February 2021

# Reference of the PR19 final determinations: Final written submission (non confidential)

Ofwat

# Reference of the PR19 final determinations: Final written submission

## Contents

# 1. Introduction

1.1 At the outset, let us say that we are grateful for the enormous effort, time and resources which the CMA has devoted to trying to achieve the right outcome in these redeterminations. No-one is more aware than us of how challenging the task must have been.

1.2 As the CMA reaches the closing stage of the process, it is going to be burdened with a huge weight of final submissions from the companies. We have attempted to keep ours at short and focused as possible. At this point, more than ever, it is important not to lose sight of the wood for the trees. We said at the beginning of the process that these redeterminations are the most important in the water sector since privatisation. Everything that has occurred since then only confirms us in that view.

1.3 Your decisions come at a point when the industry has been stagnating and losing public confidence. It could either continue on that track, or step up to improve performance and efficiency, achieve long-term resilience in the face of climate change, protect the environment, and meet customers' changing needs. In the absence of competitive pressures, it falls to the regulators – ourselves, and now the CMA in the case of the disputing companies – to provide the impetus for change.

1.4 As you know, this context underpinned our approach to PR19. Our goal was to achieve a regulatory package that aligned the interests of customers, companies and investors – providing companies with the revenues they needed to invest for a resilient and sustainable future, while ensuring customers did not pay more than necessary. We calibrated the cost allowances, performance stretch and rate of return for each company so they worked together 'in the round' to create strong incentives for the company to improve, bring customers value for money, and properly reward investors in line with the risks they are taking and what they deliver for customers.

1.5 In making these decisions, we were at least as concerned about resilience as the companies themselves. The difference between us was the importance we placed on efficiency and avoiding unearned returns. This point remains fundamental. It serves the interests of no one if investors can make returns too easily in this industry. All it does is to diminish the incentives that ought to exist towards greater productivity and better service; and these ultimately are what deliver for customers and for the environment.

1.6 Unduly easy returns also cast a shadow on the reputation of the industry, turning away the responsible long term investors it requires. Strong returns should be a reward for excellent performance and neither a given nor an easily achievable outcome. We invite you to reach the same conclusion and make your final determinations accordingly.

1.7 Did we get the balance right at PR19? Because more than a year has now passed since we made our final determinations, the CMA has the benefit of empirical evidence relating to the non-disputing companies. That evidence shows that companies are delivering in line with our purpose and ambition –

- Cost allowances are sufficient. Six monthly results of listed companies show that companies expect to perform in line with or outperform our efficient totex allowance, even despite the impacts of Covid-19 on water sector costs.[1]

- Outcomes are achievable with growing evidence of companies expecting significant outperformance over the AMP and in year 1. Six monthly results from listed companies show that they expect to perform in line with, or outperform on, outcome delivery incentives (again, in spite of the impacts of Covid-19)[2]. There is evidence to suggest that this outperformance is growing, with Severn Trent forecasting ODI outperformance of at least £50 million based on nine months data (up from at least £25 million on six months data). The scope for all companies to improve performance is demonstrated by the 7% average reduction in leakage in 2019-20.

- Listed companies trade at premia to RCV that are high by historical levels, with speculation of one listing company seeking to acquire an unlisted company. The cost of bonds issued by the companies since our final determinations has outperformed the benchmark index we applied.

- The allowed return is sufficient and potentially generous in light of falling returns since late 2019. Companies are proposing around £1.3bn of additional investment under the green recovery initiative at the PR19 allowed return[3]. All companies are proposing to finance all or most of this until 2025, which indicates headroom in the settlement for financeability.

[1] South West Water expects to outperform by £34 million and Severn Trent and United Utilities expect to perform in line with allowances.
[2] Both Severn Trent Water and South West Water expect to meet 80% of performance commitments, United Utilities expects to outperform by £10 million in 2020-21 and Severn Trent Water by £25 million based on performance in the first six months.
[3] In addition companies have supported the delivery of an additional around £2bn of amber WINEP schemes, which have been approved as part of the green recovery initiative.

1.8 We of course welcome the insights we can obtain from the CMA's perspective on the package that each of the four companies should receive and, like other regulators, look to learn from the redeterminations as we evolve and improve our regulatory approach. We do not expect the CMA in all circumstances to reach the same judgements that we have. However, a year into the current price control period, all the evidence from non-disputing companies suggests that PR19 is driving the right behaviours, working for customers, and maintaining the sector as an attractive proposition for high quality, long term investors. We have struggled to identify a rationale for any radical departure from our approach.

1.9 Therefore, while we greatly welcome the additional effort the CMA has gone to in producing working papers for further consultation, we remain very concerned about some elements of the overall package for the disputing companies towards which the CMA appears to be heading. We have highlighted these in our submissions. In introducing these submissions, we wish to emphasise four points in particular –

1. It would be a serious mistake to use the 2019/20 data in the cost model. Those data are not representative, as can clearly be seen. The reasons why this is the case are also clear; mostly because they reflect brought-forward expenditure. Having regard to all of these circumstances, the distortive effect of the data would be far greater than their evidential value. Their use would compromise the outputs of the model.

2. We have considered carefully the provisional rationale for aiming up on the cost of capital, but still do not understand it or believe that it provides a robust basis for such an important departure from our final determinations. In our view, extra measures are not needed to keep the industry attractive to investors. We remain troubled by the apparent failure of the CMA to fully take into account our arguments or our expert evidence on this subject.

3. During the closing stages of the process there has been a great deal said by the main parties and third parties on the cost of capital. Compared with the range of arguments the disputing companies have now opened up, their submissions on the cost of capital were relatively limited until they were before the CMA. It is salutary to recall that all of the companies based their final business plans on our early view of cost of capital.[4] In light of that, the claim by the disputing companies that a significantly higher cost of capital is required should be treated with considerable caution. In short, we are concerned about the risk of

[4] We note that a subset of small companies requested a company specific adjustment to the cost of debt.

direct transfers from customers to investors that will achieve nothing for the future of the industry.

4. Related to this, we are also concerned that the discussions on the cost of capital have become increasingly technical and dominated by the company perspective given the weight of adviser input. You have received very many submissions from the main parties, as well as from third parties. The preponderance of these have come from the disputing companies and their investors. Their voices are many, loud and hugely well-resourced. Consumer representatives have played their part, but they are few and far more modestly resourced. Due to this unfortunate asymmetry of voices and representation, we continue to urge you to keep in mind the need for the consumer voice to be adequately heard and given due weight.

1.10 Finally, in the light of these points, it is remarkable, indeed unacceptable, that the disputing companies are resisting Ofwat having sight of their costs in this process so that we can, as requested by the CMA, assist you in considering their efficiency and proportionality. In that way, we aim to help the CMA to ensure that customers do not pay for any excess costs from the representation of the companies' interests without adequate scrutiny or challenge. We have confidence that the CMA will see this for what it is. The CMA is being urged by the companies to do something that not only lacks procedural fairness, but that would be indefensible in the court of public opinion.

1.11 In closing, we remind the CMA that our own experience shows that if the final package is significantly tipped in investors' favour, there will be little we can do to get unearned returns back to customers. Therefore, this must be a redetermination in the light of all of the statutory duties in the round. We urge the CMA to ensure that it does not become a mere triangulation between Ofwat and the disputing companies, with the outcome unjustifiably weighted in favour of the company and investor interest.

# 2. Our response to companies' responses on the 2019-20 modelling consultation

2.1 In January 2021 the CMA consulted on its provisional decision not to include the 2019-20 outturn expenditure into the base cost models for the disputing companies' references.[5] The disputing companies' responses to the consultation disagree with this decision. We summarise our response to the points raised by companies in the remainder of this section.[6]

2.2 We continue to strongly support the CMA's decision not to include the 2019-20 data. The 2019-20 data is unrepresentative and insufficiently robust to be safely relied upon. To include it would be a serious mistake. As we previously pointed out, and as the CMA concluded through its independent analysis, there is considerable evidence that wholesale water expenditure in 2019-20 is significantly affected by pre-spending for AMP7.[7] This evidence, as highlighted by the CMA includes:

- A trend analysis which shows that 2019-20 was a high cost year, particularly considering the regulatory cycle where the fifth year has typically been a relatively low or average cost year.
- Direct evidence from companies on the nature of expenditure in 2019-20, both in water and in wastewater.
- The CMA's analysis comparing outturn costs with business forecast costs in 2018-19 and 2019-20. This analysis shows that in 2019-20 outturn costs significantly exceeded companies' forecasts by over £300 million (9%).

2.3 As the 2019-20 data is significantly affected by pre-spending for AMP7 the model results will be biased – both the estimated coefficients and the catch-up efficiency challenge. Using a biased model is undesirable regardless of whether the bias reduces or increases companies' cost allowances because, as noted by the CMA, "biased predicted allowances risk consumers overpaying or underpaying for water services" (para 64).

[5] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, pp. 21-25, paragraphs 60-70.
[6] Unless otherwise stated, we refer to the disputing companies' main response documents to the 2019-20 base cost consultation Anglian Water, 'Working paper response – 2019/20 Data for base cost models', January 2021; Bristol Water, 'Response to 2019/20 data for base cost models – working paper', January 2021; Northumbrian Water, 'Response to the CMA working paper on 2019/20 cost data', January 2021; Yorkshire Water, 'Response to CMA 2019/20 data for base cost models – Working Paper', January 2021.
[7] Ofwat, 'Reference of the PR19 final determinations: 2019/20 data for base cost models – response to working paper', January 2021, p. 3, paragraph 2.3.

2.4 The disputing companies put forward a number of misleading claims and analysis. As we summarise below and set out in detail in the rest of the document, none of these claims bear close scrutiny and in many cases provide additional support for the CMA's provisional conclusion not to include 2019-20 data. Unless otherwise stated, we refer to the disputing companies' main response documents to the 2019-20 base cost consultation.

2.5 The CMA is right to scrutinise this data before using it in the base econometric models. Adopting updated data for its own sake, with no consideration of its quality and reliability, would clearly undermine the careful cost assessment process and have a material impact on customer bills. We note other regulators in the past decided not to adopt the most up to date data when they were not confident in its quality and robustness (see section 2.1).

2.6 The disputing companies put forward a variety of arguments to explain the observed increase in 2019-20 expenditure, such as deferred investments to the end of AMP6 or more stretching performance commitments in 2019-20. These claims were often supported by misleading evidence, with none of them bearing close scrutiny and in many cases providing additional support for the CMA's provisional conclusion not to include 2019-20 data (see section 2.2). For example:

- The increase in expenditure in 2019-20 does not reflect reprofiling. The water companies' own return on regulatory equity analysis shows the increase in expenditure in the final year is not due to timing but simply additional expenditure and this is supported by water company commentaries in their APRs.
- Performance commitment targets did not get more demanding at the end of the period, and were in fact the most demanding 2015-2018 period where there was a glidepath to the upper quartile for the common level performance commitments
- The atypical outperformance by companies against their performance commitment levels on leakage reflects some of the expenditure brought forward from AMP7 to the last year of AMP6.
- The 2018-19 and 2019-20 expenditure forecasts used by the CMA are not misleading and were made four years into the AMP6 and therefore reflect companies' views on the back loading of expenditure, as well as the outcomes and efficiency assumptions of the PR14 determination.
- The transition expenditure companies incurred in 2014-15 is mainly related to enhancement. In addition, the modelling data set includes the years that follow 2014-15, which mitigates the risk of any transition expenditure in 2014-15. This is not the case for 2019-20 where the early part of AMP7 cannot be included in the models.

2.7 Wholesale water totex outturn expenditure in AMP6 was £1.8 billion higher than companies' allowances and their PR14 final business plan forecasts, with the majority of this additional investment taking place in 2019-20 (see section 2.3). This investment was not anticipated at the time companies developed their PR14 business plans or at the time PR14 allowances were determined.

2.8 Evidence from companies' APR query responses on investments brought forward from AMP7 adds to the extensive body of evidence on the influence which the PR19 determination had on companies' 2019-20 investments (see section 2.4). This is also complemented by evidence from the disputing companies' responses, indicating the need to invest early in preparation for PR19 targets.

2.9 There is no downward bias in the disputing companies' current allowances (see section 2.5). Where companies received an allowance lower than their requested costs at final determination (or in the CMA provisional findings) it is because they are inefficient relative to the industry benchmark. Any uplift in allowances following the inclusion of 2019-20 data is therefore a reflection of an upward bias at industry level. In fact, including the 2019-20 data would give a number of companies more than they requested in their business plans. This would reward inefficient business plans at the expense of customers.

2.10 In not adopting the 2019-20 data the CMA is consistent with its position for setting performance commitments (see section 2.6).

2.11 We note that there are no substantial improvements in the models that would outweigh the significant concerns related to the distortion of the 2019-20 data (see section 2.7). We note that the 'overall R-squared' statistic which is most relevant for random effects models marginally decreases in most models

2.12 We agree with Northumbrian Water's conclusion that any ex ante or ex post adjustments to the data would be arbitrary and lack robustness, and would not mitigate the risk of biased results (see section 2.8).

2.13 There is clear evidence of substantial investments brought forward from AMP7 in wholesale water and so the wholesale wastewater models would not be absent from the risk of biased results (see section 2.9).

2.14 The inclusion of the 2019-20 data would lead to an unacceptable outcome, and have wider implications for the redeterminations for example on enhancement cost allowances, performance commitments and cost adjustment claims. Before including 2019-20 data it is important that the CMA considers the full impact of its decisions, and sense-checks its results at an industry level.

