.

OC.A36 – Performance commitment on environmental projects - evidence

Topic	Reference	Ofwat 'action point'
Delivering Outcomes for Customers	*AFW OC.A36*	*Environmental innovation - delivery of community projects PC: The company should provide further evidence of customer support for this PC. In particular, the company should provide evidence that customers were presented with choice and context related to the design of the currently proposed PC.*

CCG response to OC.A36

The CCG have reviewed AWL's response to OC.A36.

We recognise the company's account that the proposal for a bespoke PC to deliver a number of local environmental projects was developed following advice and challenge from members of the CCG, several whom have significant experience as practitioners

in community engagement with environmental issues in AWL's supply area, including representatives from the Environment Agency.

In September 2017 the CCG agreed to AWLs request that we form a sub working group on "Resilience and Environment", with a purpose to challenge and advise on the development of relevant PCs to help the company with developing its business plan proposals. The group considered proposals for several PCs, one of which was for AWL to undertake a number of environmental pilot projects which could be aimed at finding innovative ways to promote a reduction in water use, promote customer education on the link between water and the environment and improve the environment. The CCG suggested that pilot projects undertaken in each of AWLs 8 community areas, which relate to water resource zones, could involve partnering with other organisations such as councils or local river groups, who could help to co-create and deliver as well as support and promote the initiatives. That approach would also fit with the company's commitment to be the leading community focussed water company[20]

In its response the company has set out the evidence it has of customer support for the proposed PC on environmental innovation, including how the proposal was presented to customers. The CCG have already commented on this in our September 2018 report. We:

- confirmed that this proposed performance commitment was one of 7 specifically set out to customers – in the 'Phase 2' Acceptability survey.
- explained that customers were asked for their views on three alternative plans with different levels of service for 7 performance commitments and price.[21] Customers were asked about acceptability, affordability and to indicate preferences between the three plans.[22]
- noted a 'second' acceptability survey conducted with customers in JulyAugust 2018 which presented a proposal for 'investing in eight new environmental pilots to test new innovations'.
- said we considered the company had obtained appropriate quantitative evidence from two representative acceptability surveys which shows customer support for some of its proposed performance commitments (including that for environmental projects/innovation).

[20] At page 34 of our September 2018 report to Ofwat we said '*The business plan also proposes that the company invests in 8 local environmental projects which are also 'innovative' working with local partners and organisations as part of the implementation. The CCG has not been involved in the identification of these projects – only the development of the proposal to have a performance commitment framed in this way, which a subgroup of the CCG met with the company to discuss in 2017/18*.'

[21] See p50 CCG September 2018 report to Ofwat

[22] In the 'Phase 2' research for the customer engagement programme customers were asked for their views on different levels of expenditure on local environmental projects being '£2 million' or '£6 million' depending on the plan option presented.

OC.A46 – Mean Zonal Compliance (MZC)

Topic	Reference	Ofwat 'action point'
Delivering Outcomes for Customers	*AFW OC:A46*	*Mean Zonal Compliance (MZC): The company should remove MZC. If the company doesn't do this is should provide further evidence that customers support the provision of two very similar measures. Also see action AFW.OC.A1 as we expect the company to select the two PCs from the asset health long list that measure water quality contacts as also are reported on the Discover Water website*

CCG response to OC.A46

The CCG have reviewed AWLs response to OC.A46. We note the company has withdrawn the proposal for a **performance commitment** based on MZC but intends to retain the use of MZC as a 'KPI'.

We support the decision by AWL to retain MZC as a KPI. We have seen no evidence that the new DWI measure of water quality, 'CRI', has been tested with customers to demonstrate that is understood and is capable of being understood easily by significant numbers of customers. We raised this issue with the DWI when they met with the CCG in 2018 and understood they had done no testing with customers to find out whether and how it is understood, or which measure customers would prefer (between CRI and MZC). Given the importance of water quality to AWLs customers as the most important outcome they expect the company to deliver it is important that performance can be reported in a way that makes sense to customers and is readily understandable. MZC is in our view far simpler and more accessible than CRI for use in general communications with customers.

CMI.A1 – Potential strategic supply options and engagement

Topic	Reference	Ofwat 'action point'
Targeted controls markets and innovation	*AFW CMI.A1*	*The company should ensure that the business plan sets out the potential strategic supply options that it has assessed and explain how it will engage with interested parties and other stakeholders to progress these options. We also expect the business plan to align with the revised water resources management plan.*

CCG response to CMI.A1

The CCG have reviewed AWL's response to CMI.A1.

We can provide assurance that we recognise the account the company has given of its engagement with stakeholders and customers concerning its revised draft Water Resources Management Plan (rdWRMP).

The company launched a consultation with customers and stakeholders about the rdWRMP on 1 March 2019 and closes the consultation on 26 April. The revised plan is due to be submitted to the Secretary of State for the Environment, Food and Rural Affairs on 31 May 2019.

As the company response to CMI.A1 indicates the CCG has formed a sub-group of members to advise and challenge the company on the consultation about the rdWRMP. The sub-group has provided advice and comment on the consultation and engagement programme, including reviewing text of collateral and engagement material and survey questions. The sub-group has also been asked to '*evaluate how customer insight is incorporated into the Plan'* and to provide a report giving its opinion to the company, so that the Board has this when it signs off the revised dWRMP in 'late May'.

Meetings of the CCG sub-group were held on 6th December and 11th February and an additional session was held prior to the CCG meeting on 19 December. In addition, a significant quantity of draft survey questions, collateral/communication material and topic guides for focus groups have been circulated to CCG members of the sub-group between meetings and members have also observed most of the customer focus group sessions held Autumn/Spring 2019, which were independently facilitated by Ipsos Mori.

AWL has taken on board advice and challenge provided by the CCG concerning the design of its customer and stakeholder engagement process by:

- Commissioning a quantitative survey with a representative sample of customers in addition to focus group sessions with customers in Autumn and Spring 2019;
- approaching the consultation and engagement materials in a way that is designed to attract attention to the key issue of water resource challenges and stimulate responses – i.e. by setting out very clearly a 'call to action' or burning platform around water resources and adopting a consistent approach to presentation of the engagement materials across different channels;
- setting targets/performance indicators for the consultation and engagement exercise designed to achieve a greater number of responses than for the first dWRMP in 2017/18;
- using email to approach customers directly to tell them about the plans and the opportunity to get involved

A further meeting of the CCG sub-group will be held in May 2019 to review the findings and feedback of AWL's consultation and engagement with customers and consider formulation of the CCG's report for the AWL board

AFW. RR.A10 – Steps taken to address CCG concerns

Topic	Reference	Ofwat 'action point'
Aligning Risk and Return	*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*

CCG response to RR.A10

The CCG have reviewed AWL's response to RR.A10.

The company has acknowledged that late changes to its AMP7 bill profile did not allow the CCG to have early sight of the final bill profile included in its September Plan. AWL has described how it has sought to improve arrangements for its revised business plan, albeit the timescale for this work has been very limited.

AWL has carried out the actions required from Ofwat (AV.A1 and AV.A2) to test the bill profile it proposed in its Business Plan with customers and the results are provided in the company responses to AV.A1 and AV.A2. The company's responses to AV.A1 and AV.A2, and our comments on those responses above, relate to the bill level, and profile, proposed in September 2018.

We understand that the company now proposes a lower level of bill for clean water (without inflation and sewerage charges) such that it will reduce by 1.6% between 2020 and 2025 and will further reduce by 2.0% between 2025 and 2030. The details of that proposal are set out in the response to RRA10.

The revised bill level now proposed by AWL is very close to a proposal which was tested with customers in Spring 2018 as part of 'Phase 2' of AWL's customer engagement programme. Details of a draft Business Plan were published for public consultation, focus group discussions were held moderated by independent market research firm Ipsos Mori and quantitative research was conducted by them with 825 customers interviewed face to face. As we noted in our September 2018 report to Ofwat:

'*The Phase 2 customer acceptability survey*[23] *in particular asked customers for their views on the proposed business plan outcomes and proposals for three alternative*

[23] dBP phase 2 customer acceptability survey (825 customers, face to face, Ipsos MORI/Arup)

business plans[24] and average bill levels and was supported by a series of independently facilitated focus group discussions involving 70 customers in different socio-economic profile groups. The in-home face to face research methods used for the quantitative survey meant that it was able to include those of AWL's customers who are digitally excluded and would not be represented in on-line market research panels.'

In that research a proposal called 'Plan L' was presented to customers with information about key business plan components. Plan L was the only plan, of 3 presented, which included a 15% reduction in leakage together with a reduction in abstractions of 39 million litres per day and a target for personal consumption, per head, of 124 litres per day. As such it is also closest to the performance commitments given in the Business plan AWL submitted in September 2018. Customers were told that under Plan L their yearly bill would be £168 in 2019/20 and reduce to £167 in 2024/25.[25] Plan L was considered acceptable by 74% of those customers surveyed.

[24] In the public consultation document the plans were called A, B and C. In the market research and focus groups the plans were called J, K and L. The average bills presented to customers in focus groups were personalised for the relevant AWL charging zone that the customers lived in.

[25] The proposals in the Phase 2 research were expressed as an average bill across all AWL's charging areas – of which there are three, were in real terms, without inflation and without including future sewerage charges.

Annex A

CCG Members at 31 March 2019

Independent members

Tina Barnard, Watford Community Housing Trust

David Cheek, Friends of the Mimram

Essex Richard Haynes, Up on the Downs

James Jenkins, University of Hertfordshire

John Ludlow, Public affairs and government relations professional

Teresa Perchard, Chair

John Rumble, Hertfordshire County Council

Gill Taylor, Groundwork East

The following members represent statutory organisations:

Karen Gibbs, Consumer Council for Water (CC Water)

Caroline Warner, CC Water – Local Consumer Advocate

Rachel Nelson, Environment Agency

Jonathan Sellars, Environment Agency (continues to be involved with the rdWRMP working group until May 2019)

Annex B

AWL CCG – Supplementary Report to Ofwat – Annex B

Documentation received by the CCG to help it prepare its Supplementary report

	Items	Author	Status	Date circulated	Discussion forum	Record
1	Proposed CCG assured action items	AWL	final	18/02/2019	e-mail AWL approach to customer engagement	comments via e-mail
2	PR19 research brief	AWL	final	18/02/2019	e-mail - bills - additional customer engagement	comments via e-mail
3	BP survey bills presented	AWL	final			
4	Proposed CCG assured action items	AWL	final			
5	AWL draft quantitative survey	Verve	draft	20/02/2019	e-mail for review	comments via e-mail
6	Draft Test Evidence Response CMI.A1	AWL	draft	08/03/2019	Quarterly meeting 13 March 19	Minutes of meeting
7	Draft Test Evidence Response AV3-5	AWL	draft			
8	Draft Test Evidence Response OC 3	AWL	draft			
9	Draft Test Evidence Response OC 32-35	AWL	draft			
10	Test Area Evidence Addressing Affordability and Vulnerability Template v0.1 - CCG AV1-2	AWL	draft	08/03/2019	Quarterly meeting 13 March 19	Minutes of meeting
11	Quantitative survey for AV.A1 and AV.A2 draft findings	Verve	draft			

12	CMI.A1 evidence report	AWL	draft	12/03/2019	tabled at quarterly meeting 13 March 19	Minutes of meeting
13	Affinity Water_PR19 Bill profile testing report_110319_C final	Verve	final	13/03/2019	e-mail for noting & comment	comments via e-mail
14	Bill Survey Results Summary	AWL	draft	14/03/2019	e-mail following quarterly meeting	comments via e-mail
15	AWL Final Bill Profile 15 March 2019 RRA10	AWL	draft	15/03/2019	e-mail to TP for review and CCG report	comments through e-mail and CCG report
16	Test area evidence addressing affordability and vulnerability AV A1-5	AWL	draft			
17	Test Area evidence delivering outcomes for customers template OC3_32-35	AWL	draft			
18	Test area evidence targeted controls and innovation CMI.A1	AWL	draft			
19	RR.A10 draft response	AWL	draft	17/03/2019	e-mail to TP for review and CCG report	comments through e-mail and CCG report
20	RR.A10 draft response	AWL	draft	18/03/2019		
21	AWL Delivering outcomes for customers - response OC32,35	AWL	draft	18/03/2019		
22	AWL Delivering Outcomes for customers OC32-35 18th March	AWL	draft	19/03/2019	e-mail to members for review against	comments through e-mail and CCG report

23	RR.A10 final bill profile draft response 18th March	AWL	draft		CCG report	
24	Test area evidence addressing affordability and vulnerability AV A1-5	AWL	draft			
25	Test area evidence targeted controls and innovation CMI.A1	AWL	draft			
26	OC.A46 25.03.19 - response on MZC	AWL	draft	25/03/2019	e-mail to TP for review and CCG report	comments through e-mail and CCG report
27	AWL final response on Addressing Affordability and Vulnerability v 3.1 AV A1-5	AWL	final	27/03/2019	e-mail to TP for review and CCG report	comments through e-mail and CCG report
28	AWL final response to CMI .A1 v3					
29	AWL final response to OC.A32-36					
30	AWL final response to OC.A2 and OC.A3					
31	AWL final response to OC.A11					
32	AWL final response to OC.A46 - MZC					
33	AWL final response to RR.A10					

Documentation Shared with CCG relating to the revised dWRMP

Ref	Items	Author	Status	Date circulated	Discussion forum	Record

1	Draft Water Resources Management Plan 2019 - Statement of Response	AWL	final	15/10/2018	Quarterly meeting Oct 18	minutes of meeting
2	Revised dWRMP – approach to further consultation	AWL	final			
3	rdWRMP 2018_Pre Consultation Method Statement_V4	Ipsos Mori	draft	14/11/2018	sub group meeting 20th Nov 18	minutes of meeting and rdWRMP table of collated comments and responses
4	rdWRMP consultation paper v final	AWL	final			
5	rdWRMP sub group meeting schedule	AWL	draft			
6	revised rdWRMP Awareness campaign plan 4 Dec 18 v2	AWL	draft	05/12/2018	sub group meeting 6th Dec 18	minutes of meeting
7	rdWRMP non tech summary v30.11.18	AWL	draft	05/12/2018		
8	rdWRMP timeline Dec 18	AWL	draft	05/12/2018		
9	Revised draft ToR CCG WRMP working group	AWL	draft	15/01/2019	e-mail for review	comments via e-mail
10	rdWRMP Consultation and Timeline Summary Jan 19	AWL	draft	15/01/2019	e-mail for review - updates following Board meeting	comments via e-mail
11	rdWRMP technical plan(board item 2.1)	AWL	final			
12	rdWRMP consultation video storyboard 01	AWL/Campaign Works	draft	25/01/2019	sub group e-mail for review	rdWRMP table of collated comments and responses
13	rdWRMP - Method statement for the on-line customer survey	Ipsos Mori	final	29/01/2019	sub group e-mail for review	rdWRMP table of collated comments and responses
14	1. rdWRMP WG minutes 6-12-18 v final	AWL	final	06/02/2019	sub group meeting 11th Feb 19	minutes of sub group meeting & rdWRMP
15	2. CCG WG ToR Jan 19 tracked changes 2	AWL	draft			