2.15 Some of the companies (notably Bristol) seek to present some of their arguments on 2019-20 data in a legal way, by invoking the statutory duties. However, in truth this is a thinly veiled attempt to repackage what is a disagreement with the CMA's judgement on the merits. They are therefore addressed by the arguments summarised above and set out in more detail below.

## 2.1 The CMA is right to scrutinise the 2019-20 data before using it in the base econometric models

2.16 Underpinning the use of econometric modelling to set efficient cost baselines is the availability of good quality data. As we set out in our March 2018 econometric modelling consultation "The success of our models can have material implications on customers' bills. The higher the quality of our models, the more confidence we can have in setting a stretching and appropriate efficiency challenge for companies. […] Good quality data is critical to the development of effective cost assessment models."[8]

2.17 Good quality data is not only assured (for example, data that has been audited) but must also be representative of the underlying relationships the models aim to capture.

2.18 Contrary to what some of the disputing companies seek to argue, the CMA's consideration of the advantages and disadvantages of the inclusion of 2019-20 data into the base cost models is in no way inconsistent with its principle that it makes use of the most up to date information available.[9] When setting out its approach to the PR19 water determinations, the CMA clearly stated it would take account of "additional and updated information available" but also consider "whether information is complete and robust so that we can place reliance on it."[10]

2.19 We note this does amount to the same thing as saying that unreliable and unrepresentative information should not be used, contrary to what iCON Infrastructure claims.[11] Considering the purpose of the models, to ensure that information is "complete and robust" it is not enough to test whether data has been subject to assurance and audit processes. Given the models are designed to

[8] Ofwat, 'Cost Assessment for PR19: a consultation on econometric cost modelling', March 2018, p. 6.
[9] Bristol para 16; Northumbrian para 2 and 10; Yorkshire para 1.4.
[10] Competition and Markets Authority, 'PR19 Water redeterminations – Approach to the redeterminations', June 2020, p. 15, paragraph 58.
[11] iCON Infrastructure, Letter to the CMA – RE: Re: Water Redeterminations 2020: 2019/20 data for base cost models – Working Paper, January 2021.

predict costs based on historical data, such data would not be robust and should not be relied on if it is not representative of the underlying relationships the models seek to replicate.

2.20 Accordingly, and as the CMA indicates, there is a **balance between the use of updated and reliable data**. Adopting updated data for its own sake, with no consideration of its quality and reliability, would clearly **undermine the careful process of building cost models** and the ability to infer robust conclusions about the assessment of cost efficiency, as well as having a material impact on customers' bills. As explained in the sections below, we consider there are compelling reasons in this instance why the data may not be safely relied upon.

2.21 The disputing companies portray the CMA's provisional decision to exclude the 2019-20 data as an extraordinary departure. However, there have been other occasions when for a variety of reasons regulators decided it was not appropriate to use the most up to date data, such as the instances in Table 2.1 below.

### Table 2.1: Examples of instances where regulators did not adopt the most up to date information

| Regulator | Description |
|---|---|
| **CMA, NERL RP3 Final determination**[12] | In its final determination, the CMA decided not to update the data used in its provisional findings as the latest data, including costs, was significantly skewed by the impact of COVID-19 on the aviation sector. |
| **Ofgem, RIIO-ED1 Final determination**[13] | Ofgem's RIIO-ED1 final determination was published in November 2014, and the distribution network operators (DNOs) submitted outturn 2013-14 data in July 2014. Hence, Ofgem could have replaced forecast 2013-14 data with outturn data in its final determination econometric cost models.<br>But Ofgem decided that the submitted outturn data was not sufficiently robust to include in the models and continued to use forecast 2013-14 data in the models instead. |
| **Office of Rail and Road, 2018 periodic review final determination**[14] | The Office of Rail and Road's (ORR) 2018 periodic review final determination was published in October 2018. But the top-down econometric benchmarking that was used to assess the relative efficiency of Network Rail's proposed costs only used data up to 2015-16 due to data quality and quantity constraints. |

[12] Competition and Markets Authority, NATS (En Route) Plc / CAA Regulatory Appeal. Final report, Paragraph 3.23, 2020.
[13] Ofgem, RIIO-ED1: Final determinations for the slow-track electricity distribution companies. Business plan expenditure assessment, p. 28, 2014.
[14] Office of Rail and Road, PR18 Econometric top-down benchmarking of Network Rail, 2018.

2.22 The CMA's redetermination for Bristol Water at PR14 is another relevant example. Bristol Water seeks to claim this is not a valid precedent as the CMA "only decided not to reflect the data in its models due to the fact it did not have a significant effect on the modelling suite at the time".[15] But there were other reasons which led the CMA to exclude the 2013-14 data from the econometric models, which makes it a relevant example (e.g. impact on model results that were difficult to explain).[16]

2.23 Furthermore, we note the CMA's decision at PR14 concerned the use of 2013-14 data rather than 2014-15 (ie the fourth year of the AMP, not the fifth). Therefore, **at PR14 the CMA did not have to consider issues relating to the influence of the PR14 determination on the data**, while this is a relevant concern for the CMA's PR19 redetermination and the use of 2019-20 data.

2.24 It is also recognised in other literature that the announcement of policy decisions and reforms can materially impact the quality and reliability of data. For example, it is common in privatisation studies to exclude the years immediately prior to privatisation, as data for those years may be distorted by privatisation provisions.[17]

2.25 It is therefore a valid concern for the CMA to consider the extent to which the PR19 draft and final determinations may have influenced companies' investment decisions ahead of the start of AMP7, particularly since "PR19 was a substantially more demanding determination than others have been in the past".[18] We come back to this point later.

[15] Bristol para 15.
[16] Competition and Markets Authority, 'Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991 – Appendices 1.1 – 4.3', October 2015, p. A4(2)-50, paragraph 223.
[17] Pollitt M, Smith A. 2002. The restructuring and privatisation of British Rail: was it really that bad?. Fiscal Studies. 23(4), pp. 463-502. See also: Galal, A., Jones, L., Tandon, P. and Vogelsang, I. (1994), Welfare Consequences of Selling Public Enterprises: An Empirical Analysis, Oxford, Oxford University Press. Martin, S. and Parker, D. (1997), The Impact of Privatisation: Ownership and Corporate Performance in the UK, London, Routledge. Newbery, D.M. and Pollitt, M.G. (1997), 'The Restructuring and Privatisation of Britain's CEGB: Was it Worth it?', Journal of Industrial Economics, vol. 45, pp. 269-303.
[18] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, pp. 13-14, paragraph 31.

## 2.2 Reasons given by the disputing companies to justify an increase in 2019-20 cost data

2.26 In its working paper, the CMA provisionally concluded that the evidence available indicates a substantial amount of investments are likely to have been brought forward from AMP7 to 2019-20, which biases the model results.[19]

2.27 The disputing companies disagree with this conclusion, presenting a range of alternative reasons to explain the observed increase in 2019-20 expenditure and challenge the CMA's conclusion. The main points they put forward are:

a) the sector underspent in the first two years of AMP6 against its cost allowance due to back-loading of AMP6 programmes, which was offset by an increase in expenditure towards the end of the period;[20]
b) performance commitment (PC) targets became more stretching as the price control period continued;[21]
c) had AMP7 expenditure been brought forward, we would have observed atypical outperformance by companies against their PC levels in 2019-20;[22]
d) the CMA's comparison of 2018-19 and 2019-20 outturn expenditure to business plan forecasts is of little value, as it does not reflect the outcomes and efficiency assumptions of the determination;[23]
e) there is evidence of expenditure brought forward in 2014-15, but the CMA did not exclude this year from the cost models.[24]

2.28 We consider each of these points in turn.

### a) Was the increase in 2019-20 expenditure due to back-loading of expenditure to the end of the AMP?

2.29 The disputing companies argue that the increase in 2019-20 wholesale water expenditure was due to underspend in the first two years of the price control, which was offset by an increase in spend towards the end of the AMP.[25]

[19] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, p. 19, paragraph 51.
[20] Bristol para 25; Anglian para 19-23; Northumbrian para 26 and 35.
[21] Bristol para 34; Anglian para 40; Northumbrian para 27.
[22] Bristol para 26.
[23] Anglian para 25-27.
[24] Bristol para 23, Northumbrian para 38.
[25] Bristol para 25; Anglian para 19-23; Northumbrian para 26 and 35.

Northumbrian Water in particular argues that increases in non-infrastructure maintenance and business rates drove the increase in 2019-20 expenditure.

2.30 In this section we make the following arguments:

- underspend in the first two years occurred to a greater extent in AMP5 than in AMP6, but despite this in AMP5 companies underspent by £600 million while in AMP6 overspent by £1.8 billion;
- RoRe analysis from companies' APRs indicates that in 2018-19 most companies were expecting to outperform over the control period, indicating the overspend in 2019-20 is not primarily driven by deferred expenditure;
- the increase in non-infrastructure maintenance is primarily driven by Severn Trent and is related to preparation for the AMP7 period, while business rates decreased in 2019-20 and are also not part of base costs.

2.31 Our analysis indicates that the back-loading of expenditure alone cannot explain £1.8 billion of totex overspend, as demonstrated in the table below.

### Table 2.2: Comparison of wholesale water totex allowance against outturn (£m, 2018-19 prices)

| AMP | Year | Industry allowance | Industry outturn | Difference |
|---|---|---|---|---|
| AMP5 | 2010-11 | 4,968 | 4,552 | -415 (-8%) |
| | 2011-12 | 5,250 | 4,930 | -320 (-6%) |
| | Cumulative first two years | 10,218 | 9,482 | **-735 (-7%)** |
| | Total AMP5 | 24,864 | 24,266 | **-598 (-2%)** |
| AMP6 | 2015-16 | 4,484 | 4,271 | -213 (-5%) |
| | 2016-17 | 4,709 | 4,649 | -60 (-1%) |
| | Cumulative first two years | 9,193 | 8,919 | **-273 (-3%)** |
| | Total AMP6 | 22,513 | 24,289 | **1,776 (+8%)** |

2.32 The table above shows that underspend occurred to a greater extent in the first two years of AMP5, where the sector underspent against its wholesale water totex allowance by £735 million (-7%). By comparison, in the first two years of AMP6 the sector spent only £273 million less than its wholesale water totex allowance (-3%).

2.33 Furthermore, if back loading of expenditure was the driver of this underspend in AMP5, we should also observe an increase in expenditure at the end of AMP5. However, the sector spent £600 million less than its wholesale water totex

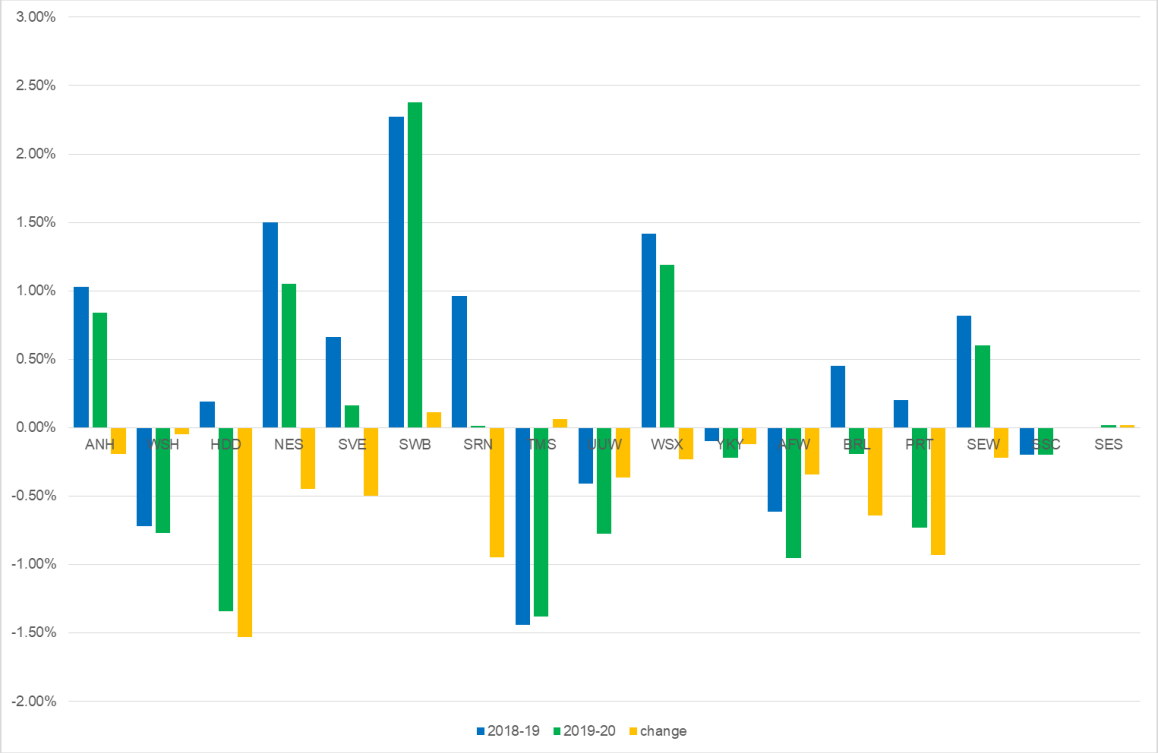
allowance by the end of the AMP. In stark contrast, the sector spent £1.8 billion more than its wholesale water totex allowance by the end of AMP6, despite the lower underspend in the first two years of the AMP6 control.