16	4. WRMP Timeline_Jan 2019	AWL	final			table of collated comments and responses
17	5i. Stakeholder engagement	AWL	draft			
18	5ii. rdWRMP pre consultation customer focus Groups 2 - Report	Ipsos Mori	final			
19	5iii. 2019-02-05 rdWRMP Triangulation report	Arup	final			
20	6i. rdWRMP Further consultation campaign 6 Feb 2019	AWL	draft			
21	6ii. Video Storyboard	AWL/Campaign Works	draft			
22	6iii. drWRMP consultation leaflet A5	AWL	draft			
23	6iv. Non Tech summary content version draft 3	AWL	draft			
24	6vi. Further consultation questions v8	AWL	draft			
25	6v. draft customer survey	Ipsos Mori	draft	08/02/2019	sub group meeting 11th Feb 19	minutes of sub group meeting & rdWRMP table of collated comments and responses
26	Further consultation questions v13	AWL	draft	15/02/2019	e-mail to sub group for review	rdWRMP table of collated comments and responses
27	rdWRMP customer on line survey_V13	Ipsos Mori	draft	25/02/2019	e-mail to sub group for review	rdWRMP table of collated comments and responses
28	rdWRMP further consultation Stakeholder Engagement timetable	AWL	final	06/03/2019	e-mail to sub group to note	comments via e-mail

29	WRMP update (for all members)	AWL		08/03/2019	Quarterly meeting 13 March 19	minutes of meeting

Annex C

Overview of AWL CCG PR19 Test areas

1.	Has AWL developed a genuine understanding of customers priorities, needs and requirements, drawing on a robust, balanced and proportionate evidence base
2.	Has AWL engaged with customers on the issues that matter to them?
3.	Has evidence from customers genuinely driven and informed the development of the business plan?
4.	Has the company used multiple data sources and triangulated those effectively to develop its proposals, and carry out customer engagement?
5.	Has the company presented its customers with realistic options?
	Has the customer engagement process been ongoing two way and transparent with the company informing customers as well as soliciting feedback from them?
7.	Has the engagement with customers been sufficiently diverse, involving the using of methods appropriate and effective for engaging with a diverse range of customers. Does this include customers in circumstances that make them vulnerable? Has the company considered the most effective methods for engaging different customers, including those that are hard to reach?
8.	Has the company engaged effectively with customers on future and long-term issues, including trade-offs and risks, in a way customers could be expected to understand?
9.	Where appropriate, has the company considered how customers could help co-create and co-deliver solutions to underlying challenges?
10.	Has the company effectively informed and engaged customers about its current performance and how this compares with other companies in a way customers could be expected to understand?
11.	Is the proposed plan affordable for current customers, future customers and those struggling or at risk of struggling to pay? How well does the company understand what affordability looks like for its customers, and do customers support the approach they have taken?
12.	Vulnerability - Is the company's approach to vulnerability targeted, efficient and effective? CCG view on the quality of planned support for customers in vulnerable circumstances, taking into account Ofwat's February 2016 Vulnerability Focus report.
13.	Performance commitment framework – including Outcomes and ODIs – how have we reviewed and challenged
14.	Opinion on proposed outcomes, performance commitments – both common and bespoke - and outcome delivery incentive in terms of level of stretch, customer engagement and support
15.	AIM – has Affinity engaged with local stakeholders to propose its AIM incentives? Has it identified suitable sites in liaison with the Environment Agency? (Aim is also a PC see Q14 above)
16.	Leakage – has Affinity taken customer views into account in its proposed five year PC levels? (see also response to Q14 above Green
17.	Transparency – are company plans for reporting on performance 2020 – 25 suitable
18.	Resilience – has the company's assessment of resilience been informed by engagement with customers so as to understand their expectations on levels of service, their appetite for risk and how customer behaviour might influence resilience

19.	Cost efficiency – if there are cost adjustment claims is there evidence that customers support the project? Does the proposal deliver outcomes that reflect customers' priorities identified from customer engagement? Has the company taken account of customers' views and is there evidence that the proposed solution represents best value for customers in the long term, including evidence from customer engagement

Annex D

Reference table showing the values of bills AWL has proposed and those tested with customers Spring 2018 to September 2018

Document	2019/20 average bill	2024/25 average bill
Our Future Plans April 2018 (and Phase 2 Acceptability Survey - Mori)	£165 (on page 5) £170 (on pp 17/18/19 £168 (p11 Mori final rpt)	Plan A/J - £158 Plan B/K - £161 Plan C/L - £168
18 July 2018 briefing for the CCG (slides tabled at meeting).	£170	Various numbers quoted according to what changes to the plan were proposed. Main proposals were: **£172.40** inc CRI at 2.8 and abstractions at 33 M/ld And **£175.90** inc 'additional resilience' various costs
Phase 3 Acceptability Survey – Ipsos MORI/Arup	£168.77 (fig 3.1 report)	£172.40 (fig 3.1 report)
Phase 3 Additional Resilience Investment – Blue Marble	£175 (draft of Q9 circulated to CCG – no year for this bill level stated)	Seems to have been expressed as £1-£2 extra per annum Or £3-£5 extra per annum Presumably on the '£175' in Q9.
V4 BP	£172.40	£175.90
Email 1/9/2018	£170.90	£174.41
BP submission 3/9/2018	£170.90	£174.44
IAP response – RRA10	£170.50	£167.80

Appendix RR.A10.3
Action ref AFW.RR.A10

Verve Customer Research Report March 2019

Affinity Water

PR19 Bill Profiling: Acceptability Testing

Online survey

Research Report

March 2019

Version 1

PR19 Bill Profiling: Acceptability Testing

Report – 11th March 2019

1.1 Background to report

- Verve was commissioned by Affinity Water to undertake survey research as part of a series of work being undertaken to support PR19 and the development of Affinity Water's Business Plan for the period 2020-25 and 2025-30.
- This report is a summary of research into the Acceptability and Affordability; variations for the final plan, with & without inflation and with & without charges for sewerage were tested in the survey.

1.2 Methodology and Sample

- Independent market research agency Verve conducted an online survey of 1,000 Affinity Water customers aged 16+, sourced via an external access panel.
- Fieldwork was conducted between Friday 1st and Friday 8th March 2019.
- Recruitment quotas targeted a representative sample of adults aged 16 and over resident in Affinity Water's eight service areas. The achieved sample profile and the effects of weighting are outlined in the Appendices of this report.

- The survey was designed to provide a representative sample of customers across all areas served by Affinity Water; quotas were placed and weighting was applied to ensure representation from Affinity Water's eight regional Water Resource Zones (WRZ) and across core customer demographics.
    - Please note the survey was designed to provide a representative sample of customers across all areas served by Affinity Water, rather than a representative sample of customers of the three sewerage providers covering the Affinity Water area (Thames Water, Anglian Water, Southern Water) or within each of Affinity Water's eight Water Resource Zones.
    - The number of customers served by the three sewerage providers and within each WRZ is proportional to the size of the population within each area.

1.3 Considerations for study design and interpretation of data

- The study was designed in conjunction with Verve and Affinity Water to ensure alignment with accepted best practice and guidelines for conducting social research.
- The required timelines for delivery of results naturally drove some pragmatic decisions as to study design; these are discussed below.

- Verve is an independent market research agency, member of the MRS Society and is ISO27001 certified.
    - Verve adheres to MRS Code of Conduct in research - the professional standards that all research practitioners must maintain.
    - This is a comprehensive set of guidelines which has been established for c. 60 years, last updated in 2014 (currently being updated in wake of GDPR for April '19).
    - While provided guidelines are not definitive, they set out accepted best practice across the research lifecycle from inception to design and execution to final use and interpretation.
    - The Code of Conduct is designed to be relevant for all market, social and opinion research.

- The study was designed to take into consideration a number of guideline areas set out by the MRS where surveys are used for consultation (i.e. where seeking the views of the public on an issue of local concern, such as the provision of new services or amenities, or a planning proposal) which we have summarised below:
    - **Independence**
        - The survey was created in an independent and neutral manner.
        - Where information was provided to inform people's responses it was clearly delineated from the rest of the questionnaire, delivered in neutral language and set out as fact rather than opinion.
    - **Clarity**
        - The layout and design of the questionnaire was structured clearly with clear sections and introductory text for new information / areas.
        - The questions themselves were designed to be clear and avoid jargon - where technical terms were included, explanatory text was provided.
    - **Fairness**
        - The survey was designed to provide a representative sample of customers across all areas served by Affinity Water (please see note below on vulnerability).

- **Respondent rights**
  - The survey explained to respondents the purpose of the survey and how the information would be used.
  - The questionnaire was kept to 15 minutes in length; the expected length of the survey was outlined in advance, so participants knew what was expected of them.
  - Survey filters and sample cells were used to help to reduce survey length / repetition for individual respondents, whilst also help to provide independent analysis on key areas (i.e. the sample was split into separate cells for the two bill profiles, therefore allowing for a monadic view on each profile).
  - Information collected in the survey was treated anonymously and confidentially.
- **Presenting results**
  - This report presents the facts and results from the survey in a clear and neutral manner. Opinion and inference has been minimised for the purposes of the report.

- The guidelines for consultation work state that all customer groups who will be affected by the decision are included in the sample. For pragmatic reasons of scheduling and efficiencies, the deliberate decision was made to use an online sample for the survey.

  - An online survey may, by its nature, exclude certain cohorts of customers, specifically a proportion of those classified as living in vulnerable circumstances.
    - The definition of vulnerability is a complex and dynamic one, as it includes permanent, fluctuating and short-term vulnerabilities. This makes inclusion of all groups a challenge for any research.
    - However, the nature of the online approach inevitably means the exclusion of customers who do not have access to internet services.
    - Figures from 2016 indicate that 93% of UK population are currently online, so while the majority of customer profiles are included - the survey was designed to ensure representation from across social grades / income and captured disability at a high level - there are a percentage of customers who will have been omitted by the nature of the methodology.
    - Additional work using alternative methodologies (i.e. face to face interviewing) would
      - be required to include the opinions of these groups.

  - In addition, the survey was also provided in English only and therefore did not specifically cater for groups for whom English is not their first language. However, customers would have been able to translate via their browser to overcome this.

- Finally, we should note that any survey will only ever generate estimates of the 'truth'; the latter of which would only be available if a complete census of customers was undertaken.
    - As a result, findings are subject to sampling tolerances and statistical confidence intervals, shown in the Appendices.
    - Any regions with a base size of under 100 have not been used for analysing the results of the survey.
    - Survey data has been weighted to match the profile of the population living in Affinity Water areas by age and WRZ, based on 2011 Census data.
    - Where percentages do not sum to 100, this is due to rounding of figures.

- Despite the above limitations which have been called out above, Verve and Affinity Water agreed that an online survey was the most suitable methodology to achieve a representative sample within the set timescale.

1.4 Survey Structure

- The survey was designed to capture customer's views on two different bill profile plans for 2020-2025 (AMP7) and 2025-30 (AMP8).
    - The survey presented half of the participants (500) with bill profile 1 and the other half (500) with profile 2. The sample was split on a 'least fill' basis to ensure consistency of profile within each cell. The achieved sample for each profile so far is outlined at the end of this document.
    - Each cell saw, in order:
        - A Clean Water plan & bill context for 2020-25 (AMP7) over the five-year billing period, with and without inflation.
        - A Clean Water plan & bill context for 2025-30 (AMP8) over the five-year billing period with and without inflation.
        - A combined Clean & Waste water bill profile, with and without inflation – as appropriate for the individual's sewerage provider.
        - Each bill profile was rated for acceptability and affordability.

2. Executive Summary

- The survey data indicates that both Profile 1 and Profile 2 are rated highly on the acceptance and affordability metrics across the 2020-2025 (AMP7) clean water plan and the 2025-2030 (AMP8) clean water plans.

- All were rated ‘very’ or ‘fairly’ acceptable (top 2 box from 5 point scale) by between 74% and 81% of customers and ‘very’ or ‘fairly’ affordable (top 2 box from 5 point scale) by between 72% and 78% of customers.
  - Although not directly comparable with previous surveys conducted in these areas this level of acceptability is broadly in line with plans tested with Ipsos MORI in 2018.

- When looking at AMP7 (2020-25), Profile 1 and Profile 2 scores are consistent across acceptability and affordability, no significant differences are identified
- When looking at AMP8 (2025-30) Profile 2 is significantly more acceptable and slightly more affordable than Profile 1.
  - Please note the Profile 2 positive scores for AMP8 (2025-30) may be due to the ordering of the stimulus and the curvature of the graph. The AMP7 (2020-25) Profile 2 stimulus, where the line graph visually shows a steady increase over time, is shown to customers first. The AMP8 (2025-2030) Profile 2 stimulus, where the line graphic visually shows more of a flat line, is shown to customers second.

- After inflation is added, acceptability and affordability falls significantly, this results in similar levels of acceptability for both AMP7 (2020-25) and AMP8 (2025-30) across both profiles (between 49% and 54%).

- The 2020-2025 combined clean and waste water plans generally experience lower acceptance and affordability than the clean water plans, with around two thirds of customers rating the plans as very or fairly acceptable and affordable.
  - Looking again at the two individual profiles, profile 1 scores significantly more highly in terms of affordability (67% vs 59% for profile 2).
  - The impact of inflation is also evident for the combined clean and waste water plans with acceptability and affordability falling significantly across both profiles once inflation is added.

3.1 Response to Clean Water plan & bill profile - 2020-25 (AMP7)

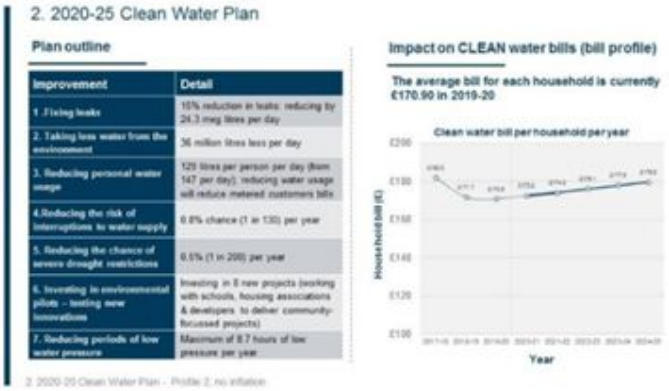
- Respondents were given a description of the household water bill business planning process:
  - *Household water bills are set every five years. They are based on an agreement between each water company and Ofwat, the Government regulator.*
  - *In setting future water bills, Affinity Water and Ofwat take customer views on board and also ensure that legally required standards for water services are met e.g. ensuring tap water is safe to drink.*

- The survey then presented customers with a business clean water plan overview including details of projected annual average household bills over the 2020-25 five-year billing period. The survey presented half of the participants (500) with bill profile 1 and the other half (500) with profile 2. The sample was split on a 'least fill' basis to ensure consistency of profile within each cell. Customers were then asked whether or not they found the presented plan to be acceptable and whether they thought the plan was affordable. Section 3.1 reviews the findings of these questions.

- The details of the plan given to participants were as follows:

Figure 1: Clean Water Plan 2020-2025 (No Inflation) – Profile 1 Stimulus

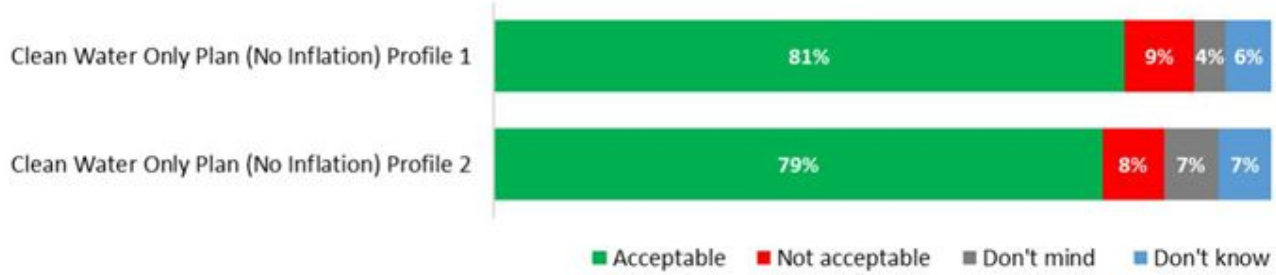
Figure 2: Clean Water Plan 2020-2025 (No Inflation) – Profile 2 Stimulus



- Both tested AMP7 Clean Water plans / bill profiles score highly on acceptability with customers.
    - **Profile 1 scores very slightly higher for acceptability when compared to Profile 2 but the difference was not significant.**

- Over eight in ten (81%) rate profile 1 as very or fairly acceptable and just under eight in ten (79%) rated profile 2 very or fairly acceptable.
- In terms of top box scores, just under a quarter (21%) of customers felt that both profile 1 and profile 2 were 'very acceptable'.
- Reminder: customers were only exposed to one bill profile throughout the survey; they did not see the other profile and could therefore not compare bill profiles directly.

Figure 3: Clean Water Only Plan 2025-2030 (No Inflation) - Acceptability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- Among those that thought the Clean Water Plans 2020-2025 (AMP7) were not acceptable the following reasons were given:
  - Customers who were shown Profile 1 thought it was too expensive and believe the cost of improvements should not be passed down to them.
  - Customers who were shown Profile 2 also thought the plan was too expensive, especially when considering the target of reducing leaks is only 15%.

- Acceptability of Clean Water Plan 2020-2025 (AMP7) Profile 1 is consistent across demographics, no significant differences identified. (shown in table 4 below).

Table 4: Clean Water Only Plan 2020-2025 (No Inflation) - Profile 1 Acceptability

Clean Water Only Plan 2020-25 P1 (No Inflation)	*Very acceptable*	*Fairly acceptable*	*Not very acceptable*	*Not acceptable at all*	*Don't mind*	*Acceptable (NET)*
Total	21%	59%	8%	1%	4%	81%
Male	20%	60%	10%	2%	4%	80%
Female	23%	59%	6%	0%	4%	82%
Aged 16-34	24%	59%	9%	0%	3%	82%
Aged 35-54	19%	62%	7%	2%	5%	81%
Aged 55+	23%	57%	9%	2%	4%	80%
ABC1	21%	61%	7%	1%	4%	82%
C2DE	22%	57%	9%	2%	4%	80%
Benefits	23%	55%	8%	2%	2%	78%

No Benefits	21%	62%	7%	1%	5%	82%
Have meter	24%	61%	5%	1%	4%	85%
No meter	21%	58%	11%	1%	4%	78%
Main bill payer	22%	59%	8%	2%	4%	81%
Joint bill payer	19%	61%	7%	0%	4%	81%
Colne	18%	55%	15%	0%	1%	73%
Lee	24%	57%	7%	0%	5%	82%
Pinn	21%	58%	10%	2%	3%	79%
Wey	20%	63%	3%	3%	7%	83%

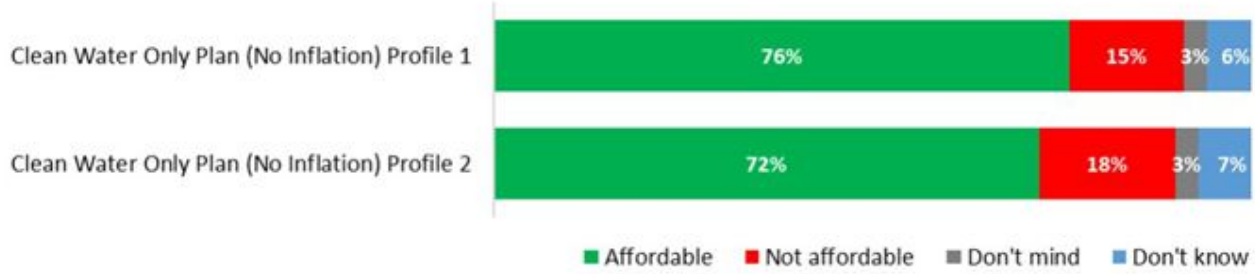
- Acceptability of Clean Water Plan 2020-2025 (AMP7) Profile 2 is consistent across most demographics, however, when looking at Water Zones, those living in the Wey find the plan significantly less acceptable than the total; 66% fairly or very acceptable compared to the total 79%. Instead, those living in the Wey water zone are significantly more likely to fall into the 'don't mind' group (16% vs 7% total) (shown in table 5 below).

Table 5: Clean Water Only Plan 2020-2025 (No Inflation) - Profile 2 Acceptability

Clean Water Only Plan 2020-25 P2 (No Inflation)	*Very acceptable*	*Fairly acceptable*	*Not very acceptable*	*Not acceptable at all*	*Don't mind*	*Acceptable (NET)*
Total	21%	58%	6%	2%	7%	79%
Male	21%	61%	7%	2%	5%	81%
Female	21%	56%	4%	2%	8%	76%
Aged 16-34	20%	64%	5%	1%	6%	84%
Aged 35-54	18%	58%	6%	2%	6%	75%
Aged 55+	24%	53%	6%	2%	9%	78%
ABC1	21%	57%	8%	3%	6%	78%
C2DE	21%	60%	2%	0%	8%	81%
Benefits	29%	46%	9%	1%	9%	75%
No Benefits	19%	62%	4%	2%	6%	81%
Have meter	19%	63%	6%	2%	5%	82%
No meter	24%	54%	6%	2%	8%	78%
Main bill payer	23%	58%	5%	2%	6%	81%
Joint bill payer	16%	58%	6%	1%	8%	74%
Colne	21%	62%	2%	5%	6%	84%
Lee	22%	63%	3%	2%	7%	85%
Pinn	16%	62%	4%	1%	6%	79%
Wey	24%	41%	10%	1%	16%	66%

- Customers were then asked whether or not they found the presented plan to be affordable, and Profile 1 also scored slightly higher in terms of affordability when compared to Profile 2 but the difference was not significant.
    - Just under three quarters (76%) rate profile 1 very or fairly affordable, compared to 72% rating profile 2 very or fairly affordable.

Figure 6: Clean Water Only Plan 2020-2025 (No Inflation) - Affordability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- Affordability of Profile 1 is consistent across most demographics. However, the results suggest that the bill is considered significantly less affordable for customers who do received benefits; 63% agreed it was a fairly or very affordable proposal, compared with 76% overall. In comparison the bill is significantly more affordable for those living in Lee; 85% agreed it was a fairly or very affordable proposal compared with 76% overall.

Table 7: Clean Water Only Plan 2020-2025 (No Inflation) - Profile 1 Affordability

Clean Water Only Plan 2020-25 P1 (No Inflation)	*Very affordable*	*Fairly affordable*	*Not very affordable*	*Not affordable at all*	*Don't mind*	*Affordable (NET)*
Total	17%	59%	13%	3%	3%	76%
Male	22%	58%	10%	3%	2%	80%
Female	13%	59%	16%	2%	3%	72%
Aged 16-34	10%	67%	11%	3%	3%	77%
Aged 35-54	19%	52%	17%	2%	3%	71%
Aged 55+	22%	59%	9%	3%	2%	81%
ABC1	18%	59%	11%	3%	3%	76%
C2DE	16%	59%	16%	2%	2%	75%
Benefits	10%	53%	19%	3%	3%	63%
No Benefits	19%	60%	11%	2%	3%	80%
Have meter	19%	57%	13%	3%	2%	77%
No meter	16%	60%	13%	2%	4%	76%
Main bill payer	18%	59%	13%	2%	3%	76%
Joint bill payer	16%	59%	13%	5%	1%	74%

Colne	22%	52%	12%	4%	3%	74%
Lee	21%	64%	8%	1%	1%	85%
Pinn	16%	60%	16%	1%	1%	76%
Wey	19%	59%	9%	1%	6%	78%

- For Profile 2 affordability is consistent across different groups of customers (shown Table 8 below). No significant differences identified across sub groups.

Table 8: Clean Water Only Plan 2020-2025 (No Inflation) - Profile 2 Affordability

Clean Water Only Plan 2020-25 P2 (No Inflation)	*Very affordable*	*Fairly affordable*	*Not very affordable*	*Not affordable at all*	*Don't mind*	*Affordable (NET)*
Total	18%	54%	14%	3%	3%	72%
Male	18%	56%	14%	4%	2%	74%
Female	18%	51%	15%	3%	4%	69%
Aged 16-34	21%	50%	18%	1%	3%	70%
Aged 35-54	15%	53%	16%	5%	4%	68%
Aged 55+	19%	57%	10%	4%	2%	76%
ABC1	20%	50%	14%	4%	4%	70%
C2DE	15%	59%	15%	2%	1%	74%
Benefits	21%	48%	19%	3%	4%	69%
No Benefits	18%	56%	14%	3%	3%	73%
Have meter	19%	52%	14%	4%	3%	71%
No meter	19%	59%	14%	3%	1%	78%
Main bill payer	20%	51%	16%	3%	3%	71%
Joint bill payer	14%	60%	11%	3%	2%	74%
Colne	22%	58%	11%	3%	0%	80%
Lee	23%	46%	18%	3%	3%	70%
Pinn	20%	54%	17%	2%	2%	74%
Wey	11%	62%	10%	1%	7%	73%

3.2 Response to **Inflation** Clean Water plan & bill profile - 2020-25 (AMP7)

- After respondents were shown the pre-inflation clean water plan and bill profile for 2020-25 (AMP7) they were shown the profile again but this time with inflation. Respondents were given a description of inflation first:
  - *Inflation is the rate of increase in prices for goods and services. It is expected that there will be a 2% increase to household water bills each year due to inflation. This increase is in line with expectations on inflation rates for goods and services in general, not just for water.*
  - *When considering the impact of inflation on bills please bear in mind that incomes and pensions can also rise in line with inflation, which can offset the increase in the cost of goods and services.*

- Again, the survey presented half of the participants (500) with bill profile 1 and the other half (500) with profile 2. Customers were then asked again whether or not they found the presented plan to be acceptable. Section 3.2 reviews the findings of these questions.

  The details of the plan given to participants were as follows:

Figure 9: Clean Water Plan 2020-2025 (Inflation) – Profile 1 Stimulus

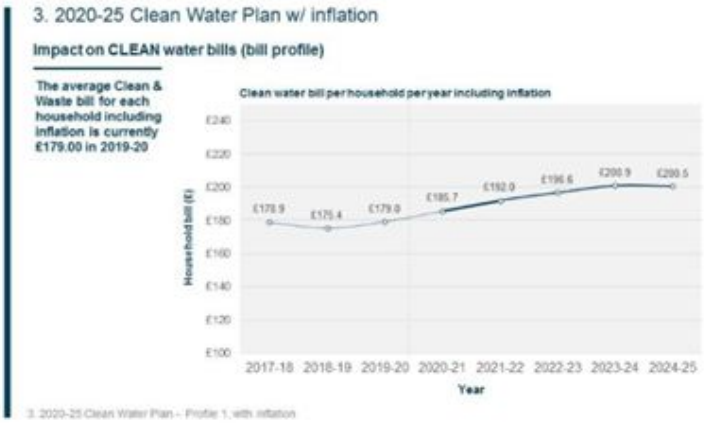
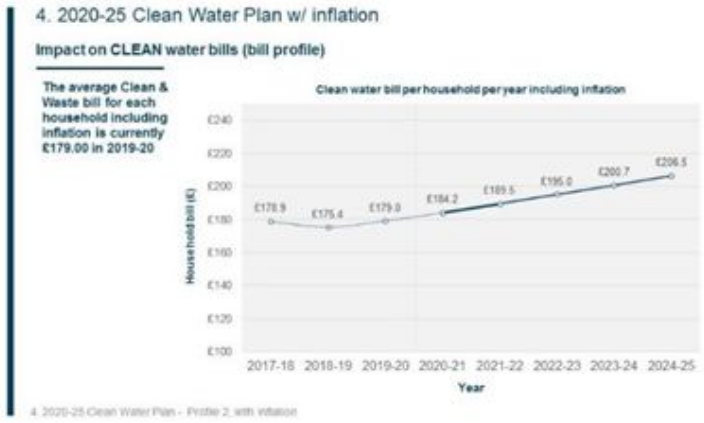


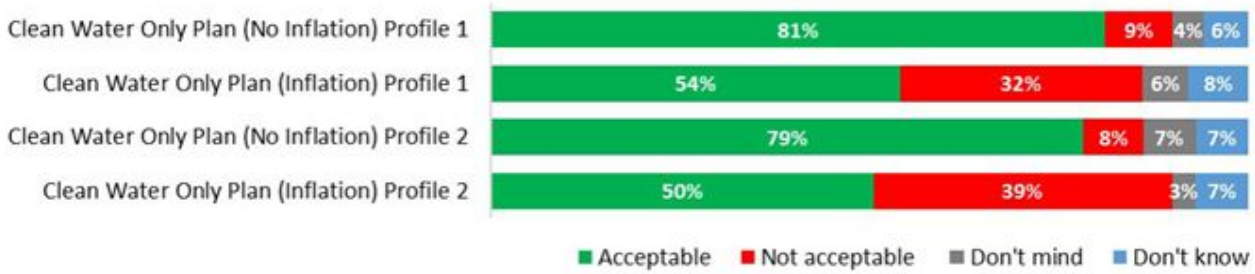
Figure 10: Clean Water Plan 2020-2025 (Inflation) – Profile 2 Stimulus



- As seen in previous research, there is a significant drop in stated acceptability and affordability when the bills including inflation were shown, suggesting the term ‘inflation’ continues to have a negative impact; this drop puts responses to the two profiles at similar levels for acceptability and affordability.
  - 81% rating Profile 1 pre-inflation acceptable, significantly dropped to 54% acceptability when inflation is added (-27%).
    - 76% rating Profile 1 pre-inflation affordable significantly dropped to 54% affordability when inflation was added (-22%).
  - 79% rating Profile 2 pre-inflation acceptable significantly dropped to 50% acceptability when inflation was added (-29%).