2.34 In its Figure 3, Anglian Water attempts to show that the industry spent much less in the first two years of AMP6 than in previous AMPs.[26] The figure is misleading as it indexes expenditure in the first two years against the average expenditure of the AMP. The AMP6 average is driven higher by a material overspend in the second half of the AMP, thereby showing expenditure in the first two years as a small proportion of this. As shown in the table above, **comparison against the allowance corrects for this, and indeed shows that underspend in the first two years was higher in AMP5 than in AMP6.**

2.35 The water companies Return on Regulatory Equity analysis in their Annual Performance Reports provides an indication of whether additional spending in the final year was a reflection of the deferral of the expenditure from earlier in the period. The RoRE analysis shows company expectations of totex performance, removing the impact of deferrals.[27] This shows (Figure 2.1) that in 2018-19 most companies expected to outperform over the control period. However this picture changed in the final year with most companies seeing a reduction in expected outperformance and the sector overall spending broadly in line with total wholesale allowances over the control period.[28] **This demonstrates that the increase in spending in the last year is not driven by deferred expenditure to the end of the AMP.**

[26] Anglian para 23 Figure 3.
[27] Ofwat, RAG 4.08 Guideline for the table definitions in the annual performance report, January 2019, Table 4H.5
[28] Ofwat, Service delivery report 2019-20, 2020, p. 8.

**Figure 2.1: Company estimates of totex out or under performance (% of RoRE) cumulative over control period in 2018-19 and 2019-20**




Source: Ofwat analysis of company annual performance reports.

2.36 We have also examined water company commentaries in their APRs to identify whether they have attributed the additional spending in 2019-20 to deferrals from the 2015-17 period. Overall this supports the case with the vast majority of companies not attributing additional spending in 2019-20 to deferrals, and where they do, this forms a small part of any additional spending in the final year with any timing differences largely removed by the end of 2018-19. For example:

- while Anglian Water mentions the deferral of expenditure earlier in the period, by 2018-19 they state that "The difference in base year prices between total allowed totex and adjusted actual totex on a cumulative basis is £324.1, which is now entirely comprised of totex outperformance"[29];
- United Utilities states that "On an equivalent basis and excluding the additional scope of the resilience and dry weather related spend, discussed above, we have accelerated approximately £190m of expenditure into the first four years of the AMP6 period"[30];
- While Yorkshire Water mentions deferral of expenditure earlier in the period, the 2018-19 APR states that that "Capital expenditure associated with the WW

[29] Anglian Water, Annual performance report 2019, p. 105.
[30] United Utilities, Annual performance report, 2018/19, p. 135

> programme in the current AMP period is overall broadly in line with the WW FD profile, excluding the management & general support programme." The additional expenditure on management and general support relates to additional IT systems expenditure rather than timing issues."[31]

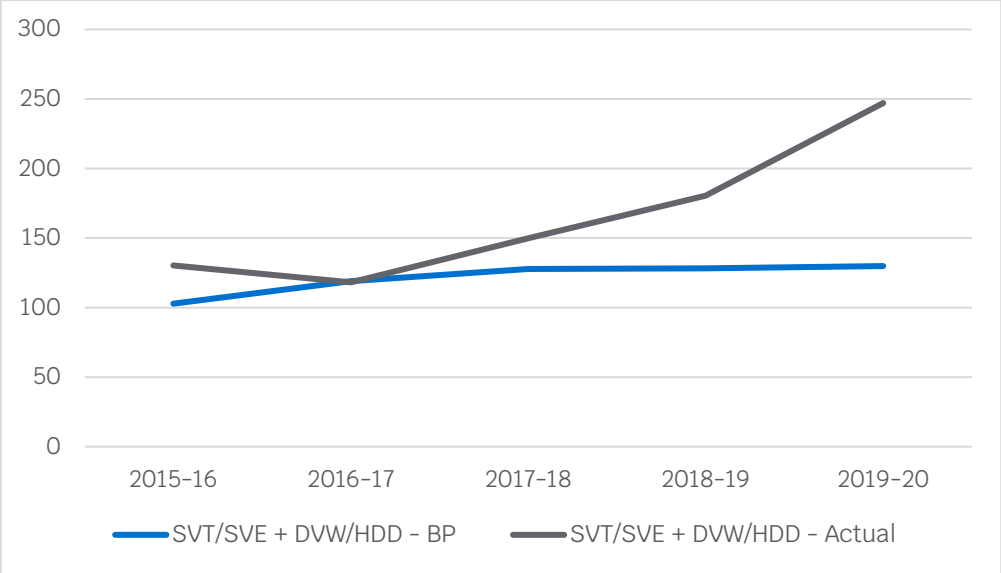
2.37 Northumbrian Water argues that non-infrastructure maintenance (NIM) grew over the AMP6 period, suggesting the increase in 2019-20 expenditure may be due to back-loaded or late expenditure.[32] It also suggests business rates grew over AMP6.

2.38 The main contributor to the NIM increase is Severn Trent, whose 2019-20 outturn investment in NIM is well above its 2019-20 forecast.[33] In its 2019-20, Severn Trent provides the following commentary to explain the increase in its 2019-20 costs: "We invested £3,115m which is £338m (12%) more than the FD. This reflects our decision to reinvest efficiencies in our assets to deliver service improvements (particularly in water quality, monitoring technologies and security), which should create a solid trajectory into AMP7. The reinvestment covered areas such as leakage improvement (additional loggers, monitors and controllers), energy efficiency and process automation."[34]

2.39 The majority of 2019-20 increase in non-infrastructure maintenance spend appears to be due to the early AMP7 preparation Severn Trent described above. This is supported by the evidence from Severn Trent's PR14 business plan forecasts (Figure 2.2), which shows the company didn't spend less than was forecasting at the beginning of AMP6 and still incurred expenditure significantly above the forecast in 2019-20. The April 2019 forecasts in feeder model 1 (which were made three years into the PR14 control and would reflect any back-loading) provide the same picture.

[31] Yorkshire Water, Annual performance report 2019 , p. 231.
[32] Northumbrian para 26.
[33] Source: FM_WW1 updated for 2019-20 data, tab 'Interface real'.
[34] Severn Trent, '2019-20 Annual Performance Report', p. 106.

**2.40 Figure 2.2: Comparison of Severn Trent's non-infra capital maintenance forecast (PR14 final business plan) and outturn expenditure[35]**




2.41 We note that business rates decreased in 2019-20 (as evident from Northumbrian Water's chart)[36] and therefore are not a driver of the totex increase. We also note business rates are not included in modelled base costs and therefore irrelevant in explaining the increase in base costs.

## b) Did AMP6 stretching performance commitment targets drive the increase in 2019-20 expenditure?

2.42 The disputing companies argue that PC levels became more onerous by the end of the price review, driving the increase in outturn 2019-20 expenditure.[37]

2.43 In support of this statement, Anglian Water presents a table showing the number of PCs increased as the control period progressed, indicating it had "twice as many PCLs in year 5 as in any other year".[38] Similarly, Northumbrian Water's Figure 2 notes that "the largest tightening was from 2018-19 to 2019-20 […] It is not surprising therefore that companies spent more in 2019-20 to meet the tougher PC targets."[39] We note Northumbrian Water withdrew its Figure 2 in

[35] We add DVW/HDD to SVT/SVE to account for any change in expenditure due to changes in boundaries between Severn Trent and Dee Valley Water/Hafren Dyfrdwy.
[36] Northumbrian, 'Response to RFI 033', p. 3, Figure 3.
[37] Bristol para 34; Anglian para 40; Northumbrian para 27.
[38] Anglian para 40 and Table 1.
[39] Northumbrian para 27 and Figure 2.

response to RFI 033, as "the data was overly affected by outliers".[40] The company presents new evidence on AMP6 year on year tightening of PC levels, indicating that the 2019-20 year had a large increase in PCs that are "are tighter (or new) compared to 2018/19."[41]

2.44 This evidence is misleading. Northumbrian Water and Bristol Water had PC targets for almost all PCs in all years between 2015 and 2020, while Anglian Water and Yorkshire Water often only had a PC target in the fifth year (Table 2.3). This was a choice which companies made at PR14, but **it does not represent an increase in stretch in the fifth year as almost all PCs require work across the AMP.** Companies also have an incentive to invest early to improve their performance and see the benefits of such investments over the rest of the control period.

**Table 2.3: Number of performance commitments with a stated PC level for the year**

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|---|---|
| ANH | 15 | 15 | 16 | 15 | 39 |
| BRL | 21 | 21 | 21 | 21 | 21 |
| NES | 40 | 40 | 44 | 44 | 44 |
| YKY | 23 | 23 | 23 | 23 | 34 |

2.45 The highest increase in stretch in PC levels in fact occurred between 2015-16 and 2017-18, rather than in the last year. Where we set comparative levels at PR14 **we allowed a glide path for improvement up to 2017-18, and therefore the greatest effort across the industry was required in the first half of the period**. This is shown in Figures 2.3 and 2.4 below.

2.46 The box plot in Figure 2.3 shows the increase in stretch of common PCs where an upper quartile challenge was applied at PR14. It shows that the stretch in such PCs progressively increased up to 2017-18 for the majority of companies (represented by the boxes), with almost no increase required in 2018-19 and 2019-20. The maximum reductions required of companies (represented by the whiskers) were also significantly bigger in the first half of the control period than in 2018-19 or 2019-20, with reductions up to 50% in 2017-18.

2.47 Figure 2.4 draws out a similar picture. It shows, out of the 53 comparative PCs with an upper quartile challenge at PR14, what proportion had an increase in

[40] Northumbrian Water, 'Response to RFI 033', p. 4 paragraph 18.
[41] Northumbrian Water, 'Response to RFI 033', p. 4 paragraph 19.

stretch year on year. In 2017-18, 75% of the PCs had an increase in stretch, compared to only 25% in 2019-20.

**Figure 2.3: Changing stretch of common PCs where an upper quartile challenge was applied at PR14. Box represents interquartile range over the 53 PCs and whiskers are the maximum and minimum**

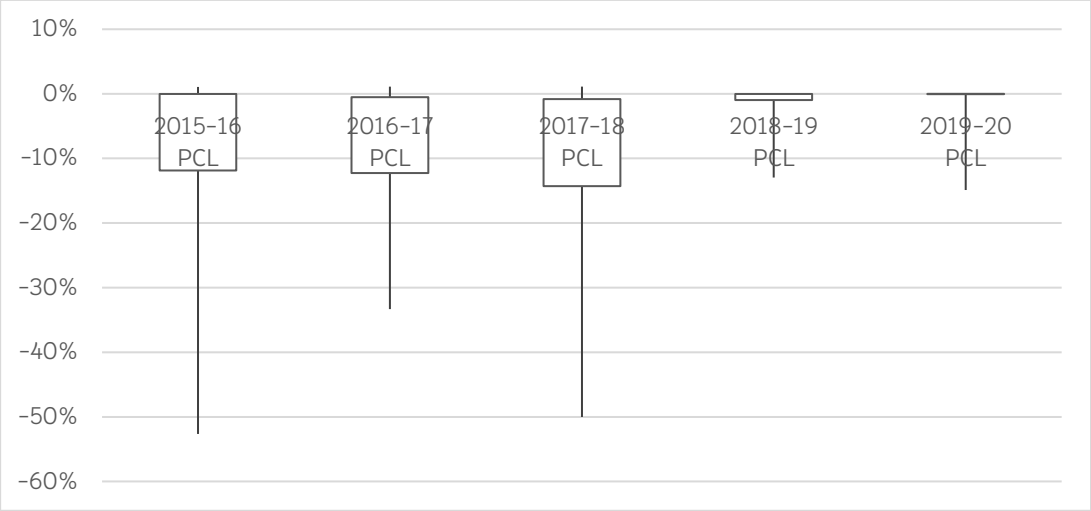
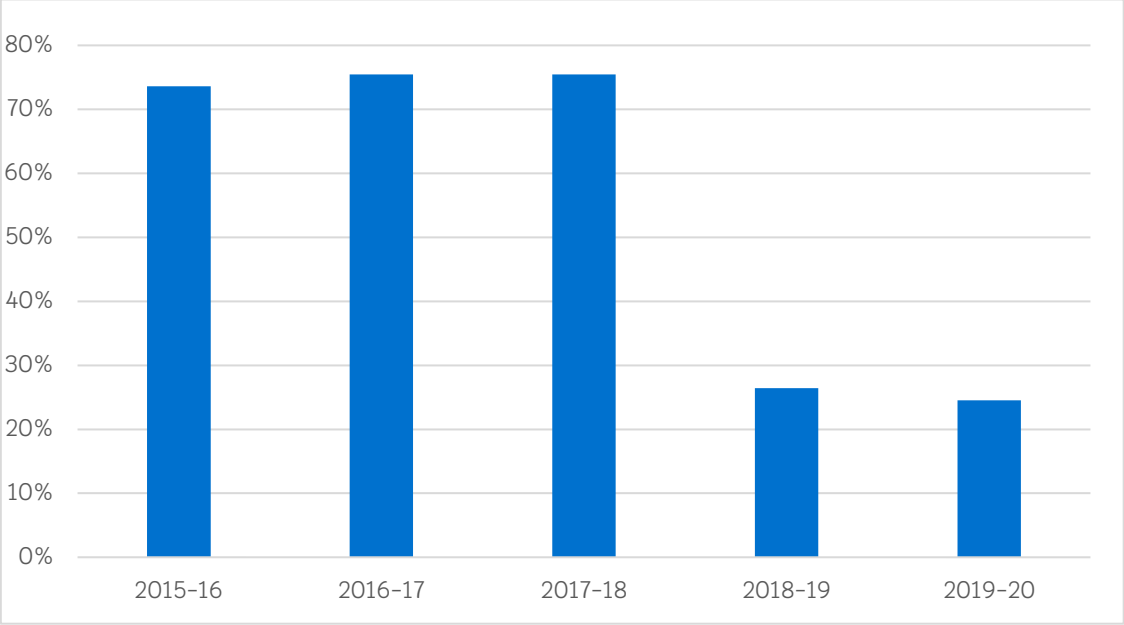



**Figure 2.4: Proportion of comparative PCs (out of 53 PCs) with a year on year increase in stretch across AMP6**




2.48 Northumbrian Water argues that AMP6 PC levels were challenging compared to the pre-PR14 period.[42] This consideration is irrelevant for the matter at stake (ie

[42] Northumbrian para 26,

whether the expenditure in 2019-20 was driven by tighter performance requirements), since we have seen the largest improvements were delivered in the early part of the 2015-20 period.