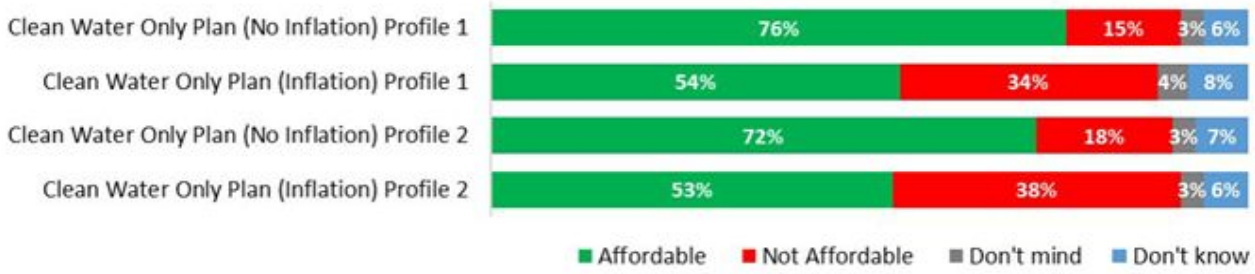
- The 72% who found profile 2 pre-inflation affordable significantly dropped to 53% affordability when inflation was added (-19%).

Figure 11: Clean Water Plan 2020-2025 (No Inflation vs Inflation) – Acceptability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

Figure 12: Clean Water Plan 2020-2025 (No Inflation vs Inflation) – Affordability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

4.1 Response to Clean Water plan & bill profile - 2025-30 (AMP8)

- Next the survey then presented customers with a business clean water plan overview including details of projected annual average household bills over the 2025-30 five year billing period. The survey presented half of the participants (500) with bill profile 1 and the other half (500) with profile 2. The sample was split on a 'least fill' basis to ensure consistency of profile within each cell. Customers were then asked whether or not they found the presented plan to be acceptable. Section 4.1 reviews the findings of these questions.

  The details of the plan given to participants were as follows:

Figure 13: Clean Water Plan 2025-2030 (No Inflation) – Profile 1 Stimulus

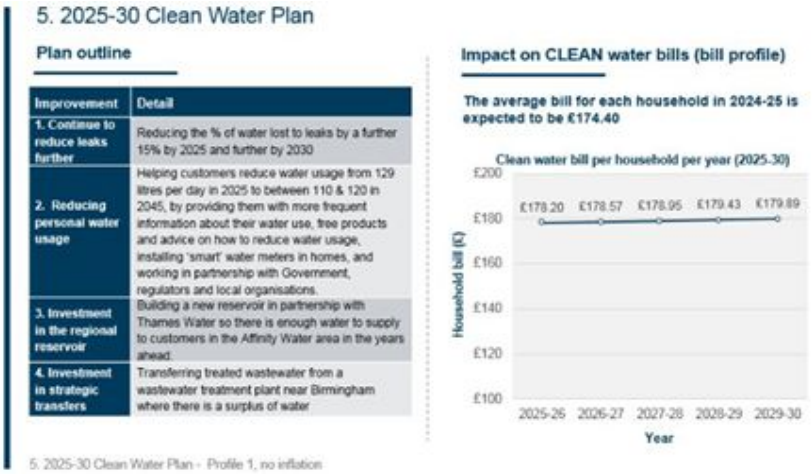
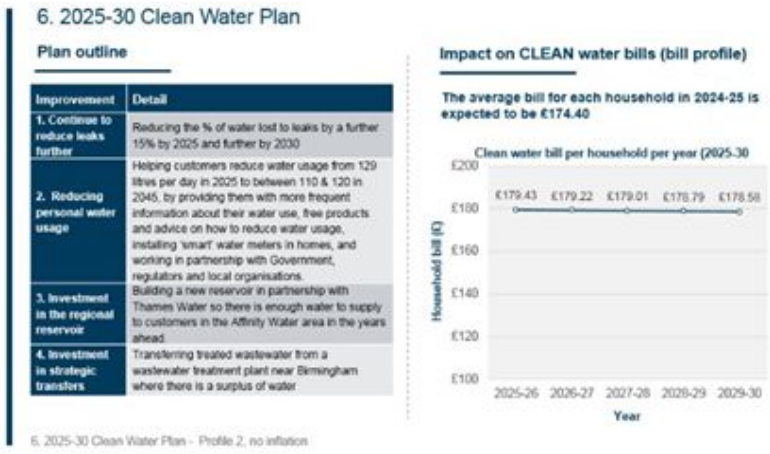


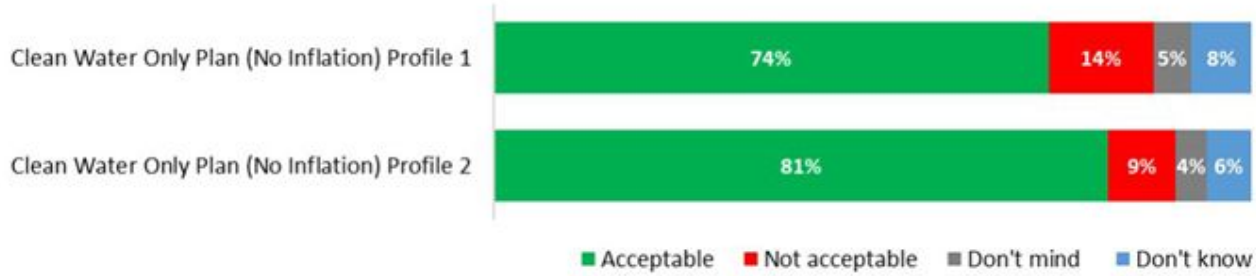
Figure 14: Clean Water Plan 2025-2030 (No Inflation) – Profile 2 Stimulus



- Both tested AMP8 Clean Water plans / bill profiles score highly on acceptability and affordability with customers, however Profile 2 was considered to be significantly more acceptable than Profile
    - 74% found Profile 1 to be very or fairly acceptable and 81% found profile 2 to be very or fairly acceptable.

- Customers also found Profile 2 to be more affordable than profile 1 but not significantly so.
    - Just under three quarters (73%) found Profile 1 to be very or fairly affordable and 78% found Profile 2 to be very or fairly affordable.
- Reminder: customers were only exposed to one bill profile throughout the survey; they did not see the other profile and could therefore not compare bill profiles directly.

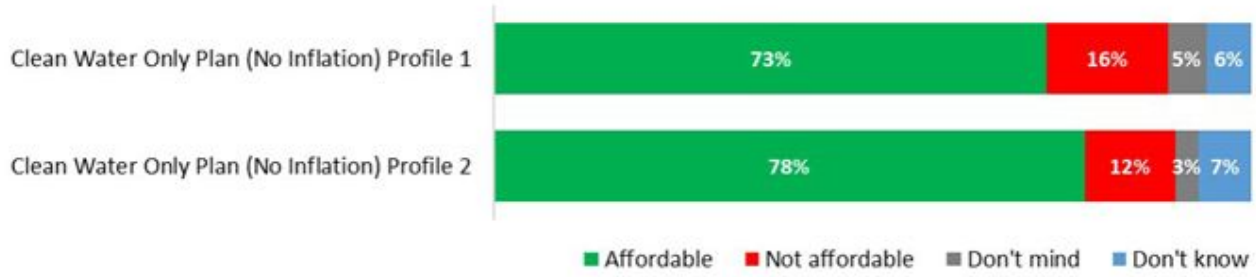
Figure 15: Clean Water Plan 2025-2030 (No Inflation) – Acceptability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- Among those that thought the Clean Water Plans 2025-2030 (AMP8) were not acceptable the following reasons were given:
    - Customers who felt Profile 1 was not acceptable thought the increased price of the water bill was not justified when water leakage rates are still high. Customers also react negatively to the proposition they will have to reduce their water usage.
    - Customers who felt Profile 2 was not acceptable were concerned that water leakages are only slightly reduced when the costs of the water bill remain high.

Figure 16: Clean Water Plan 2025-2030 (No Inflation) – Affordability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- For Profile 1 acceptability is relatively similar across different groups of customers (shown Table 17 below). However, customers living in the Pinn Water Zone are significantly less accepting of the bill, 62% find Profile 1 fairly or very acceptable compared to 74% total.

Table 17: Clean Water Only Plan 2025-2030 (No Inflation) - Profile 1 Acceptability

Clean Water Only Plan 2025-30 P1 (No Inflation)	Very acceptable	Fairly acceptable	Not very acceptable	Not acceptable at all	Don't mind	Acceptable (NET)
Total	22%	52%	11%	3%	5%	74%
Male	26%	51%	9%	3%	4%	77%
Female	18%	52%	12%	2%	7%	70%
Aged 16-34	18%	52%	13%	2%	6%	69%
Aged 35-54	22%	52%	9%	3%	5%	75%
Aged 55+	25%	51%	12%	3%	4%	77%
ABC1	22%	50%	11%	2%	6%	71%
C2DE	22%	55%	11%	4%	3%	77%
Benefits	21%	50%	5%	8%	4%	71%
No Benefits	23%	52%	13%	1%	6%	75%
Have meter	23%	50%	12%	3%	4%	73%
No meter	23%	56%	9%	1%	5%	78%
Main bill payer	23%	49%	11%	3%	6%	72%
Joint bill payer	19%	58%	12%	1%	3%	77%
Colne	31%	44%	14%	2%	3%	75%
Lee	25%	56%	4%	0%	5%	81%
Pinn	18%	44%	18%	5%	5%	62%
Wey	17%	55%	12%	3%	6%	72%

- For Profile 2 acceptability is consistent across different groups of customers (shown Table 18 below). No significant differences identified across sub groups.

Table 18: Clean Water Only Plan 2025-2030 (No Inflation) - Profile 2 Acceptability

Clean Water Only Plan 2025-30 P2 (No Inflation)	Very acceptable	Fairly acceptable	Not very acceptable	Not acceptable at all	Don't mind	Acceptable (NET)
Total	24%	56%	7%	2%	4%	81%
Male	25%	55%	7%	3%	5%	81%
Female	24%	57%	7%	1%	3%	81%
Aged 16-	27%	62%	4%	3%	1%	89%

34						
Aged 35-54	23%	55%	7%	2%	4%	78%
Aged 55+	24%	52%	11%	1%	7%	76%
ABC1	27%	56%	6%	3%	4%	83%
C2DE	21%	57%	9%	0%	4%	78%
Benefits	23%	55%	8%	2%	7%	78%
No Benefits	25%	57%	7%	2%	3%	83%
Have meter	26%	58%	5%	2%	4%	84%
No meter	25%	56%	9%	1%	5%	81%
Main bill payer	24%	56%	7%	2%	5%	80%
Joint bill payer	25%	56%	6%	0%	3%	82%
Colne	26%	58%	5%	5%	4%	84%
Lee	33%	51%	5%	2%	6%	85%
Pinn	22%	56%	11%	0%	2%	78%
Wey	20%	57%	5%	3%	8%	77%

- For Profile 1 affordability is relatively similar across different groups of customers (shown Table 19 below). No significant differences identified across sub groups.

Table 19: Clean Water Only Plan 2025-2030 (No Inflation) - Profile 1 Affordability

Clean Water Only Plan 2025-30 P1 (No Inflation)	*Very affordable*	*Fairly affordable*	*Not very affordable*	*Not affordable at all*	*Don't mind*	*Affordable (NET)*
Total	21%	52%	13%	3%	5%	73%
Male	26%	53%	11%	3%	1%	79%
Female	16%	51%	15%	3%	8%	67%
Aged 16-34	17%	50%	14%	3%	8%	67%
Aged 35-54	21%	53%	12%	3%	5%	75%
Aged 55+	24%	52%	13%	3%	2%	77%
ABC1	21%	51%	11%	4%	6%	72%
C2DE	21%	54%	16%	1%	3%	74%
Benefits	20%	43%	21%	3%	3%	62%
No Benefits	22%	54%	11%	3%	5%	77%
Have meter	27%	47%	13%	4%	4%	74%
No meter	15%	60%	11%	2%	5%	76%
Main bill payer	23%	50%	13%	2%	4%	73%
Joint bill payer	16%	56%	12%	6%	7%	72%

Colne	23%	48%	10%	5%	3%	71%
Lee	19%	62%	6%	2%	5%	81%
Pinn	26%	40%	21%	4%	3%	66%
Wey	24%	51%	12%	1%	7%	75%

- As with Profile 1, Profile 2 affordability is relatively similar across different groups of customers (shown Table 20 below). No significant differences identified across sub groups.

Table 20: Clean Water Only Plan 2025-2030 (No Inflation) - Profile 2 Affordability

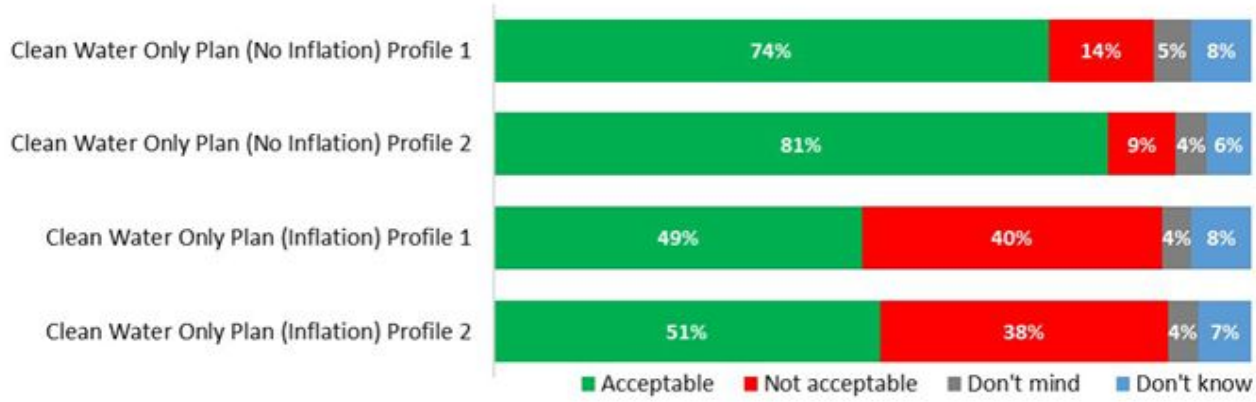
Clean Water Only Plan 2025-30 P2 (No Inflation)	*Very affordable*	*Fairly affordable*	*Not very affordable*	*Not affordable at all*	*Don't mind*	*Affordable (NET)*
Total	25%	54%	9%	3%	3%	78%
Male	26%	54%	8%	5%	3%	80%
Female	23%	54%	9%	2%	3%	77%
Aged 16-34	28%	53%	6%	4%	2%	81%
Aged 35-54	23%	54%	11%	2%	2%	77%
Aged 55+	23%	53%	9%	3%	4%	76%
ABC1	28%	50%	8%	3%	4%	78%
C2DE	19%	60%	10%	3%	1%	79%
Benefits	23%	49%	14%	2%	4%	72%
No Benefits	25%	56%	8%	3%	3%	81%
Have meter	28%	50%	9%	4%	3%	78%
No meter	23%	61%	6%	3%	3%	84%
Main bill payer	27%	51%	10%	3%	3%	78%
Joint bill payer	19%	61%	5%	3%	3%	80%
Colne	34%	48%	9%	6%	2%	81%
Lee	34%	44%	10%	2%	5%	78%
Pinn	20%	62%	8%	0%	1%	83%
Wey	21%	55%	6%	5%	3%	76%

4.2 Response to **Inflation** Clean Water plan & bill profile - 2025-30 (AMP8)

- As with the 2020-25 plan, the bill including inflation was presented to participants. Again, results show a significant drop in perceived acceptability and affordability:

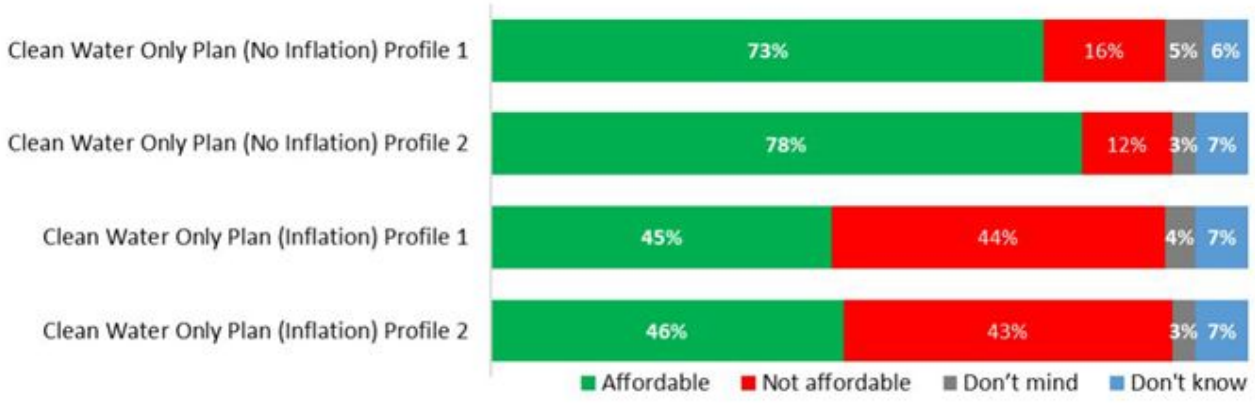
- 74% rating profile 1 pre-inflation acceptable significantly dropped to 49% acceptability when inflation was added (-25%).
  - 73% rating profile 1 pre-inflation affordable significantly dropped to 45% affordability when inflation was added (-28%).
- 81% rating profile 2 pre-inflation acceptable, significantly dropped to 51% acceptability when inflation was added (-30%).
  - 78% rating profile 2 pre-inflation affordable significantly dropped to 46% affordability when inflation was added (-32%).

Figure 21: Clean Water Plan 2025-2030 (No Inflation vs Inflation) – Acceptability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

Figure 22: Clean Water Plan 2025-2030 (No Inflation vs Inflation) – Affordability



- Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

5.1 Response to Clean and Waste Water Bill Profiles

- Respondents were given a description of waste water services and fit with the household water bill business planning process
    - *You pay Affinity Water for WASTE water services, but they pass this part of the bill on to Thames/ Anglian/ Southern. The bills they set are also based on an agreement with Ofwat, the Government regulator.*

- Respondents were shown a combined clean and waste water bill from 2020 to 2025 dependant on their waste water provider. The survey presented half of the participants (500) with bill profile 1 and the other half (500) with profile 2. The sample was split on a 'least fill' basis to ensure consistency of profile within each cell. Customers were then asked whether or not they found the presented plan to be acceptable. Section 5.1 reviews the findings of these questions.

- The details of the plan given to participants were as follows:

Figure 23: Complete Water Bill Information (No Inflation) – Profile 1 (Thames Water)

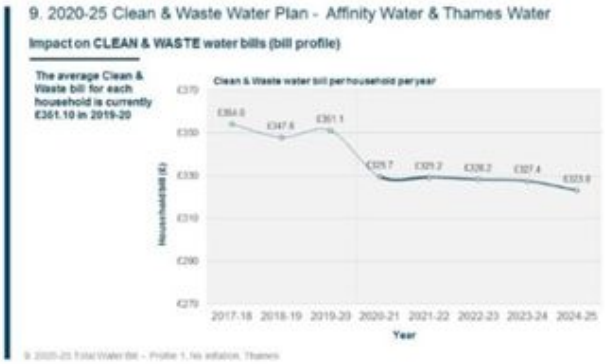


Figure 24: Complete Water Bill Information (No Inflation) – Profile 1 (Anglian)

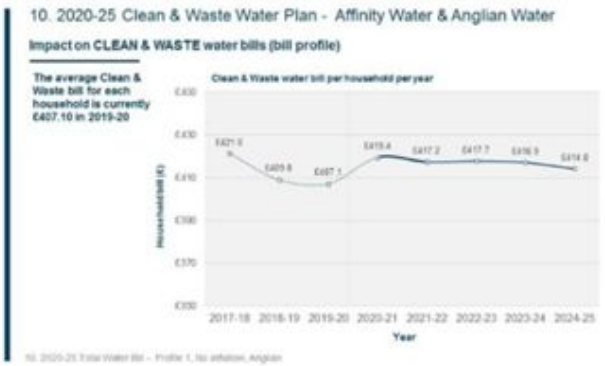


Figure 25: Complete Water Bill Information – Profile 1 (Southern)

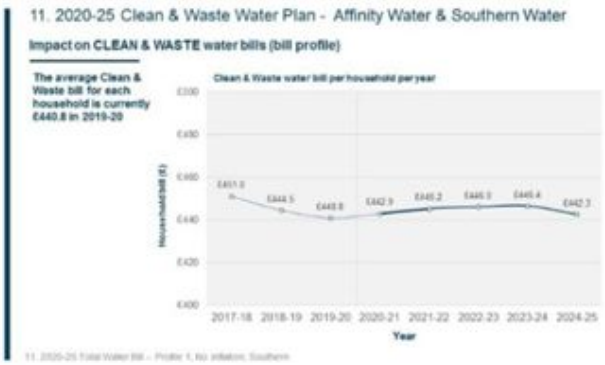


Figure 26: Complete Water Bill Information (No Inflation) – Profile 2 (Thames Water)

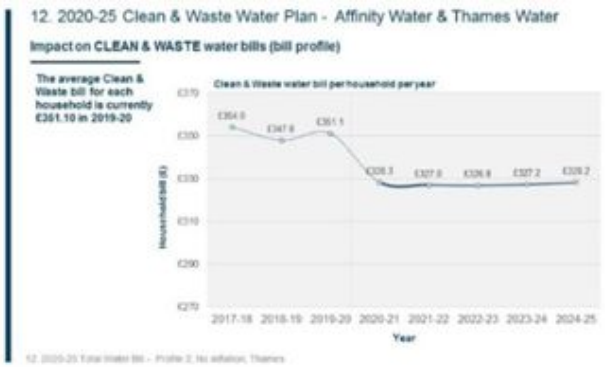
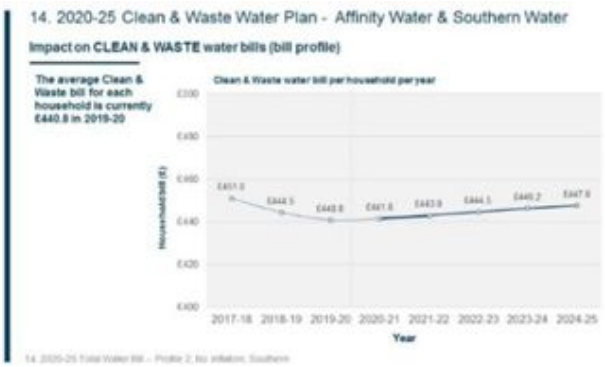


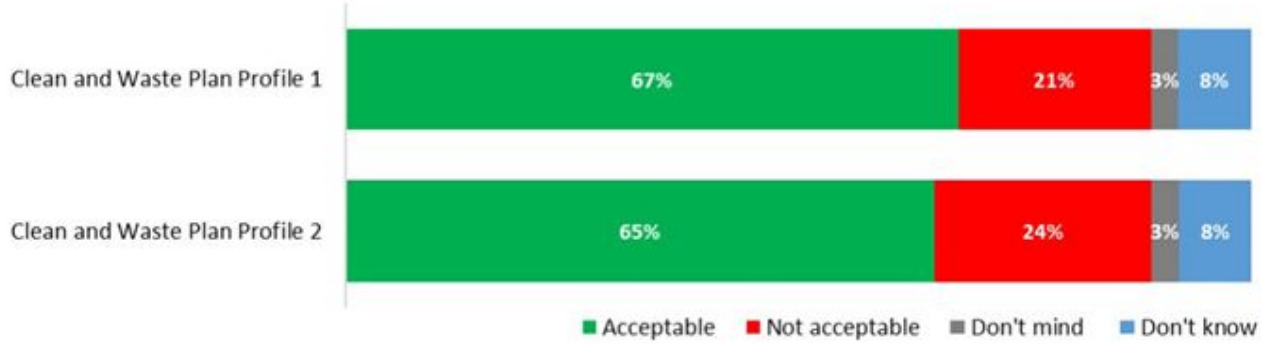
Figure 27: Complete Water Bill Information (No Inflation) – Profile 2 (Anglian)

Figure 28: Complete Water Bill Information – Profile 2 (Southern)



- Levels of stated acceptability for combined clean and waste water bills from 2020-2025 are generally lower, but, **both profiles receive similar levels of acceptance rating by customers** with each plan rated very or fairly acceptable by around two thirds overall. Profile 1 is considered to be slightly more acceptable but not significantly so.
    - 67% rate Profile 1 as very or fairly acceptable.
    - 65% rate Profile 2 as very or fairly acceptable.
        - Reminder: customers were only exposed to one bill profile throughout the survey; they did not compare bill profiles directly.

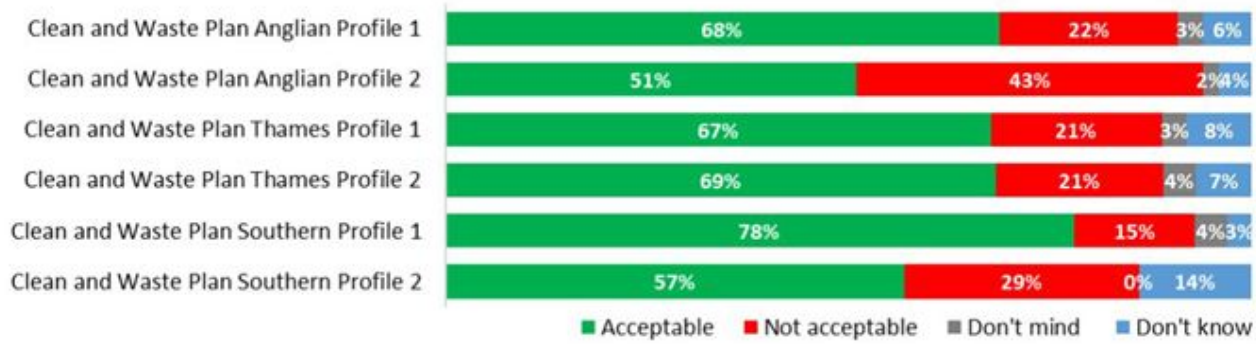
Figure 29: Clean and Waste Water Plans (No Inflation) – Combined Acceptability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- When comparing results by sewerage provider acceptability is consistent for Profile 1:
  - 67% of Thames customers feel that Profile 1 is very or fairly acceptable, 68% of Anglian feel that Profile 1 is very or fairly acceptable.
- But profile 2 tells a different story with Thames customers significantly more accepting of the combined clean and waster bill than Anglian customers.
  - 69% of Thames customers feel that Profile 2 is very or fairly acceptable, but only just over half (51%) of Anglian customers feel that Profile 2 is very or fairly acceptable.
- Please not that due to low base sizes for Southern we were unable to comment on the results but have included the data in figure 30 as a reference.

Figure 30: Clean and Waste Water Plans (No Inflation) – Acceptability by Sewerage Company



Base: Thames P1 381 /1000, Thames P2 385/1000, Anglian P1 67/1000, Anglian P2 64/1000, Southern P1 32/1000, Southern P2 23/1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- For Profile 1 clean and waste water acceptability is relatively similar across different groups of customers (shown Table 31 below). However, customers aged 35-54 are significantly less accepting of the bill, 59% find Profile 1 fairly or very acceptable compared to 67% total.