2.49 In conclusion, it is misleading to look at the absolute number of PCs across years, as most PCs would not imply a greater expenditure requirement in the year of the target but would require work across the control period. The substantial part of the improvement in outcomes, apart from leakage, was delivered before 2019-20. Hence, **the increase in 2019-20 expenditure was not driven by more stretching 2019-20 PC targets.**

## c) Do we observe atypical outperformance by companies against their PC levels in 2019-20?

2.50 The disputing companies argue that we would observe atypical outperformance against their PC levels in 2019-20 if expenditure from AMP7 was brought forward to the last year of AMP6.[43]

2.51 This is precisely what we observe for leakage, which has been often cited by companies as a driver for increased expenditure in 2019-20.[44]

2.52 Between 2000-01 and 2018-19 the sector level of leakage reduced by only 3.5%. In 2018-19 the reduction was 0.1% at industry level.

2.53 In stark contrast, in 2019-20 the sector delivered a dramatic reduction of 7%. All companies apart from Southern Water achieved their PC levels, with companies achieving levels of leakage reductions well beyond their 2019-20 target – this includes a 16% reduction by Portsmouth Water, and reductions above 10% by Affinity Water, Bristol Water, Hafren Dyfrdwy and Thames Water.

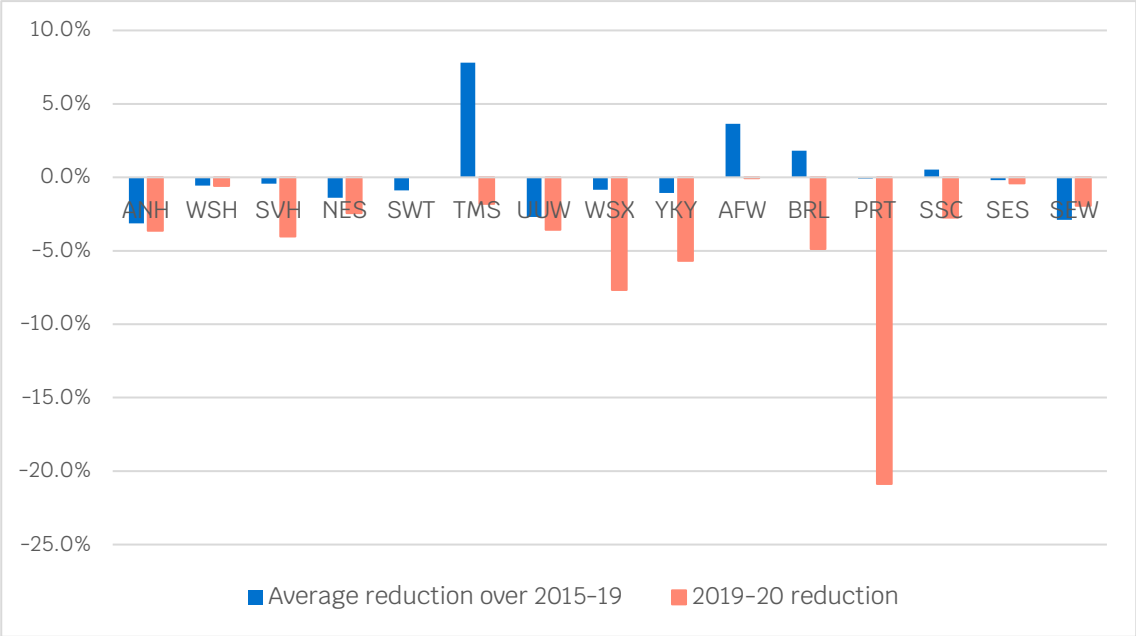
2.54 Contrary to what Northumbrian Water claims ("additional leakage expenditure in 2019/20 was to meet the CPL rather than exceed it"),[45] Figure 2.5 below shows that the sector's leakage reductions in 2019-20 went well beyond what was required to meet the 2019-20 targets, and were an outlier in comparison with performance during the previous years of the AMP.

2.55 This is therefore a key area where we observe atypical outperformance by companies against their PC levels, which appears to have been materially driven

[43] Bristol para 26.
[44] Ofwat, 'Service Delivery Report 2019-20', November 2020, p. 7.
[45] Northumbrian Water, 'Response to RFI 033', February 2021, p. 5, paragraph 20.

by companies' commitment to get a head start on AMP7 performance, and which undoubtedly distorted the 2019-20 outturn expenditure.

**Figure 2.5: Comparison of leakage actual performance target over 2015-19 and in 2019-20**




2.56 Northumbrian Water's Figure 4 in its response to RFI 033 seeks to claim that the industry's leakage expenditure in 2019-20 was driven by moving from missing the 2018-19 leakage PC target to meeting it in 2019-20.[46] However, the figure is driven by the underperformance of Thames Water during the period 2016-17 to 2018-19. A chart of individual company performance against its PC level, such as the chart we present above, indicates the sector went significantly beyond its required target, rather than meeting it, and this is in contrast with the marginal improvements against targets in previous years.

## d) Is there little value in CMA's comparison of 2018-19 and 2019-20 forecast and outturn expenditure?

2.57 The disputing companies argue that the CMA's comparison of 2018-19 and 2019-20 outturn expenditure to the forecasts included in the PR19 business plan submissions is of little value as they do not reflect the outcomes and efficiency assumptions of the determination.[47]

[46] Northumbrian Water, 'Response to RFI 033', February 2021, p. 5, Figure 4.
[47] Anglian para 25-27.

2.58 We do not consider this to be correct. The 2018-19 and 2019-20 forecasts included in companies' PR19 business plans were made four years into the AMP6. They therefore should reflect any back loading of expenditure planned by companies, as well as the outcomes and efficiency assumptions of the PR14 determination.

2.59 What the forecasts do not reflect are companies' investment decisions following the PR19 draft determinations, which were not set at the time the forecasts were made. For this reason, **the CMA's comparison of 2018-19 and 2019-20 forecasts to outturn provides important insights into the extent to which the 2019-20 data was influenced by the PR19 draft and final determinations**.

## e) Is there a parallel between the 2014-15 and 2019-20 expenditure and should the CMA have excluded 2014-15 from the sample?

2.60 The disputing companies argue that there is evidence of wholesale water expenditure brought forward in 2014-15, but the CMA did not exclude this year from the cost models. In particular, Northumbrian Water argues that "transitional expenditure in 2014-15, the comparable transition year during AMP5, was £407m compared to £24 m in 2019-20. This means that similar transitional expenditure in 2014-15 was £383m higher and much higher than any potential uplift in 2019-20 and yet both Ofwat and the CMA have been comfortable with using the 2014-15 year in their analysis."[48]

2.61 As we explained in relation to PR19 transition expenditure,[49] transition expenditure is expenditure we allow companies to bring forward, mainly to enable early statutory deadlines to be met. As such, the transition expenditure we allow is mostly related to enhancement schemes. The majority of wholesale water 2014-15 transition expenditure was also related to enhancement schemes. Furthermore, the level was much lower than Northumbrian Water indicates, with total allowed wholesale water transition expenditure being around £130 million (2017-18 prices).

2.62 In addition, the modelling dataset includes the years that follow 2014-15, which mitigates the risk of any transition expenditure in 2014-15. The same cannot be said for 2019-20 data, which means the risk of bias caused by 2019-20 additional investments brought forward from AMP7 cannot be mitigated at this point in time.

[48] Northumbrian para 38.
[49] Ofwat, 'Reference of the PR19 final determinations: Costs and Outcomes – Ofwat December response', December 2020, p. 3, paragraph 2.2.

## 2.3 Companies' expenditure in 2019-20 was materially biased by preparation for PR19

2.63 The disputing companies outlined a range of reasons on why the increase in 2019-20 data would not be due to the sector bringing forward investments from AMP7 to the last year of AMP6.

2.64 We note there are contradictory statements on this point across the disputing companies. While Bristol Water and Anglian Water argue there is no evidence of substantial investments being brought forward,[50] Northumbrian Water explicitly recognises the presence of such investments in 2019-20 data ("[…] there is clear evidence that some expenditure has been brought forward to meet AMP 7 performance levels […]"),[51] albeit to argue this is to a lower degree than the CMA envisaged.

2.65 Yorkshire Water is even more explicit on this. It discusses the decision to invest in leakage (enhancement expenditure) and to re-invest outperformance into service improvements ahead of AMP7: "The expectation to shift to upper quartile performance, or make 15% improvements, from year 1 of the AMP would have been impossible without early capital enhancement investment and planning." and "It became increasingly apparent as the price review progressed and the performance expectations tightened significantly throughout the process that early preparation and investment was necessary."[52]

2.66 Even Bristol Water acknowledged the influence of the PR19 determination on the last year of AMP6 expenditure in one of its earlier submissions, when its narrative was not influenced by the need to argue for the inclusion of the 2019-20 data in the base models: "Our analysis of this [2019-20] data shows clear evidence, for the water service, that costs are increasing because of the need to meet new and more challenging performance commitments […]."[53]

2.67 As this commentary indicates, companies found that early investment and preparation was necessary to meet the more challenging PR19 targets, which materially distorted the expenditure companies incurred in 2019-20.

[50] Eg Anglian para 2.
[51] Northumbrian para 4.
[52] Yorkshire para 1.14-1.15.
[53] Bristol Water, 'Response to CMA provisional findings (Non-Confidential)', October 2020, p. 2, paragraph 5.

2.68 In its working paper, the CMA acknowledges that PR19 was a substantially more demanding determination than others have been in the past,[54] and companies had sight of this much earlier in the process. Examples of which are presented in Table 2.4 below. **This gave companies more opportunities to bring forward expenditure than in PR14 and incur the benefits of the investment over the entire PR19 period.**

2.69 In addition, the PR14 symmetric cost sharing rates are more favourable to companies than the PR19 asymmetric cost sharing rates, which will require most companies to bear a higher proportion of any overspend (Table 2.4). As a result, **companies had an incentive to bring forward expenditure to AMP6 in the knowledge that customers would share a greater proportion of any overspend than in AMP7.**

**Table 2.4: Comparison between PR14 and PR19**

| | PR14 | PR19 |
|---|---|---|
| **Level set for common level PCs** | In final determination (December 2014). Approach also set out in final determination. | In draft determinations (April 2019). Approach set out in final methodology (Dec 2017). |
| **Leakage reduction** | No material reduction | 15% reduction set out in final methodology (Dec 2017). |
| **Cost sharing rates** | Symmetric rates, nearly all companies between 45% and 55% | Asymmetric rates in favour of customers. Maximum of 75% of costs of overspend to company, 32% of underspend but most companies in the range 40% to 60%. |

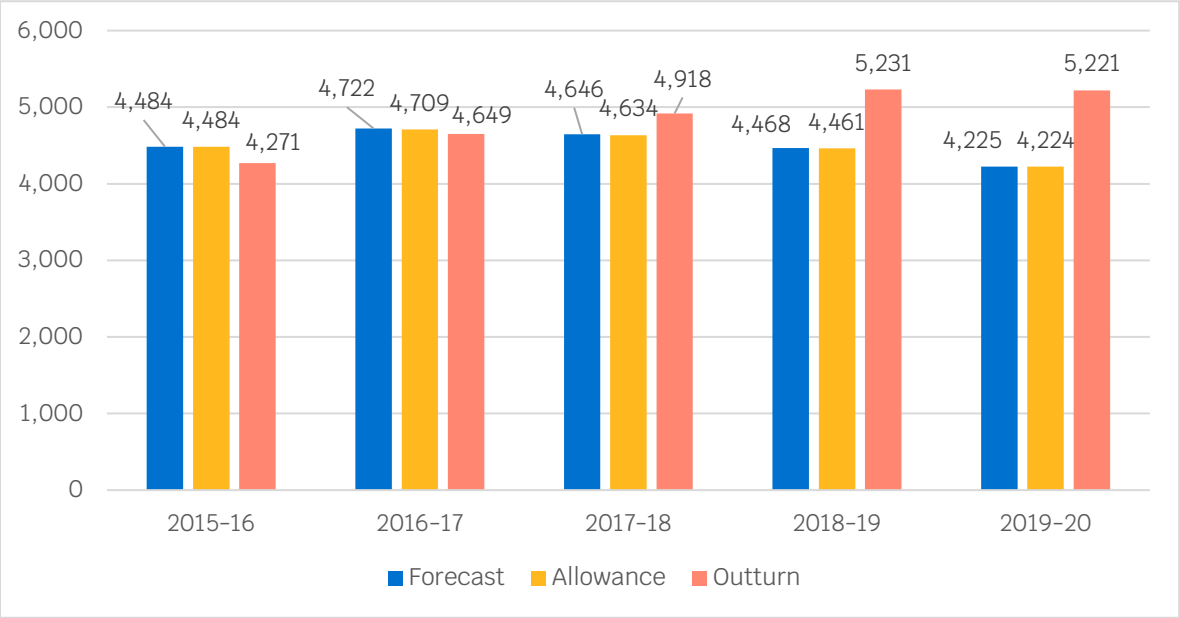
2.70 Yorkshire Water argues not including the 2019-20 data would send the wrong signal to companies which have been encouraged to "act now ahead of the game", and this might mean Yorkshire Water "simply will not risk investing ahead of the next AMP period if those costs will potentially not be recognised by the regulator."[55] This is another clear indication of the additional investments the industry has made in 2019-20 in preparation for AMP7. There is also no merit in Yorkshire Water's claim. The decision not to include the 2019-20 data in the base models ensures allowances remain appropriate and are not biased by distortive data, as discussed above. Companies' investment decisions should not be influenced by the expectation of influencing the models, but on the basis on long-term and efficient planning.

[54] Competition and Markets Authority, '2019/20 data for base cost models – Working Paper', January 2021, p. 14, paragraph 31.
[55] Yorkshire para 1.11 and 1.16.

2.71 Northumbrian Water argues that the CMA should have attempted to calculate the potential value of expenditure brought forward in order to consider the materiality of the bias.[56] It suggests that any amount of totex expenditure brought forward from AMP7 is modest and can be explained by other factors.[57]

2.72 We categorically disagree with this statement. While it is not possible to estimate a precise range for expenditure companies incurred in 2019-20 in preparation for AMP7, a comparison of AMP6 forecast, allowance and outturn totex suggests this range to be much greater than the company indicates, as shown in Figure 2.6 below.

**Figure 2.6: Comparison of industry wholesale water totex forecast (PR14 final business plan), allowance and outturn expenditure in AMP6 (£m, 2018-19 prices)**




2.73 The figure above shows that companies overspent against requested AMP6 wholesale water totex, and allowed AMP6 wholesale water totex, by £1.8 billion. In addition, the majority of the overspend took place in 2019-20 (£1 billion). This is in contrast with the underspend companies faced in the AMP5 period.

2.74 This package of evidence indicates the **presence of substantial investments which were not anticipated at the time companies developed their PR14 business plans or at the time PR14 allowances were determined**. These

[56] Northumbrian para 22.
[57] Northumbrian para 4 and 17.

investments largely took place in the last year of AMP6, which distorts the 2019-20 outturn data.

2.75 Adding further to the distortion of the 2019-20 data, the disputing companies incurred additional costs in 2019-20 in relation to the CMA appeal process, which they have asked the CMA to allow them to recover from customers.[58]

## 2.4 Companies' APR query responses add to the extensive body of evidence that 2019/20 data is significantly distorted

2.76 The disputing companies have argued that the evidence of expenditure brought forward from companies' APR query responses is anecdotal and not relevant in the context of total base costs.[59] Bristol Water argued it does not provide compelling evidence that material base expenditure has been brought forward.[60]

2.77 The evidence from query responses should not be taken in isolation, but rather viewed as part of the extensive body of evidence we presented so far on the influence which the PR19 determination had on companies' 2019-20 investments. Taken in this context, the evidence from nearly half of the companies (excluding the disputing companies) only serves to strengthen our conclusion.

2.78 We note Bristol Water's comments on the APR query responses seek to dismiss the evidence on the basis of inappropriate assumptions,[61] which we categorically disagree with. United Utilities provides evidence it invested £96 million across wholesale water and wastewater in readiness for the AMP7 period. Southern Water indicates a £44 million investment across water and wastewater, which it described as preparation for AMP7 targets. It is also unclear on what ground Bristol Water dismisses South West Water's maintenance and leakage investments, which were both described by the company as investments to "be in the best possible position to deliver 2020-25 targets".[62] Similarly, Bristol Water dismisses Severn Trent's entire response on the basis that "it is safe to assume that there was no explicit strategy to bring base expenditure forward", despite

[58] Anglian Water, 'Cost Recovery', January 2021. Bristol Water, 'Cost of the CMA Redetermination', January 2021. Northumbrian Water, 'Submission on Cost Recovery', January 2021. Yorkshire Water, 'Submission on Cost Recovery', January 2021.
[59] Anglian para 2, 11 and 12, Yorkshire para 1.19.
[60] Bristol Annex 1 para 1.
[61] Bristol Annex 1 Table 4.
[62] Query SWB-APR-CA-004.

Severn Trent's indication that it used its fast-track status to start early on preparation for AMP7 commitments.

## 2.5 There is no downward bias in the CMA's current modelling position

2.79 The disputing companies argue there is a downward bias in the CMA's current allowances, which the CMA has disregarded in favour of concerns over an upward bias.[63] They argue that omitting the 2019-20 data from the models will allow the downward bias to persist.

2.80 The evidence is clear – there is no downward bias in the disputing companies' current allowances. Where companies received an allowance lower than their requested costs at final determination (or in the CMA provisional findings) it is because they are inefficient relative to the industry benchmark. It is not because the allowances are biased.

2.81 Our final determination allowance on total wholesale modelled base costs was already 0.8% higher than the cost the sector requested in August 2019. Where the allowance was lower than the requested cost at company level, it was due to the company's inefficient forecast.

2.82 This sense-check at industry level is missing from the disputing companies' responses, which are narrowly focused on the impact of 2019-20 data on their own allowances and present this as proof of downward bias in the current modelling.[64] **The sensitivity test at the industry level clearly shows there is no downward bias in the CMA's current modelling, and that the uplift in allowances using 2019-20 data reflects a clear upward bias at the industry level.**

2.83 We note that the position taken in the CMA's provisional findings, which incorporated changes to the catch-up efficiency challenge and frontier shift, results in allowances that are 1.2% higher than the industry requested (an increase of over £100 million).

2.84 We note that both Northumbrian Water and Yorkshire Water received an allowance higher than they requested in wholesale water, as shown in Table 2.5 below. The use of 2019-20 data would increase the companies' wholesale water

[63] Bristol para 10-13, Northumbrian para 21-23,
[64] Bristol para 9-13. Oxera, 'Response to the CMA's working paper on the use of 2019/20 data in base cost modelling', January 2021, pp. 7-8.

allowance by up to £70 million and £100 million above requested costs, respectively.

**Table 2.5: Allowed and requested wholesale water modelled base costs for the disputing companies**

| | Aug 2019 requested | CMA provisional allowance | CMA 2019-20 modelling allowance[65] | Difference to CMA provisional | Difference to 2019-20 modelling |
|---|---|---|---|---|---|
| ANH | 1,504 | 1,284 | 1,323 | -220 | -181 |
| BRL | 367 | 343 | 353 | -24 | -14 |
| NES | **1,107** | **1,125** | **1,177** | **18** | **70** |
| YKY | **1,306** | **1,338** | **1,403** | **32** | **98** |

2.85 We respectfully urge the CMA to acknowledge the importance of sense-checking cost allowances against information from companies' forecasts. This comparison adds a further element to the body of evidence pointing towards the distortionary impact of the 2019-20 outturn data on the assessment of base cost efficiency. It also ensures that our baselines are sufficiently stretching, so that customers do not pay more than necessary for the services they receive.

2.86 Company expenditure forecasts also inform the companies' own assessment of their efficiency compared to the rest of the industry and indicate the extent to which they have to catch up. Data from companies' April and August 2019 forecasts reflects this assessment, as well as feedback received from us at the initial assessment of plans and draft determination stages. **That data is therefore more informative than companies' original plans**, which had not yet incorporated this extensive feedback.

2.87 Furthermore, the inclusion of the distorted 2019-20 outturn expenditure would provide substantial additional allowances to companies that remain inefficient at the expense of customers.

2.88 This is evident as the disputing companies do not become more efficient when the 2019-20 is included in the models and their efficiency position relative to the sector remains the same. **This further indicates that the current models capture the companies' efficiency appropriately and the allowances are not biased** (Table 2.6).

[65] Assuming the modelling approach proposed in the CMA 2019-20 modelling consultation.

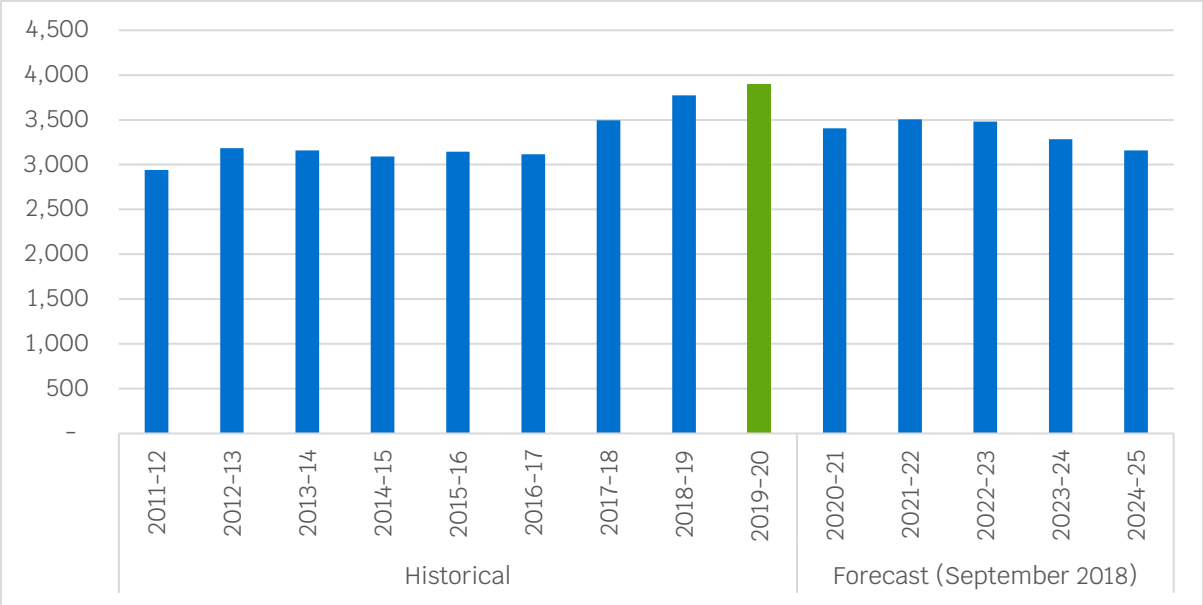
**Table 2.6: Sector forward-looking ranking under the final determination models and the 2019-20 models (CMA consultation modelling approach)[66]**

| Wholesale water | | | Wholesale wastewater | | |
|---|---|---|---|---|---|
| Company | FD Rank | 2019-20 Rank | Company | FD Rank | 2019-20 Rank |
| **ANH** | **16** | **16** | **ANH** | **10** | **9** |
| **NES** | **5** | **5** | **NES** | **3** | **4** |
| NWT | 2 | 2 | NWT | 4 | 5 |
| SRN | 15 | 15 | SRN | 8 | 8 |
| SVH | 6 | 6 | SVH | 1 | 1 |
| SWB | 3 | 3 | SWB | 6 | 6 |
| TMS | 12 | 11 | TMS | 7 | 7 |
| WSH | 4 | 4 | WSH | 2 | 2 |
| WSX | 7 | 7 | WSX | 5 | 3 |
| **YKY** | **9** | **9** | **YKY** | **9** | **10** |
| AFW | 8 | 8 | | | |
| **BRL** | **14** | **14** | | | |
| PRT | 1 | 1 | | | |
| SES | 13 | 13 | | | |
| SEW | 11 | 12 | | | |
| SSC | 10 | 10 | | | |

2.89 As a final point, **with the 2018-19 data our sample is already over representative of high cost years**,[67] further adding to the point that there is no downward bias in the CMA's current modelling. The over representation of high cost years would be exacerbated if the 2019-20 year was included, since it is a significant outlier compared to both historical and companies' forecasts for AMP7 (even compared to September 2018 forecasts as shown in Figure 2.7).

[66] Source: FM_WW4 and FM_WWW4 at final determination and under CMA 2019-20 consultation modelling approach, Ofwat analysis.
[67] Ofwat, 'PR19 final determinations: Securing cost efficiency technical appendix', December 2019, p. 33.

**Figure 2.7: Comparison of historical outturn and forecast (September 2019 business plan) modelled base costs in wholesale water, £m**




## 2.6 The CMA is consistent with its position on setting performance commitment levels

2.90 Bristol Water argues that by not adopting the 2019-20 data the CMA is creating a further disconnect between costs and outcomes, as they argue the CMA is using evidence from 2019-20 data when setting stretching performance commitments.[68]

2.91 We note the CMA did not use the 2019-20 data to revise performance commitments targets. For example, to take account of the 2019-20 data, Bristol Water's 2024-25 PC level would need to be revised from 21.2% to a 23.8% reduction to deliver the same stretch at PR19. As the CMA has not changed the PC level, if Bristol Water delivers the original annual percentage reductions it will earn outperformance payments over 2020-25.