Table 31: Clean & Waste Water Plans (No Inflation) – Profile 1 Acceptability

Clean & Waste Water Only Plan P1 (No Inflation)	*Very acceptable*	*Fairly acceptable*	*Not very acceptable*	*Not acceptable at all*	*Don't mind*	*Acceptable (NET)*
Total	26%	41%	13%	8%	3%	67%
Male	32%	38%	12%	7%	4%	70%
Female	20%	44%	14%	9%	3%	65%
Aged 16-34	28%	46%	8%	8%	3%	74%
Aged 35-54	23%	35%	20%	7%	4%	59%
Aged 55+	27%	45%	10%	9%	2%	72%
ABC1	28%	43%	12%	6%	3%	71%
C2DE	23%	39%	16%	10%	3%	63%
Benefits	15%	43%	15%	11%	1%	58%
No Benefits	30%	42%	11%	7%	4%	71%
Have meter	29%	43%	13%	8%	2%	72%
No meter	24%	40%	14%	7%	3%	65%
Main bill payer	24%	41%	14%	8%	4%	65%
Joint bill payer	31%	42%	10%	7%	1%	74%

Colne	38%	31%	13%	5%	1%	70%
Lee	22%	46%	10%	7%	7%	69%
Pinn	20%	47%	8%	15%	3%	67%
Wey	28%	42%	8%	8%	1%	71%

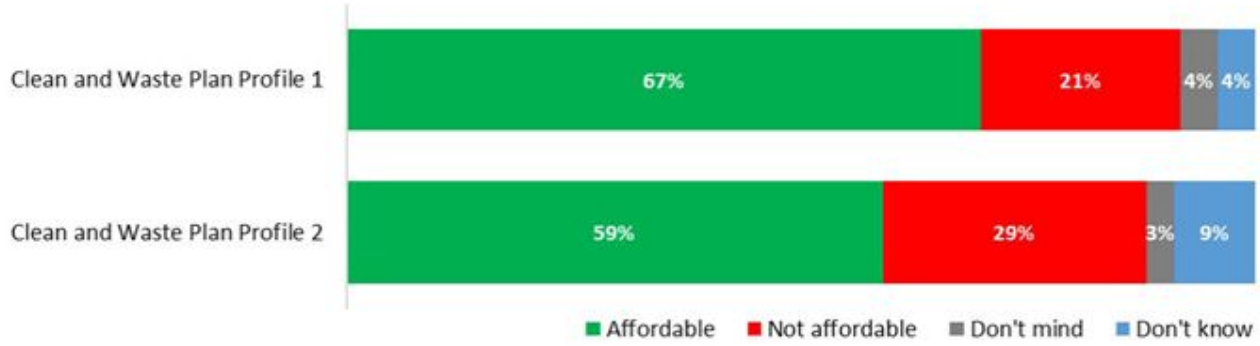
- For Profile 2 clean and waste water acceptability is relatively similar across different groups of customers (shown Table 32 below). No significant differences identified across sub groups.

Table 32: Clean & Waste Water Plans (No Inflation) - Profile 2 Acceptability

Clean & Waste Water Only Plan P2 (No Inflation)	*Very acceptable*	*Fairly acceptable*	*Not very acceptable*	*Not acceptable at all*	*Don't mind*	*Acceptable (NET)*
Total	23%	42%	16%	8%	3%	65%
Male	24%	44%	14%	8%	5%	68%
Female	21%	41%	19%	7%	2%	62%
Aged 16-34	23%	42%	21%	4%	4%	64%
Aged 35-54	22%	41%	17%	7%	4%	63%
Aged 55+	23%	44%	12%	11%	2%	67%
ABC1	26%	45%	15%	6%	2%	70%
C2DE	18%	39%	18%	9%	6%	57%
Benefits	21%	36%	21%	11%	1%	58%
No Benefits	24%	44%	16%	6%	4%	67%
Have meter	25%	41%	17%	8%	3%	65%
No meter	22%	50%	15%	7%	3%	72%
Main bill payer	23%	41%	17%	7%	3%	64%
Joint bill payer	20%	46%	13%	8%	4%	67%
Colne	29%	39%	14%	7%	7%	68%
Lee	27%	39%	21%	7%	1%	65%
Pinn	21%	46%	16%	6%	3%	67%
Wey	25%	49%	5%	6%	8%	74%

- Levels of stated affordability for combined clean and waste water bills from 2020-2025 are again generally lower than the clean water only plans. When comparing the two clean and waste water profiles, Profile 1 is considered to be significantly more affordable than Profile 2;
    - 67% rate profile 1 as very or fairly affordable compared to the 59% rating profile 2 very or fairly affordable.

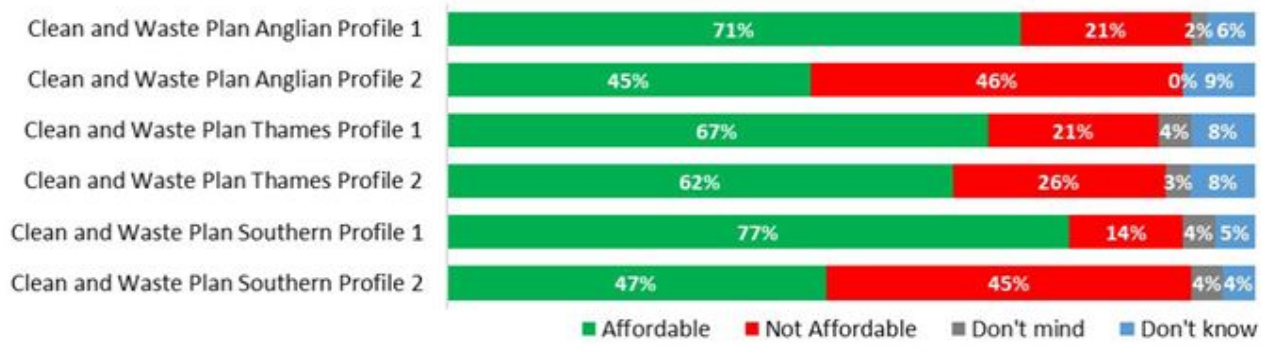
Figure 33: Clean and Waste Water Plans (No Inflation) – Combined Affordability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- When comparing results by sewerage provider, just like acceptability, affordability is consistent for Profile 1:
  - 67% of Thames customers feel that Profile 1 is very or fairly affordable, 71% of Anglian feel that Profile 1 is very or fairly affordable.
- But profile 2 tells a different story with Thames customers feeling like the combined clean and waste water bill is significantly more affordable compared to Anglian customers.
  - 62% of Thames customers feel that Profile 2 is very or fairly affordable, but under half (45%) of Anglian customers feel that Profile 2 is very or fairly affordable.
- Please not that due to low base sizes for Southern we were unable to comment on the results but have included the data in figure 30 as a reference.

Figure 34: Clean and Waste Water Plans (No Inflation) – Affordability by Sewerage Company



Base: Thames P1 381 /1000, Thames P2 385/1000, Anglian P1 67/1000, Anglian P2 64/1000, Southern P1 32/1000, Southern P2 23/1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

- For Profile 1 clean and waste water affordability is relatively similar across different groups of customers (shown Table 35 below). However, customers receiving benefits feel that the bill is significantly less affordable; 49% find Profile 1 fairly or very affordable compared to 67% total.

Table 35: Clean & Waste Water Plan (No Inflation) - Profile 1 Affordability

Clean & Waste Water Only Plan P1 (No Inflation)	Very affordable	Fairly affordable	Not very affordable	Not affordable at all	Don't mind	Affordable (NET)
Total	22%	44%	13%	9%	4%	67%
Male	31%	42%	9%	8%	2%	72%
Female	15%	47%	16%	9%	5%	62%
Aged 16-34	25%	46%	6%	8%	4%	71%
Aged 35-54	20%	39%	19%	10%	4%	60%
Aged 55+	23%	49%	11%	7%	2%	72%
ABC1	23%	51%	10%	7%	2%	73%
C2DE	22%	35%	17%	11%	6%	57%
Benefits	14%	35%	19%	16%	5%	49%
No Benefits	25%	47%	10%	7%	3%	72%
Have meter	26%	45%	11%	10%	2%	71%
No meter	20%	44%	15%	7%	4%	64%
Main bill payer	21%	43%	14%	8%	4%	64%
Joint bill payer	25%	48%	10%	10%	2%	73%
Colne	35%	39%	8%	7%	1%	74%
Lee	18%	49%	12%	8%	6%	67%
Pinn	20%	41%	16%	11%	3%	61%
Wey	21%	53%	8%	11%	1%	74%

- For Profile 2 clean and waste water affordability is relatively similar across different groups of customers (shown Table 36 below). However, male customers feel that the plan is significantly more affordable than the total; 67%of males find Profile 2 fairly or very affordable compared to 59% total.

Table 36: Clean & Waste Water Plan (No Inflation) - Profile 2 Affordability

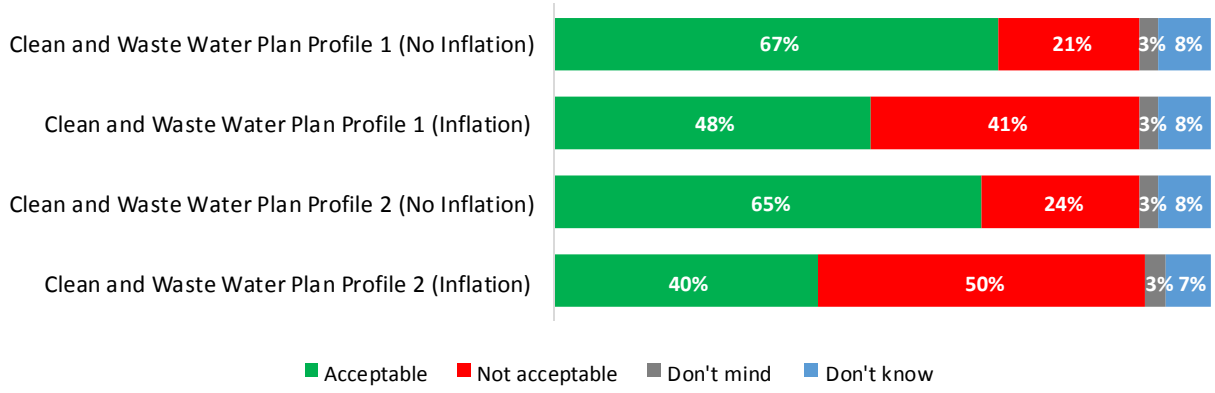
Clean & Waste Water Only Plan P2 (No Inflation)	Very affordable	Fairly affordable	Not very affordable	Not affordable at all	Don't mind	Affordable (NET)
Total	19%	40%	18%	10%	3%	59%
Male	19%	48%	14%	11%	3%	67%
Female	19%	33%	23%	10%	3%	52%
Aged	22%	36%	21%	9%	2%	58%

16-34						
Aged 35-54	16%	43%	17%	11%	4%	59%
Aged 55+	18%	41%	17%	10%	3%	60%
ABC1	24%	40%	19%	8%	2%	64%
C2DE	11%	40%	18%	14%	5%	52%
Benefits	17%	36%	22%	18%	2%	53%
No Benefits	20%	42%	18%	8%	3%	62%
Have meter	22%	41%	18%	9%	3%	63%
No meter	17%	42%	19%	12%	3%	59%
Main bill payer	21%	40%	17%	11%	3%	61%
Joint bill payer	13%	42%	22%	9%	2%	55%
Colne	22%	46%	11%	11%	6%	68%
Lee	24%	35%	22%	10%	2%	58%
Pinn	20%	40%	14%	12%	4%	60%
Wey	18%	45%	23%	3%	3%	63%

5.2 Response to Clean and Waste Water Bill Profiles with inflation

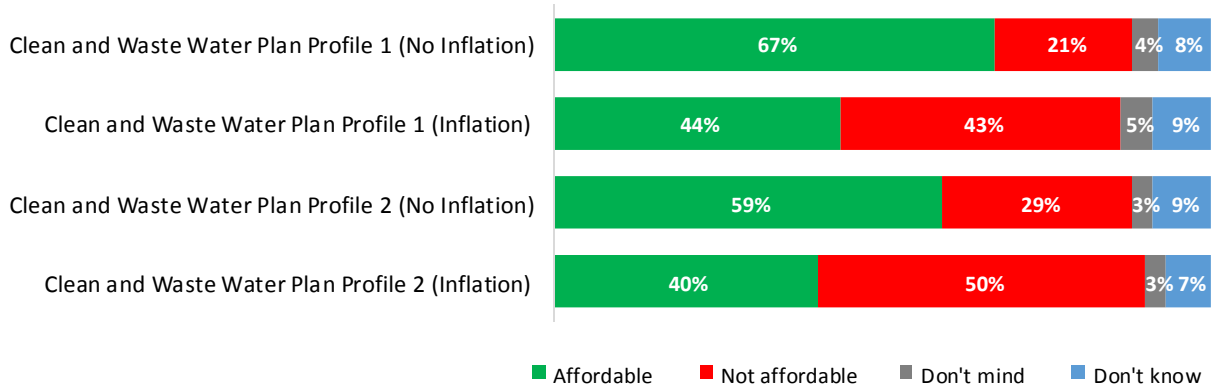
- Again, there is significant drop in stated acceptability and affordability when inflation is added for both profiles, similar decreases are seen as for the AMP7 and AMP8 clean water plans.
    - 67% rating profile 1 pre-inflation acceptable, significantly dropped to 48% acceptability (-19%).
        - 67% rating profile 1 pre-inflation affordable significantly dropped to 44% affordability (-23%).
    - 65% rating profile 2 pre-inflation acceptable significantly dropped to 40% acceptability (-25%).
        - The 59% who found profile 2 pre-inflation affordable significantly dropped to 40% affordability (-19%).