2.92 Similarly, Northumbrian Water argues the CMA used 2019-20 APR data extensively in its Cost of Capital working paper and in setting the allowed return.[69]

2.93 There is no ground to claim the CMA has adopted an inconsistent position. Unlike costs, WACC parameters are exogenous (i.e., not under companies' management control) and therefore the not distorted by companies bringing forward AMP7

[68] Bristol para 16.
[69] Northumbrian para 12.

expenditure. Market rates are outside of companies' control, and it is important that the CMA sets the WACC by reference to the market rates relevant for the control period.

## 2.7 There are no substantial improvements in the econometric models to justify the adoption of materially distorted data

2.94 The disputing companies note that including the 2019-20 data does not reduce the performance of the models, and indeed one of the model coefficients becomes statistically significant with the inclusion of the data.[70] Oxera says that including the 2019-20 data improves the 'within R-squared'.[71]

2.95 The companies refer to the estimated coefficient of weighted average density in model WRP2. Without the 2019-20 data this coefficient is just above the 10% significance threshold (with a p-value 0.120), while the coefficient becomes significant at 5% level with the inclusion of 2019-20 data. In all other models, the weighted average density variable is already significant at 1% level without the 2019-20 data.

2.96 We consider that an improvement in the statistical significance of one explanatory variable (out of 22 instances where we use our explanatory variables in the models) is a very marginal improvement in the quality of the models and does not justify the inclusion of the distortionary 2019-20 data. Especially since weighted average density is already significant at the 12% level in model WRP2, and strongly significant in all other models.

2.97 We also do not consider an improvement in the 'within R-squared' is an indication of a strong improvement in model performance either. As the CMA indicated in its working paper, "most of the explanatory power of our models derives from cross-sectional differences across companies, rather than data fluctuations over time",[72] meaning that including more data "does not necessarily increase the explanatory power of our models".

[70] Bristol para 2, Northumbrian para 15.
[71] Oxera, 'Response to the CMA's working paper on the use of 2019/20 data in base cost modelling', January 2021, pp. 8-9.
[72] Competition and Markets Authority, 'Water Redeterminations 2020 2019/20 data for base cost models – Working Paper', January 2021, p. 13, paragraph 30.

2.98 In addition, the 'overall R squared' statistic is more relevant for random effects models because the random effects estimator is a weighted average estimator of the between and within estimators. Table 2 in Oxera's submission shows that the 'overall R squared' actually decreases marginally in all wholesale water models when 2019-20 data is included.[73] We note the same applies to most wholesale wastewater models.

2.99 In its working paper, the CMA says that in choosing whether to adopt the 2019-20 data it considered advantages and disadvantages of its inclusion.[74] Overall, we do not find convincing improvements in modelling performance with the inclusion of 2019-20 data that would outweigh the significant concerns related to the distortion of the 2019-20 data. The models are robust, and performance is strong, regardless of the adoption of this data.

## 2.8 Adjustments to the 2019-20 data would be arbitrary and not robust

2.100 Yorkshire Water suggests a range of data adjustments the CMA could make to mitigate the risk of 2019-20 data being distorted by companies bringing forward AMP7 expenditure. For example, adjustments to specific areas where there is evidence companies brought forward investments, or adjustments to specific areas where it is most plausible costs could have been brought forward.[75]

2.101 Northumbrian Water discusses a similar range of options, concluding such adjustments would be arbitrary or simply impractical.[76]

2.102 We agree with Northumbrian Water's conclusion that any ex ante or ex post adjustments to the data would be arbitrary and lack robustness, and would not mitigate the risk of biased results. This aligns with the CMA's conclusion in its working paper.[77]

[73] Oxera, 'Response to the CMA's working paper on the use of 2019/20 data in base cost modelling', January 2021, pp. 8-9, Table 2.
[74] Competition and Markets Authority, 'Water Redeterminations 2020 2019/20 data for base cost models – Working Paper', January 2021, p. 3, paragraph 4.
[75] Yorkshire para 1.17-1.18.
[76] Northumbrian para 48-50.
[77] Competition and Markets Authority, 'Water Redeterminations 2020 2019/20 data for base cost models – Working Paper', January 2021, p. 22, paragraph 63.

2.103 Anglian Water suggests the CMA could cap allowances at the requested cost, which would ensure that no company receives a higher base allowance than its own assessment of its expenditure needs.[78]

2.104 This approach would represent a significant departure from our PR19 methodology, which allowed efficient companies to receive a cost allowance that is higher than their business plan to provide a strong incentive for companies to seek efficiencies and submit stretching cost forecasts. It would also not protect customers against the risk of funding inefficient business plans by using significantly distorted and biased data.

## 2.9 The 2019-20 expenditure in wholesale wastewater is also distorted by early investments ahead of PR19

2.105 The disputing companies argue that the CMA should include the 2019-20 wholesale wastewater data regardless of its decision in relation to the use of 2019-20 data in wholesale water models.[79]

2.106 We disagree. There isevidence of **material investments brought forward from AMP7 in wholesale wastewater to prepare for the PR19 period**, as indicated by a number of companies including United Utilities, South West Water, Southern Water, and Dŵr Cymru.

2.107 There is also evidence from one of the disputing companies on early investments in sewer flooding – Yorkshire Water indicates large investments on internal sewer flooding, indicating it "invested its outperformance rewards in the latter part of AMP6 in order to undertake an 'early start' to improve its internal sewer flooding performance ahead of AMP7. This has put [Yorkshire] on the front foot to meet the challenges ahead."[80]

2.108 The inclusion of distortive data in the 2019-20 models, which reflects atypical expenditure companies incurred in preparation for the stretching AMP7 targets, would lead to biased result in wholesale wastewater allowances similarly to the result on wholesale water.

[78] Anglian para 53.
[79] Northumbrian para 39-46; Oxera p. 10.
[80] Yorkshire Water, 'Response to CMA provisional findings', October 2020, p. 62, paragraph 6.8.1.

## 2.10 Including 2019-20 outturn expenditure into the base cost models would lead to an unacceptable outcome for customers

2.109 Although the CMA re-determination process concerns only 4 of the 17 water companies, it is important that the CMA sense-checks the impact of its decisions at the industry level, in order to assess the reasonableness and full implications of such decisions.

2.110 Including 2019-20 outturn expenditure into the base cost models would lead to a significant distortive impact on the sector's base allowances, with 13 out of 17 water companies with a higher wholesale water modelled base cost allowance than they requested in August 2019.

2.111 Had such distorted results been reached during PR19 determination process (for example, following the inclusion of 2018-19 data after the draft determinations), it would have undermined our approach to determining efficient cost allowances and led to an unacceptable outcome for customers.

2.112 This would have likely raised a strong challenge and questions from our wider stakeholders, such as whether the historical data is still a good predictor of the future, how has information from business plans been used to set the efficient allowance,[81] and whether the industry is sufficiently incentivised to deliver efficiencies over the PR19 control period.

2.113 We respectfully urge the CMA to undertake this analysis and use sector's forecasts to sense-check the appropriateness of its results and understand the full implications on its efficiency benchmarking.

2.114 In addition to considering whether the selected econometric models remain appropriate with the inclusion of the 2019-20 data and whether companies are sufficiently incentivised to deliver an improvement in their level of performance, the CMA would need toreview the interaction with other elements of our cost assessment and price review framework, beyond the modelled base cost allowances.

2.115 This would include the efficiency challenge, decisions on cost adjustment claims (as implicit allowances would need to be recalibrated), and its assessment of enhancement expenditure, including leakage, deep and shallow dive efficiency

[81] For example, Ofgem at RIIO-GD2 use forward looking business plan information to estimate econometric cost models and to set the catch-up efficiency challenge.

challenges and the internal consistency of its benchmarking (which might show companies efficient in base costs but inefficient in benchmarked enhancement costs). It would also need to consider the impact of 2019-20 data on outcomes and recalibrate the levels of performance commitments for the disputing companies, many of which are based on, or cross checked against, historical performance. However, as with cost, we do not recommend that the CMA re-considers performance commitment levels in light of 2019-20 performance.

## 2.11 Concluding remarks

2.116 There is clear evidence to indicate that companies decided to act ahead of the PR19 control period in order to meet the stretching AMP7 targets. This influenced companies' investment decisions in 2019-20, driving outturn costs significantly above both companies' forecasts and allowed expenditure in AMP6.

2.117 The current base cost allowances to the disputing companies reflect their efficiency position relative to the rest of the sector. These companies do not become more efficient with the inclusion of 2019-20 data, indicating that the current base allowances are appropriate.

2.118 The uplift in the disputing companies' allowances following the inclusion of the 2019-20 data reflects an upward bias at sector level, which materially distorts the modelled results at sector level. This would lead to rewarding inefficient business plans at the expense of customers, should this data be adopted in the CMA's redetermination.

# 3. Our response to Bristol Water's Canal and River Trust cost adjustment claim

## Background

3.1 In our response to the provisional findings, we argued that Bristol Water benefits from significant offsetting savings from its agreement with the Canal and River Trust, as it avoids the cost of owning, operating, maintaining and making safe a water resources storage reservoir.[82]

3.2 In a subsequent response, Bristol Water argued it is not the case such offsetting benefits exist, as "bankside storage exists at Purton and in raw water reservoirs for Littleton (all of these are existing points, i.e. Bristol Water does incur abstraction, storage and transportation costs)."[83]

3.3 Following this statement, in RFI 024 the CMA asked Bristol Water to provide a breakdown of the abstraction, storage and transportation costs it incurred in AMP6 in relation to its water resources assets.[84]

3.4 In its response, Bristol Water indicated that the costs incurred in relation to its assets at Purton and Littleton account for a material proportion of the expenditure it incurred across water resources and raw water distribution (**<REDACTED>**).[85]

## Evidence from Bristol Water indicates the company does not incur any storage costs in water resources and has been misallocating expenditure across controls

3.5 Since the beginning of the CMA redetermination process, we have been flagging our concerns over Bristol Water's poor understanding of its water resources assets and costs, which could lead to misallocation of resources and inefficiency.[86] One

[82] Ofwat, 'Reference of the PR19 final determinations: Costs and Outcomes – response to CMA provisional Findings', October 2020, p. 127, paragraphs A6.9-A6.12.
[83] Bristol Water, 'PR19 Redetermination Bristol Water: Reply to Ofwat's Response to CMA Provisional Findings', December 2020, p. 5 paragraph 15.
[84] Competition and Markets Authority, 'RFI 024', Question 9.
[85] Bristol Water, 'CONFIDENTIAL: BRISTOL WATER – RESPONSE TO CMI RFI024 Q8 – 10', November 2020, p. 11, Table 'Total over 2015-20'.
[86] Ofwat, 'Reference of the PR19 final determinations: Response to Bristol Water's statement of case', March 2020, p. 60, paragraphs 3.145-3.146.

of the issues discussed was in particular Bristol Water's allocation of costs in relation to the Purton and Littleton storage tanks, which we argued based on the limited evidence available to us appeared to be too small in size to be in the water resources control, and should rather sit within the network plus control.[87]

3.6 The evidence Bristol Water presented in its response to RFI 024 confirmed the capacity of the Purton and Littleton assets. **<REDACTED>**.[88]

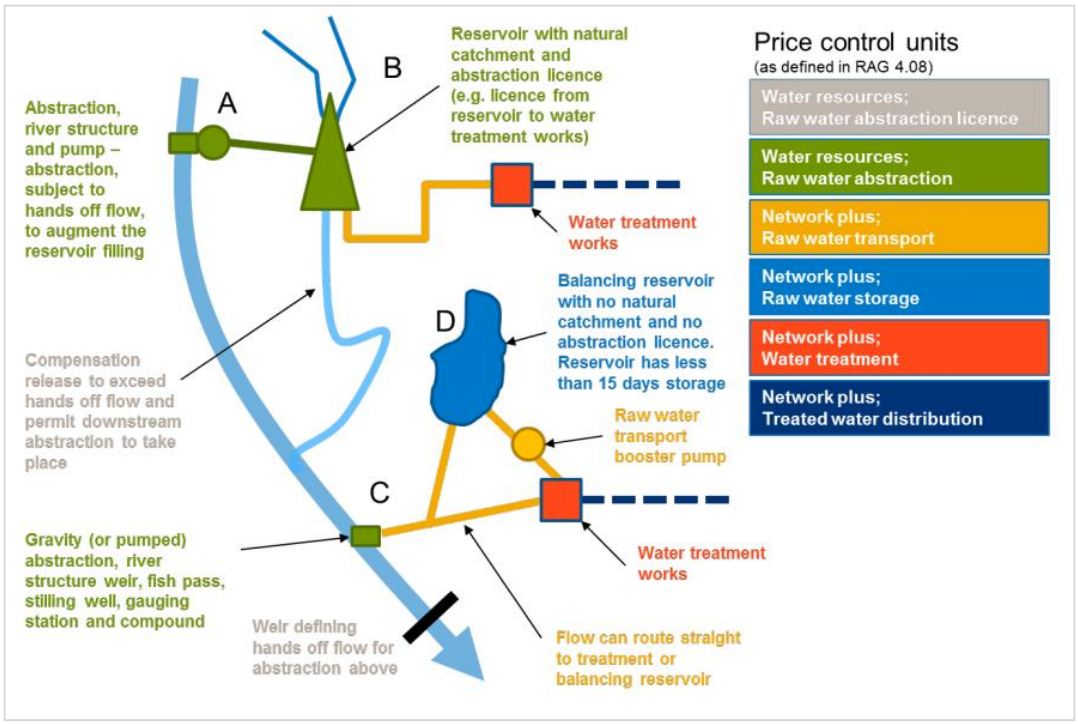
**Figure 3.1: <REDACTED>**

3.7 The boundary of the water resources control is clearly outlined in the Regulatory Accounting Guidelines (RAGs) – to qualify as a reservoir, an asset should have at least 15 days of usable storage.[89]

3.8 Bristol Water's evidence clearly indicates that the Purton and Littleton storage assets **<REDACTED>** are too small to qualify as a reservoir, or water resources asset.[90] Rather, the assets qualify as a point D assets (see diagram below), which are outside of the water resources boundary and qualify as water network plus assets. Bristol Water's current allocation treats the canal and the storage tanks as point A and B respectively, while the correct allocation should be as point C and D respectively.

[87] Ofwat, 'Reference of PR19 final determinations: Response to Bristol Water's 27 May submission to the CMA', June 2020, p. 17, paragraphs 3.15-3.16.
[88] Bristol Water, 'CONFIDENTIAL: BRISTOL WATER – RESPONSE TO CMI RFI024 Q8 – 10', November 2020, p. 10.
[89] Ofwat, 'RAG 4.08, Appendix 2', January 2019.
[90] As a broad indication, the volume of water abstracted from the canal and treated at the Littleton and Purton works was 133 Ml/d in 2017-18, according to Bristol Water's draft determination representation. The combined total usable storage serving these works would therefore need to be above 1995 Ml (15 days * 133 Ml/day) to be water resource control reservoirs, **<REDACTED>**

**Figure 3.2: Example system identifying both water resources and network plus reservoir assets (RAG 4.09)[91]**




3.9 Bristol Water previously argued that the allocation of these assets was agreed in conversations with Ofwat ahead of the start of the price review process.[92] It is not appropriate for a company to disregard accounting guidelines, and the company should have checked that its interpretation of the water resources boundary was still holding in the light of the relevant RAGs.

3.10 In conclusion, while this may appear as an accounting allocation issue of limited importance, the implications of this are much wider and significant:

- the water tanks at Purton and Littleton are **not water resources assets** but water network plus assets, and Bristol Water has incorrectly been misallocating costs to the water resources control;
- this indicates that Bristol Water **benefits from significant offsetting savings as it does not incur the cost of owning a water resources reservoir (and all the related risks)** due to its bulk supply agreement with the Canal and River Trust, while other companies would incur such costs through the asset base they own;

[91] Source: Ofwat, 'RAG 4.08, Appendix 2', January 2019, p. 6.
[92] Bristol Water, 'PR19 Redetermination Bristol Water: Reply to Ofwat's further submission', July 2020, p. 12, paragraph 54.

- the implicit allowance Bristol Water receives from the base models and the significant costs the company avoids from not owning a storage reservoir far exceed any remaining gap between our £5.6 million allowance and the requested cost.

3.11 For the sake of clarity, we therefore note the cost information Bristol Water provided to the CMA in response to RFI 024 is based on incorrect cost allocation assumptions and is inflating the costs Bristol Water incurs in water resources. Bristol Water operates many other water sources (25 depending on misallocations), and it is highly unlikely that two sites alone would account for **<REDACTED>** of the company's total water resources and raw water distribution costs. These two sites account for **<REDACTED>** of the cost due to the significant amount of network plus costs which the company incorrectly allocated to them.

3.12 We expect Bristol Water to develop a better understanding of its water resources costs and asset allocations for PR24.

# 4. Our response to companies' and third party responses on the leakage working paper

4.1 We consider that we have already provided a response to the issues raised by the companies in reference to the base cost adjustment for leakage in our response to the CMA's request for information, RFI033. However, for ease of reference we provide a short summary of our response below.

4.2 Accordingly, in this final response on leakage we have focused on responding to new evidence which the companies and third parties have submitted in response to both the working paper and RFI033. We also provide brief clarification where we consider that the companies have misrepresented our position.

4.3 Overall we do not consider that the companies have adequately responded to the challenges we raised in our previous submissions. We specifically draw attention to those challenges relating to: the build-up of company costs in determining their optimal activity levels; identifying a split between base and enhancement expenditure; and evidencing their proposed costs are efficient. We do not repeat those challenges in detail here as we are mindful of the CMA's request not to reiterate previously raised points, but we submit that the CMA should carefully consider the lack of evidence in response to these challenges when making its final determinations.

## Summary of our response to RFI 033

4.4 In our response to RFI 033 we have assessed the relevant information provided by the disputing companies in their responses to the leakage working paper and raised points relevant to the third party submissions. In our response to RFI 033 we set out:

- That we recommend the CMA accepts upper quartile performance is delivered by base cost allowances;
- Evidence of upper quartile cost and leading service performance in other measures;
- That our proposal is flexible in recognising variations in company starting positions by not expecting a common service level to be delivered and allowing companies to earn outperformance payments on the basis of company specific performance commitment levels;

- Our challenge to Anglian Water's estimate of the implicit allowance of costs included in the base models and its forecast costs for maintaining leakage in the 2020-25 period. We have a number of concerns that the company has failed to answer, including the assumption that its expenditure (both historical and forecast) is efficient and the absence of an activity profile to explain the drivers of the base costs; and
- The need to consider the cost service relationship and prior funding to avoid the risk of customers paying twice for improvements.

## Anglian Water

4.5 The company highlights in is response to RFI033 that at an industry level circa two thirds of leakage reduction from 2018-19 to 2019-20 was delivered by three companies and a methodological change contributed to that for Thames Water. However, it is also important to note that the industry median reduction is 7%. Also, if the Thames Water methodological change impacts are removed from its figures, it still achieved a reduction of over 7% from 2018-19 levels. Severn Trent Water achieved a reduction of similar magnitude to Thames Water despite Anglian Water not considering it was a company recovering from underperformance.

4.6 In its response to RFI033 Anglian Water argues that the base models fund (mean) average performance for leakage, simply because it is not included in the model as an independent variable. We consider this is an overly cautious view of what the models fund and is skewed in the companies' favour. We note that other companies' responses to the RFI reached very different conclusions. Yorkshire Water for example, discusses the assumptions one must make to reach specific interpretations of what is funded by the model for any single service area[93]. As we state in our response to RFI033, believing the base funding allows for only average leakage performance assumed that leakage spend in 2015-20 was efficient. It assumes that there is no scope for companies to improve their performance in 2020-25 within the same cost envelope, despite them doing so across many other performance metrics over several price reviews. These assumptions are not credible. It would also risk customers paying twice for the same performance improvements, through the base allowance adjustments and outcome delivery incentives outperformance payments.

[93] Yorkshire Water, Oxera response to RFI033', January 2021, pp. 4-5.

## Bristol Water

4.7 We consider that challenging a company's view of its efficient costs is an important part of our regulatory role. In Bristol Water's case we support applying an efficiency challenge to Bristol Water's identified leakage enhancement cost of £4.833 million. This is on the basis of our assessment of the bottom-up evidence provided by the company as previously referenced in our response to the working paper.[94] Through this assessment we raised concerns such as:

- The company's assumption of extreme impacts of winter conditions on burst rates;
- The low productivity assumed by the company for its leakage inspectors in contrast with the observed performance;
- The application of generic efficiency challenges to leakage costs, despite the company having recently tendered a new contract; and
- That the company's consultant report only concluded that Bristol Water's costs appeared to be least cost at a high level.

4.8 The company's claim that we have not assessed its bottom-up evidence is therefore incorrect. We do not consider these points of concern to have been adequately addressed by the company's responses to date and therefore our view is that applying an efficiency challenge in the final determination remains justified.

4.9 We are disappointed that Bristol Water suggests we have been late in responding, since we have simply responded to the evidence companies have presented at the point in the process it has become available to us, and have done so within the timescales agreed with the CMA. It is wholly appropriate for us to respond to the latest available evidence, such as Bristol Water's new report from Isle Utilities which it provided with its response to the provisional findings.

4.10 In its response to RFI033 Bristol Water references the calculations it provided in response to the provisional findings in which it identified variance from industry median and upper quartile levels.[95] While we support the use of the geometric mean to determine the performance gap there was an error in the company's

[94] In our response to the leakage working paper we referenced the following previously submitted documentation: Ofwat, 'Reference of the PR19 final determinations: Costs and Outcomes - response to CMA provisional findings', October 2020, pp. 116-117; Ofwat, 'Response to RFI020 (Q11)', November 2020, pp. 10-12; and Ofwat, 'Reference of the PR19 final determinations: Costs and outcomes – response to provisional findings responses', November 2020, pp. 70-74.
[95] Bristol Water, 'BW442 Leakage Analysis', October 2020.

calculations. Bristol Water calculated the performance gap percentage by dividing by the company's own performance level which could lead to counterintuitive results. It should have divided by the calculated geometric mean performance level, which is the CMAs logical approach to calculating the percentage gap.[96]

4.11 In its response to RFI033 the company proposes a new approach to calculating an adjustment to the implicit base allowance, using an unweighted average of the performance 'gap' for a high performing company (three-year average to 2019-20) to the median in 2019-20 and the median in 2024-25. We note that this approach, when correcting for the error described in the paragraph above, produces a similar result for both Anglian Water and Bristol Water as the CMA's approach in its Provisional Findings, which uses the performance 'gap' to 2019-20 upper quartile.

## Northumbrian Water

4.12 We do not consider that Northumbrian Water's response to the leakage enhancement cost working paper provides a credible justification for its request for additional leakage funding. We consider it important to note that having considered our PR19 methodology, Northumbrian Water concluded it did not require enhancement funding from customers to achieve its proposed 2024-25 performance commitment levels. But even if the company felt constrained by our published price review methodology into not requesting additional costs, when applying to the CMA for a redetermination Northumbrian Water still did not request leakage reduction enhancement funding in its statement of case.

4.13 We note that in order for the CMA to consider making an allowance for Northumbrian Water, it would need high quality evidence from the company that it requires enhancement funding, and it has said the opposite until it saw the provisional findings. This approach smacks of opportunism.

4.14 In its response to the working paper Northumbrian Water makes reference to a Yorkshire Water cost adjustment claim.[97] That company submitted a draft leakage cost adjustment claim in May 2018 as part of preparatory price review work. However, in its assured September 2018 business plan, and at all other times in the PR19 process, Yorkshire Water did not submit a leakage cost adjustment claim, as is made clear in its business plan.[98] We disagree with Northumbrian

[96] Competition and markets authority, 'Leakage totex calcs tables 8-2 & 8-3 PFs', October 2020.
[97] Northumbrian Water, 'Response to the CMA working paper on leakage', p. 5, paragraph 21.
[98] Yorkshire Water, 'Exhibit 001 - PR19 business plan', p. 56, Table 8b.

Water's statement that Yorkshire moved leakage costs from base to enhancement.

## Yorkshire Water

4.15 Yorkshire Water claims the CMA has set an unduly high evidential burden that it could not possibly meet. It states that using the upper quartile unit cost in the top-down analysis is not credible because the unit cost data varies more widely between companies than the base cost model outputs. Both claims are without foundation. The base cost model results show how average costs differ between companies for a number of categories of cost. The enhancement unit costs are marginal costs of improvements, which we expect to vary more, depending on where each company is on the marginal cost curve and how much it considers it can achieve within the base cost allowance. Yorkshire Water is a relatively poor performer and so we expect it to have relatively low marginal costs for improvement, potentially much lower than higher performing companies who have fewer "quick wins" to implement. As the unit marginal costs Yorkshire Water proposes are high, the onus is on Yorkshire Water to explain why, for example by setting out its bottom-up costings. We continue to agree with the CMA that Yorkshire Water has consistently failed to provide convincing evidence of its high costs through bottom-up costings and explaining its decision making process for the activities it plans to carry out. In the absence of such evidence, reverting to upper quartile unit costs from top-down analysis is a proportionate approach.

4.16 In its response to the leakage enhancement paper, Yorkshire Water has provided some new evidence breaking down its requested leakage enhancement expenditure in Table 4.[99] We do not consider that this breakdown into cost components addresses our concerns regarding the assumptions that have been used to build up these activity levels. The table does not set out how the company determined an appropriate split between base and enhancement expenditure, and there is a continued lack of evidence for how the company assured itself that the proposed costs are efficient. On reviewing this breakdown, we are concerned that the company may have assumed unjustifiably high activity levels to maintain its current leakage level. Any overestimate in activity levels means both the resulting requested base and enhancement costs are excessive. The company still does not provide evidence of its historical activity levels, cost benchmarking for any of its proposed activities when some are routine such as mains replacement,

[99] Yorkshire Water, 'Response to the leakage working paper', January 2021, p. 22.

or an explanation of the chosen split between additional repair or renewal/ replacement for each asset type.

4.17 We do not agree with Yorkshire Water when it claims that the CMA provided inadequate reasoning in the leakage enhancement working paper. The CMA states how it considered the relatively high unit cost should require a compelling explanation of why Yorkshire Water's costs should be allowed (paragraph 101), It notes that Yorkshire Water has itself agreed that companies with lower leakage levels are likely to have higher marginal costs for reducing leakage further (paragraph 102). The CMA sets out that "despite being allowed repeated opportunities to do so, [Yorkshire Water] failed to provide convincing evidence that the proposed expenditure was efficient, and there was insufficient detail to indicate that adequate optioneering had been considered" (paragraph 103). We consider this provides Yorkshire Water with more than adequate reasoning for the approach the CMA has taken.