Figure 37: Clean and Waste Water (No Inflation vs Inflation) Combined Acceptability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

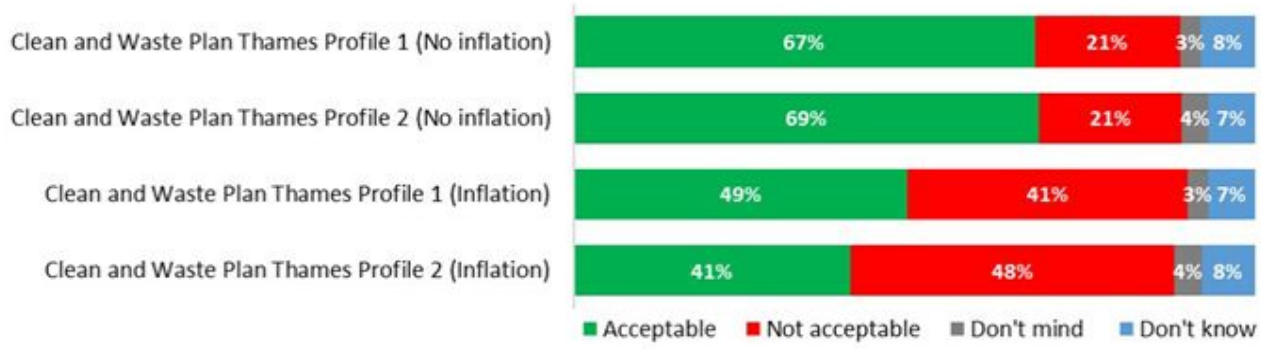
Figure 38: Clean and Waste Water (No Inflation vs Inflation) Combined Affordability



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

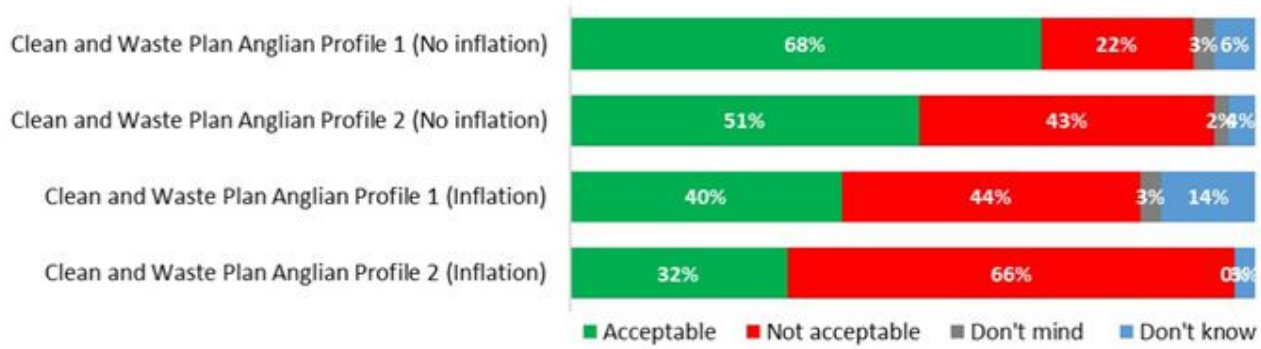
- Due to low base sizes for Southern we were unable to compare results by all three waste providers. However, again, there is significant drop in stated acceptability and affordability when inflation is added for both Thames and Anglian across both profiles.
    - Acceptability
        - 67% of Thames customers feel that Profile 1 is very or fairly acceptable, significantly dropped to 49% acceptability (-18%).
        - 69% of Thames customers feel that Profile 2 is very or fairly acceptable, significantly dropped to 41% acceptability (-28%).
        - 68% of Anglian customers feel that Profile 1 is very or fairly acceptable, significantly dropped to 40% acceptability (-28%).
        - 51% of Anglian customers feel that Profile 2 is very or fairly acceptable, significantly dropped to 32% acceptability (-19%).
    - Affordability
        - 67% of Thames customers feel that Profile 1 is very or fairly affordable, significantly dropped to 43% affordability (-24%).
        - 62% of Thames customers feel that Profile 2 is very or fairly affordable, significantly dropped to 41% affordability (-21%).
        - 71% of Anglian customers feel that Profile 1 is very or fairly affordable, significantly dropped to 45% affordability (-26%).
        - 45% of Anglian customers feel that Profile 2 is very or fairly affordable, significantly dropped to 35% affordability (-10%).

Figure 39: Clean and Waste Water Plans (No Inflation vs Inflation) – Acceptability Thames



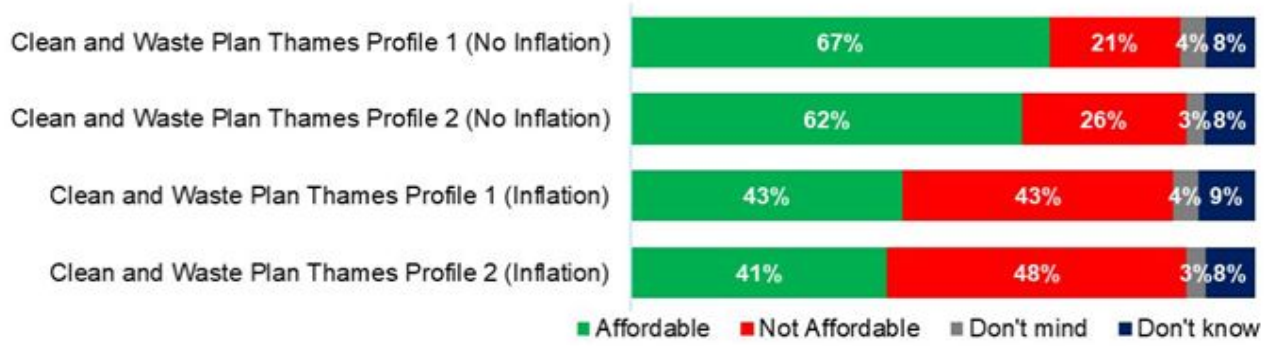
Base: Thames P1 381 /1000, Thames P2 385/1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

Figure 40: Clean and Waste Water Plans (No Inflation vs Inflation) – Acceptability Anglian



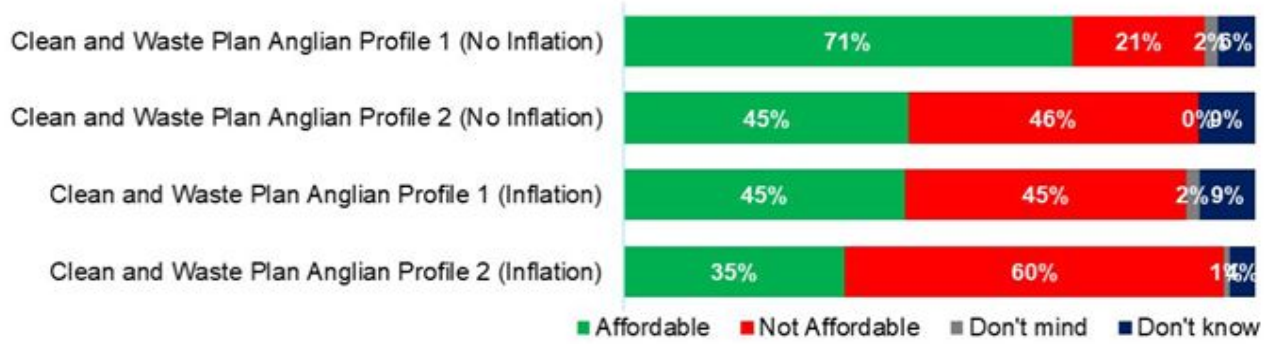
Base: Anglian P1 67/1000, Anglian P2 64/1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

Figure 41: Clean and Waste Water Plans (No Inflation vs Inflation) – Affordability Thames



Base: Thames P1 381 /1000, Thames P2 385/1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

Figure 42: Clean and Waste Water Plans (No Inflation vs Inflation) – Affordability Anglian



Base: Anglian P1 67/1000, Anglian P2 64/1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

6.1 Affinity Water Targets

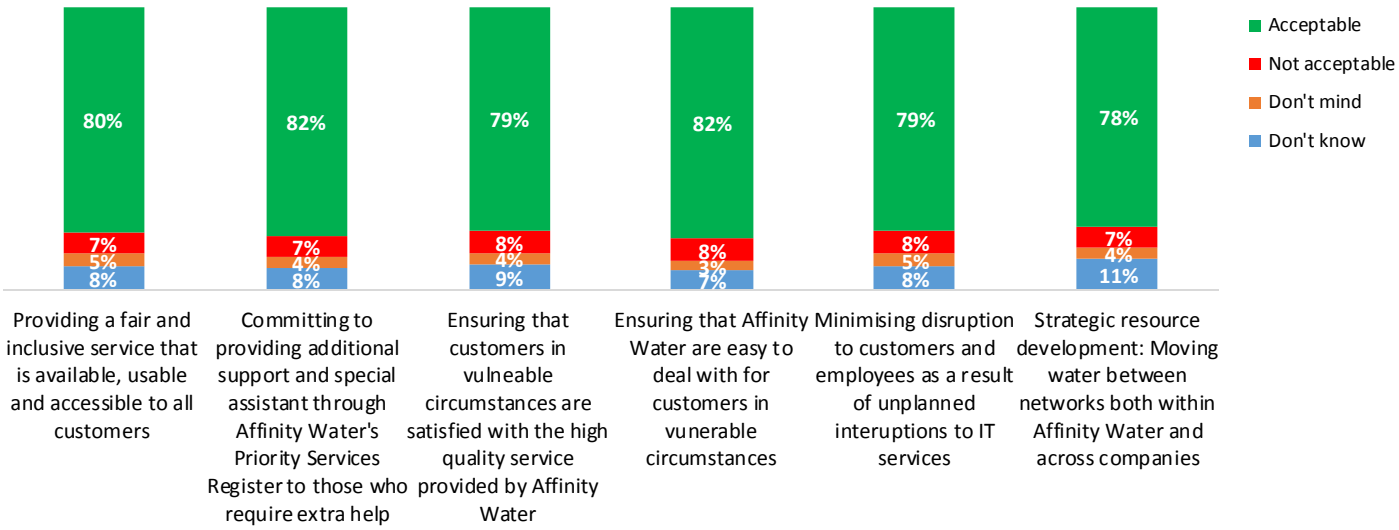
- Six long-term targets were tested for acceptability in the survey:
  - Providing a fair and inclusive service that is available, usable and accessible to all customers equally regardless of personal circumstances **("BSI certification for Inclusive Services").**
  - Committing to providing **additional support and special assistance** through Affinity Water's Priority Service Register to those who require extra help in the way that they receive water services, regardless of age, health, disability or lack of disability (e.g.

providing bills and other literature in accessible formats, delivering water to customers who cannot fetch water in the event of a 'no water' incident).

- Ensuring that customers in vulnerable circumstances (for example, those requiring special assistance or in financially vulnerable circumstances) **are satisfied with the high quality of service** provided by Affinity Water.
- Ensuring that Affinity Water **are easy to deal wi**th, particularly for customers in vulnerable circumstances (for example, those requiring special assistance or in financially vulnerable circumstances).
- Minimising disruption to customers and employees as a result of **unplanned interruptions to IT services** (including digital platforms, email, infrastructure and telephone systems etc).
- **Strategic resource development**: Moving water between networks both within Affinity Water and across companies (e.g. reservoirs and transfers) to better ensure a continuous supply.

- All of the above long-term targets scored consistently for acceptability, with high scores ranging from 78% to 82% of customers rating each target as 'very' or 'fairly' acceptable.

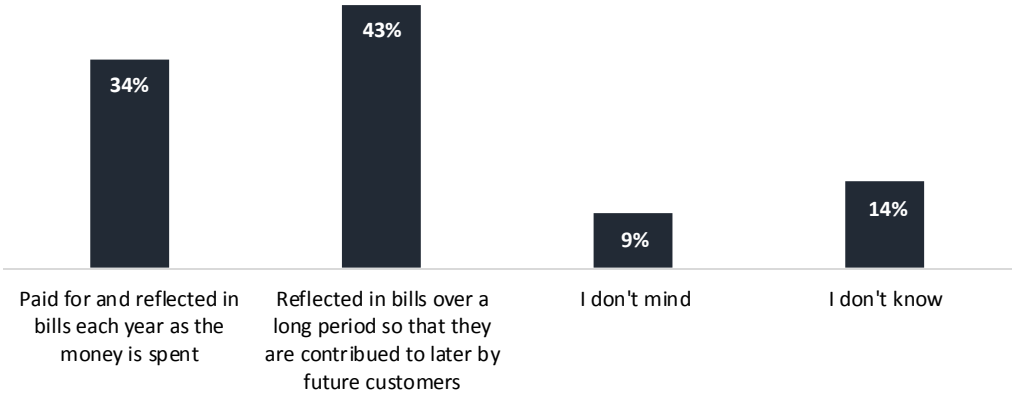
Figure 43: Affinity Water Long-Term Targets



- When asked about the investment Affinity Water makes in order for a better longer-term water supply:

- 43% of customers would prefer that the investment is reflected in bills over a longer period so that they are contributed to later by future customers.
- 34% of customers would prefer the investment is paid for and reflected in bills each year as the money is spent.

Figure 44: Affinity Water Bills



Base: 1000 /1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

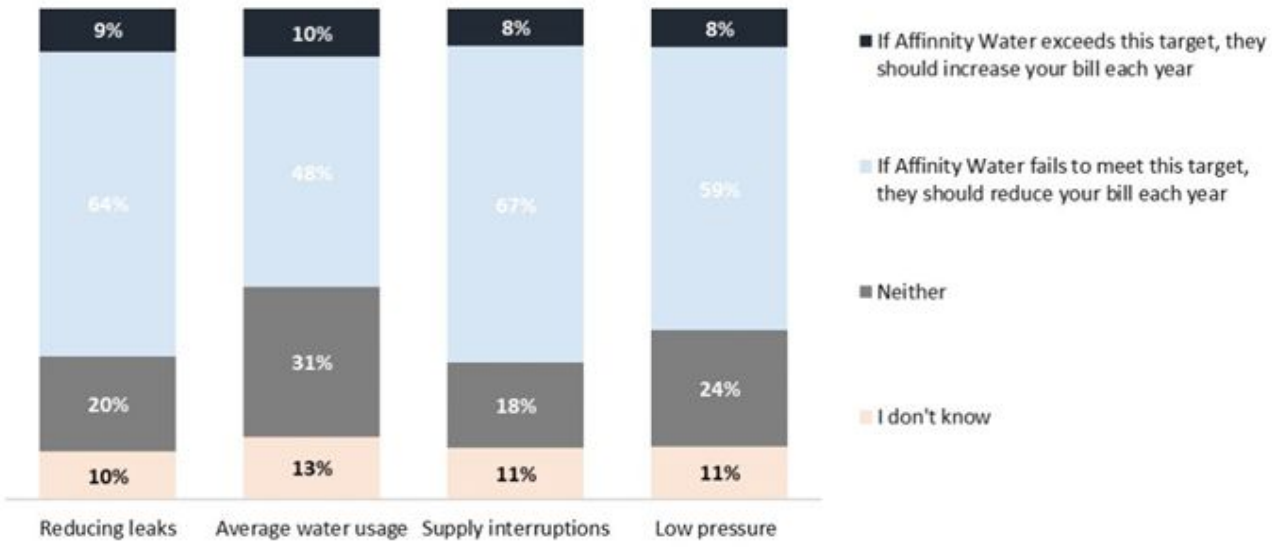
6.2 Performance Commitments

- Three sets of Performance Commitments were tested from the 2020-25 Business Plan. Customers were asked to respond to possible incentives or penalties for delivering against these targets. Throughout section 6.2 please keep in mind that customers were able to select more than one answer from the following options:
  - "If Affinity Water exceeds this target they should increase your bill every year"
  - "If Affinity Water fails to meet this target they should reduce your bill every year"
- However, the majority of respondents chose to only select one option, this may be due to the set up of the questionnaire and customers assuming it was an 'either-or' question type.
  -
- *PCs directly related to customer service*
  - Customers respond most strongly to 'Supply interruptions'; 67% believe that Affinity Water should reduce the customer's bill if failing to meet supply interruption reduction targets.
  - Just below this was the response to 'reducing leaks' and 'low pressure'.

- 64% of customers felt that Affinity Water should reduce customer's bill if they failed to meet their 'reducing leaks' target.
- 59% of customers felt that Affinity Water should reduce customer's bill if they failed to meet their 'low pressure' targets.

- Customers responded significantly less strongly to 'average water usage', just over half (48%) believed Affinity Water should reduce the customer's bill if they failed to meet the average water targets.

Figure 45: PCs directly related to customer service

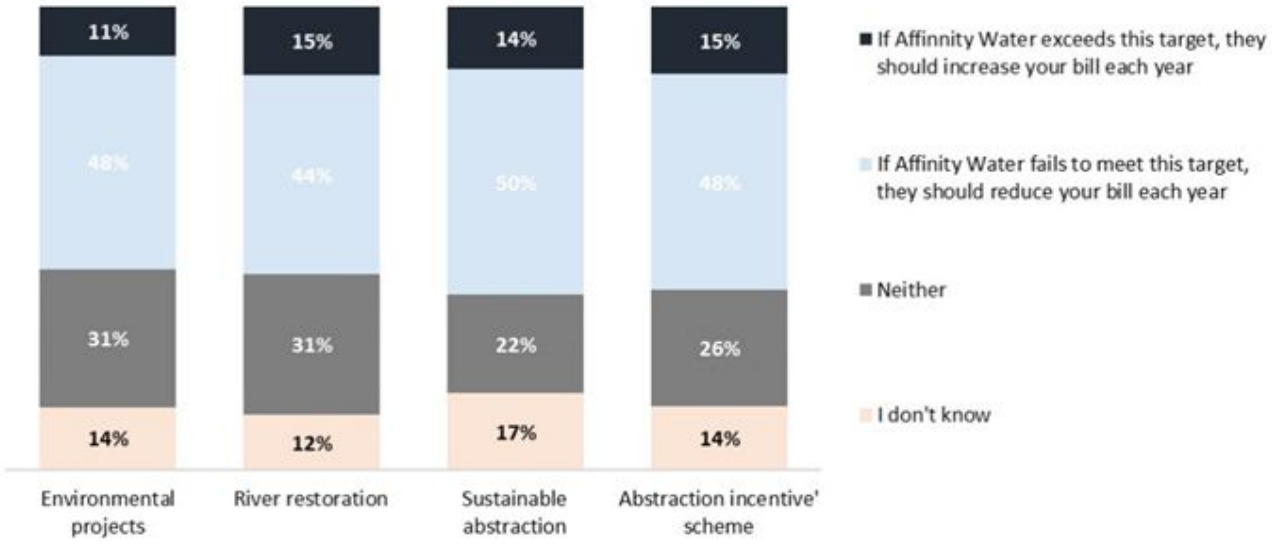


Base: 333 adults aged 16+ from across the Affinity Water customer areas, March 2019

- PCs directly related to environment

- Customers respond less strongly to the environment related targets, with a consistent response shown across the PCs; between 44% and 50% of customers feel that if Affinity water fail to meet each of the natural environment targets they should reduce the customer bill each year.
  - Half (50%) feel that if Affinity Water fails to meet their 'sustainable abstraction' targets they should reduce their customer's bill, however, 22% did not feel this should result in a change to the customer's bill.
  - Just under half (48%) feel that if Affinity Water fails to meet their 'abstraction incentive scheme' targets they should reduce their customer's bill, however, 26% did not feel this should result in a change to the customer's bill.
  - The same amount (48%) feel that if Affinity Water fail to meet 'environmental projects' targets they should reduce their customer's bill, however, 31% did not feel this should result in a change to the customer's bill.
  - Under half (44%) feel that if Affinity Water fail to meet 'river restoration' and 'targets they should reduce their customer's bill, however, 31% did not feel this should result in a change to the customer's bill.
- The data suggests that PCs directly related to environment tend to elicit less concern compared to than the customer service PCs. Around a quarter to a third of customers feel the impact of various environmental targets should not impact the customer's bill.

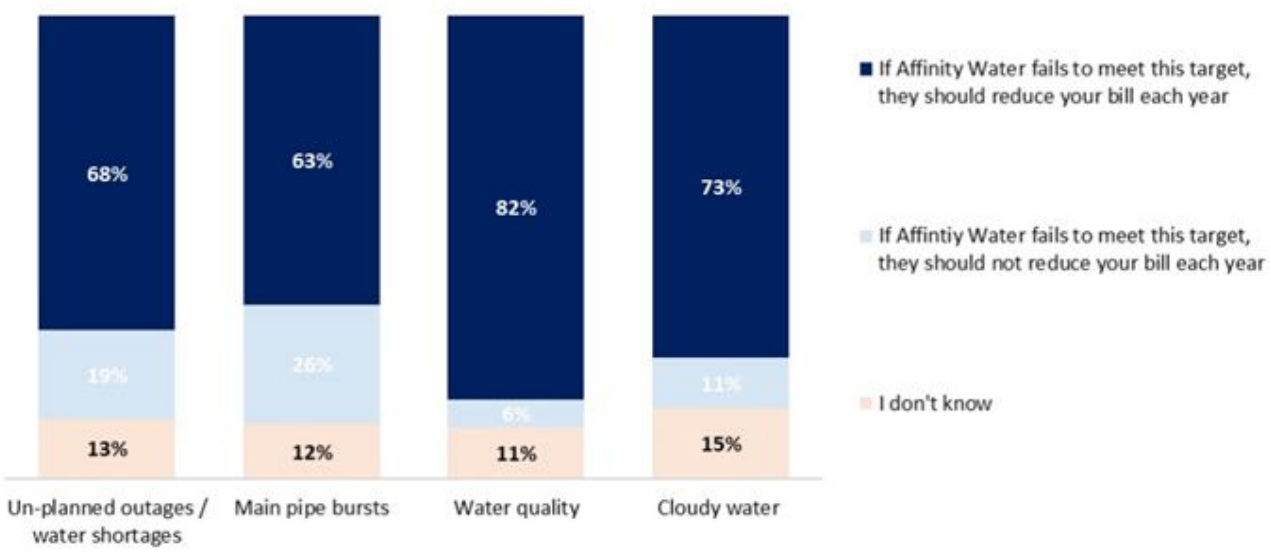
Figure 46: PCs directly related to improving the natural environment



Base: 331 adults aged 16+ from across the Affinity Water customer areas, March 2019

- ***[PCs directly related to customer service where AWL would only be penalised]***
    - Customers react most strongly to the PC related to water quality;
        - 82% feel that Affinity Water should reduce the customer bill if they fail to meet water quality targets and 73% of customers felt that Affinity Water should reduce customer's bill if they failed to meet their 'cloudy water' target.
    - Customers responded significantly less strongly to 'un-planned outages/ water shortages' and 'mains pipe burst' targets;
        - 68% of customers felt that Affinity Water should reduce customer's bill if they failed to meet their 'un-planned outages/ water shortages' target.
        - 63% of customers felt that Affinity Water should reduce customer's bill if they failed to meet their 'mains pipe burst' target.

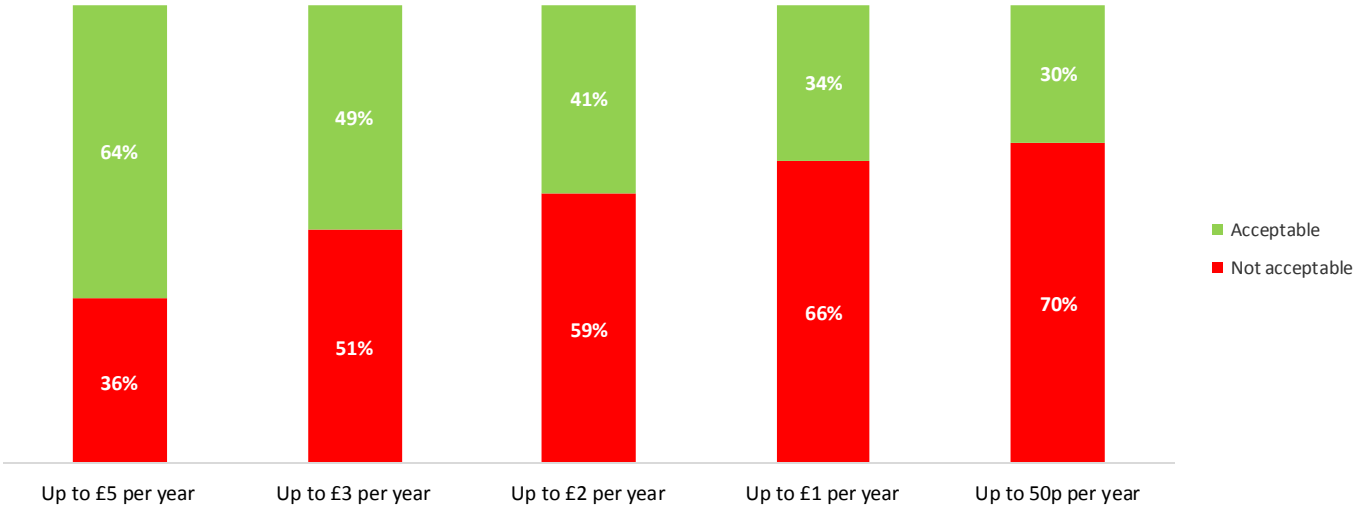
Figure 47: PCs directly related to customer service where AWL would only be penalised



Base: 333 adults aged 16+ from across the Affinity Water customer areas, March 2019

- If Affinity Water fails to meet its targets and is penalised, 64% of customers feel that a reduction of up to £5 a year is very or fairly acceptable, only around a third of customers would feel satisfied with £1 reduction.

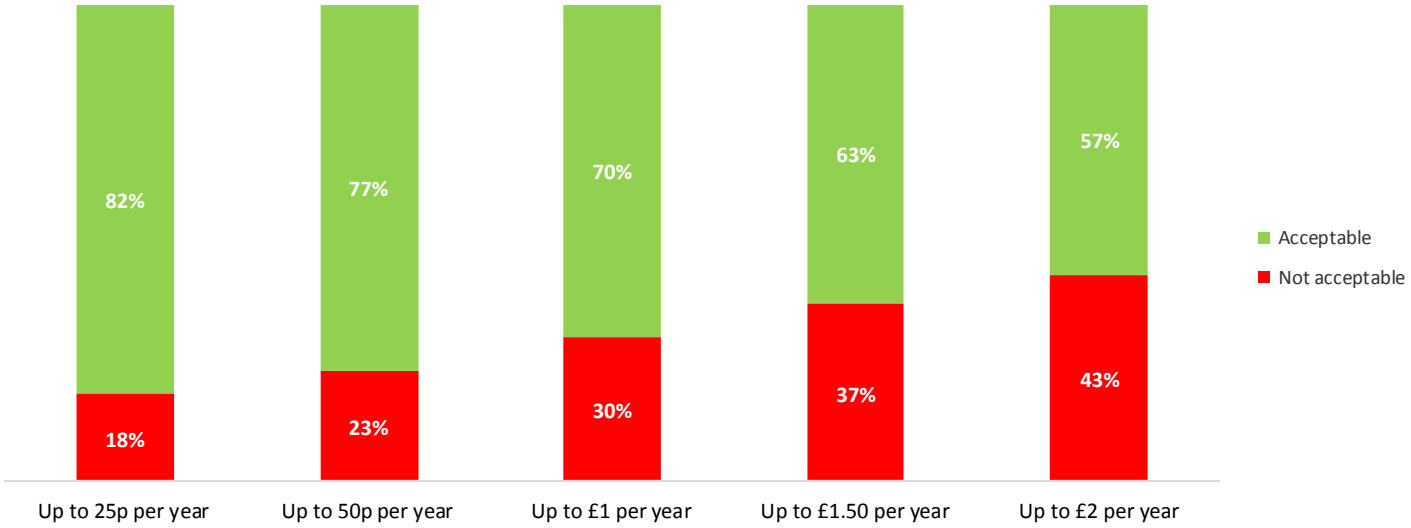
Figure 48: Yearly acceptable reduction if Affinity Water fails to meet targets



Base: 476 adults aged 16+ from across the Affinity Water customer areas, March 2019

- If Affinity Water were to exceed its targets and is rewarded, three quarters of customers feel that up anything up to £1 is acceptable as an increase to their bill.
- Once the increase steps over the £1 price mark, stated acceptability starts to fall significantly (63% for £1.50 and 57% for £2).

Figure 49: Yearly acceptable reward if Affinity Water exceeds targets



Base: 1000 adults aged 16+ from across the Affinity Water customer areas, March 2019

Appendix.

Sample Profile

		% breakdown	Completes N=1,000	Profile 1 % breakdown N=500	Profile 2 % breakdown N=500
Community_Zone (WRZ) **WATER ZONE**	Misbourne	9%	90	9%	9%
	Colne	12%	120	11%	13%
	Lee	20%	200	21%	19%
	Pinn	27%	270	26%	28%
	Stort	8%	80	9%	7%
	Wey	15%	150	15%	15%
	Dour	5%	50	6%	4%
	Brett	4%	40	4%	4%
Gender [Q1]	Male	49%	490	49%	49%

	Female	51%	510	51%	51%

Age [SAGE]	16-24	6%	57	5%	6%
	25-34	25%	253	25%	25%
	35-54	36%	360	39%	33%
	55+	33%	330	31%	35%

Socio-economic group [Q5]	ABC1	60%	600	60%	60%
	C2DE	40%	400	40%	40%