## Third party responses

4.18 South Staffs Water considers that our proposed future annual performance reporting will not enable a distinction to be made between expenditure to maintain and expenditure to reduce leakage levels. This is not an issue. The latest version of the regulatory accounting guidelines that detail annual reporting requirements for 2020-25[100], contains table 6D, line 16 for companies to report annual totex expenditure for both 'maintaining leakage' and 'reducing leakage'.

4.19 CCW agrees with our position that Yorkshire Water should not receive an enhancement allowance and proposes that if an enhancement allowance is made then the company's performance commitment levels should be made more stretching. Our proposed approach is to make no enhancement allowance to Yorkshire Water, and to allow the company to earn outperformance payments for delivering leakage reductions beyond 15%. We consider this represents an appropriate balance of stretch and incentive for the company.

4.20 The responses from Water UK and Portsmouth Water state the need to consider the influence of weather conditions on leakage performance in 2019-20 and the expectations for the 2020-25 period. We also note that Water UK references 'other atypical' factors, but provides no further detail of what these might be. We consider that improvements in leakage reduction capabilities in 2019-20 can be

[100] Ofwat, 'RAG 4.09 – Guideline for the table definitions in the annual performance report', November 2020, p. 108.

expected to continue to deliver benefits over a range of weather conditions. It is also important to recognise that delivering a 7% annual reduction each year (the industry level reduction achieved in 2019-20) across the 2020-25 period would lead to an approximate 30% reduction from 2019-20 levels. This would be far in excess of the 15% challenge we made in our PR19 methodology and considered in the setting of PR19 performance commitments. .

# 5. Our response to further company comment on the cost of capital working papers

5.1 In this section we respond to issues raised by the disputing companies in their final responses to the cost of capital working papers.

## Aims of the PR19 methodology

5.2 Our PR19 methodology set out our aim to ensure investors in efficient companies have a reasonable prospect of earning their allowed returns. Our aim was to ensure base returns are neither skewed to the interests of investors nor customers and our approach is designed to satisfy our statutory duties taken in the round.

5.3 Historically, financing outperformance has been a key driver of company returns; it has dwarfed the impact of cost and service out / under performance. Our aim for PR19 was to reduce the relative importance of financing gains by ensuring the allowed return better reflected expectations of returns for the price control period, with scope for increased returns through the ODI mechanisms. We sought to encourage companies to deliver stretching business plans and to focus more on what matters for customers in seeking enhanced returns.

5.4 We remain concerned that the CMA's final decision, particularly by aiming up the allowed return, will cut across these objectives.

5.5 Our PR19 methodology set out an early view of the allowed return for PR19. This was applied by all companies in their final business plans and was lower than that stated in the CMA's provisional findings (business plans were underpinned by a 4.36% nominal cost of debt, a 7.13% nominal cost of equity and an appointee allowed return of 5.47%; lower than the 5.57% stated in the CMA's provisional findings).

5.6 While we welcome the proposals set out by the CMA in its cost of capital working papers, it is disappointing that disputing companies have used the reference process to open new lines of argument on the cost of capital that were not pursued in PR19 business plans. It is also surprising that companies now argue for a higher allowed return, particularly because we have seen reductions in the forecast cost of debt and risk free rate that is expected to persist through 2020-25

since the publication of our methodology in 2017 and companies confirmed their business plans were financeable taking account of the early view allowed return.

## Regulatory stability

5.7 Since publication of the CMA's cost of capital working papers, the disputing companies have, in some instances very aggressively, sought to undermine the CMA's assessment by claiming the CMA has made errors of principle and fact. The companies have sought to argue that the outcomes implied by the CMA's cost of capital working papers are destabilising for the regulatory regime. However:

- Disputing companies have been selective in their comments about the CMA's cost of capital working papers destabilising the regulatory regime. For the provisional findings, for example, companies did not oppose the novel approach to calculating the risk free rate, which, taking account of AAA corporate bonds is a material departure from the established regulatory precedent. Nor did they oppose the radical proposal to double the length of the trailing average from its PR14 length of 10 years.
- The CMA's high aiming up adjustment itself could also have a destabilising effect. For example, as recently as 2019, we have seen evidence that the loss of public confidence in the sector, arising in part from the consequences of excess returns, can have a destabilising effect on the regulatory regime.
- Much of what has been claimed by disputing companies as destabilising is simply an extension of past regulatory practice. For example, past determinations have used actual data to set cost of debt allowances, and the use of a 15 year trailing average for the cost of embedded debt is an extension of the 10 year trailing average used at PR14. The extension of the trailing average from 10 to 15 years is an adjustment that is beneficial to companies and their investors compared to the counterfactual of retaining the PR14 approach.
- Through the reference process we have identified errors in submissions made by companies (for example in respect of evidence considered for market to asset valuation calculations[101] and evidence presented from Monte Carlo analysis carried out for calculating the cost of equity percentiles[102]). If as a consequence of these errors, the CMA were to set an upwardly biased allowed return, this could be destabilising to the sector in the long term.

[101] Ofwat, 'Cost of capital – initial response to working papers', January 2021, p.21-22, paragraph 2.36 and this submission.
[102] Ofwat, 'Cost of capital – final response to working papers,' January 2021, paragraphs 2.11-2.15 and this submission.

5.8 We remain concerned that the CMA should place appropriate weight on the evidence we have put forward on the cost of capital, and ensure it does not uncritically accept company arguments.

## Further evidence the PR19 determinations are financeable

5.9 In a pattern familiar from the run-up to previous final determinations, companies and their advisers claim the CMA's working paper proposals will result in determinations that are not financeable for the notional structure.

5.10 We are not able to comment on the claims made by disputing companies and their investors about the ability of each company individually to access finance in 2020-25, as this will depend on the specific financing arrangements in place at each company. However, as referenced in our previous submissions, company claims about the financeability of the notional company are far-fetched in light of evidence from market to asset valuation analysis of the listed companies, as well as evidence from pricing of bonds issued since our determination. In addition, Moody's latest sector analysis, confirms a sector average rating of Baa1 and stable outlook at an allowed return that is over 20bps lower than the CMA's working paper proposals.[103]

5.11 Additional evidence that our determinations are financeable at the PR19 allowed return arises from the investment plans put forward by companies for 'green recovery' schemes on 31 January 2021. These schemes, to be delivered in 2020-25, provide strong evidence that companies are willing to invest in discretionary schemes at the PR19 allowed return. In total, companies are proposing £1.3bn of additional investment before 2025, with limited recovery of costs during the period. Investment in green recovery schemes provides water companies with meaningful opportunity to increase investment in the UK.[104]

5.12 Based on proposals put forward by companies on 31 January we cite:

- Severn Trent submitted a plan for £730 million investment to support the UK's Green Recovery. The company states it will fund 85% of the plan by raising new finance which is then recovered over a longer period.[105]

[103] Moody's Investors Service, 'Regulated Water Utilities – UK, 2021 outlook returns to stable as companies settle into a tough regulatory period', January 2021.
[104] JP Morgan, 'JPMC Utilities Daily', 01 February 2021.
[105] Severn Trent, 'Life beyond the pandemic', February 2021, p. 2, 8.

- South West Water is proposing additional investment of £92 million by 2025, representing a c.10% increase in its investment programme with no increase in customer bills over that period.[106]
- United Utilities is seeking regulatory approval for a further £145 million of investment. The company sets out it is also fast tracking over £600 million of investment set out in its current five year business plan.[107] The proposals do not seek to increase bills in the current regulatory period.
- **<REDACTED>**.

5.13 The majority of the investment stated above has been put forward with no impact on customer bills in 2020-25, meaning that the majority of costs will be recovered only after 2025. This suggests that companies have headroom in financeability metrics for material additional expenditure at the PR19 allowed return, without the need for any aiming up of the allowed return on equity.

5.14 We have already cited evidence about companies expecting to at least meet or outperform their PR19 determinations[108] - notably this is evidence from interim financial statements that were published only 6 months into the first year of the control period and despite the challenges of Covid-19. This evidence is further supported by evidence that Severn Trent has announced it remains on or ahead of target for almost 80% of its customer performance measures and anticipates at least £50 million outperformance against customer ODIs in 2020-21 (equivalent to 1.3% of 31 March 2020 equity RCV).

## CMA cost of capital working papers

5.15 We set out our response to the CMA's cost of capital working papers in 'Ofwat – Cost of capital – initial response to working papers'[109] and 'Ofwat - Cost of capital – final response to working papers'[110].

5.16 Our responses welcomed the analysis undertaken by the CMA which led it to propose a cost of embedded debt that was closer to (though still above) the cost allowed in our PR19 final determinations and the proposed reduction in the 'aiming up' adjustment proposed by the CMA. We set out however that firstly the proposed 25 basis point aiming up of the allowed return on equity is neither

[106] South West Water, 'Green recovery initiative', February 2021, p. 3.
[107] United Utilities, 'United Utilities: Supporting a green recovery in the North West', February 2021.
[108] Ofwat, Reference of the PR19 final determinations: Risk and return – Ofwat December response, pp. 9-12, paragraphs 2.3-2.4.
[109] Ofwat, 'Cost of capital – initial response to working papers', 18 January 2021.
[110] Ofwat, 'Cost of capital – final response to working papers', 27 January 2021.

reasonable nor justifiable in the water sector, and secondly the working papers did not evidence that the CMA had considered our representations on the upward bias already present in the CMA's parameter estimates used to calculate its proposed mid-point. In combination, these effects would result in an increased cost to customers of over £1 billion over five years if applied to the water sector and the CMA's proposals appear to continue to represent a material departure from decisions it made in its NERL RP3 determination[111] without adequate justification or explanation.

5.17 As at 29 January, responses to the CMA's cost of capital working papers include seven from regulated companies (including the four disputing companies) and twelve from investors (or their representatives). The CMA has received one response from a consumer body and two from regulators – Ofwat and Ofgem. The balance of responses is therefore significantly skewed towards the vested interests of companies and their investors. We recognise it is important the CMA determines an allowed return that is reasonable for investors, but it is also important that in reaching to provide reasonable returns for risk, the CMA must ensure that the interests of customers, and the counter arguments to those advanced by companies and investors, are properly considered to ensure that its final decision fully reflects all of its duties.

5.18 In their response to the working papers, disputing companies argue their views have not been adequately taken into account, for example, Northumbrian Water states '*It was apparent from the WACC roundtable that several submissions that we and other Disputing Companies have made to the CMA have either not been read or they have not been understood by the panel members*'[112] We appreciate the significant size of the task the CMA must undertake in these determinations, but we contest the implication by disputing companies that they have been disadvantaged by the process, not least because the position the CMA appears to retain in its working papers,[113] is one that unduly favours company over customer interests. Submissions made by the disputing companies throughout the process have been significant, have made selective use of evidence and have adopted changing positions. They have also grown to encompass issues clearly originating in the RIIO-2 energy price controls.[114] As the CMA must make its decisions under the same duties that applied to us in our determinations, we submit that

[111] CMA, 'NATS (En Route) Plc /CAA Regulatory Appeal Final report', July 2020, section 13.
[112] Northumbrian Water, 'Final response to working paper on WACC', January 2021, p. 5, paragraph 19.
[113] For instance by aiming up the allowed return failing to make outperformance adjustments to the cost of new debt and retaining upwardly biased cost of equity parameter estimates.
[114] For example to take account of submissions made by representatives of the energy sector, including an Oxera paper covering the assessment of the Asset risk premium relative to the debt premium submitted very late in the referral process and not referenced by companies in PR19 or in initial submissions made by companies to the CMA. Nevertheless, we set out our response to the Oxera paper in table 5.2.

appropriate weight should be given to the arguments and evidence we provide as an independent regulator.

5.19 Many of the issues raised in responses to the CMA's cost of capital working papers do not raise issues that are new, and have already been raised through the reference process. At the January Cost of Capital Roundtable the CMA panel made a closing request for any new issues which there had not been time to discuss – we noted no new issues of substance, suggesting the session had comprehensively covered the terrain. We respond to key issues in the following sections, our response to detailed points is set out in Table 5.2.

## Allowed return on debt

5.20 We observe in the latest round of company submissions the following themes:

- Arguments that the CMA should base its allowance on company-specific factors rather than a notional, sector-wide perspective.
- Attempts to mischaracterise historical Ofwat policy to make our PR19 approach and CMA working paper proposals look inconsistent.
- Sustained pressure on the CMA to redefine the historical characteristics of the notional company by smuggling in new assumptions.
- Inverted logic, whereby risky financing decisions taken by disputing companies are characterised as prudent and efficient, while efficient companies are described as having 'taken different risk positions'.
- Questionable analysis supporting a higher allowance, involving leaps of logic that are not supported by the evidence.
- Late-stage attempts to introduce cost items that were not raised earlier in the appeals process.

5.21 Submissions raised by disputing companies regarding the CMA's approach to the cost of embedded debt are influenced by their own circumstances, for example, Anglian Water states "*the primary question the CMA needs to answer is whether it is accounting for debt that was legitimately and efficiently incurred by each of the Disputing Companies*". We dispute this statement – the CMA's primary objective is to set a return on debt that is reasonable for the notional company.

5.22 Since our first price review in 1994, the regulatory approach has been to set an allowed cost of debt that is reasonable for a notional company that is efficient. Our approach, at successive determinations, has been to set an efficient return on debt informed by debt in company balance sheets, but there has not been any commitment that actual incurred costs would be remunerated. Indeed, we

reference below that, regulatory statements made around the time that Anglian Water raised its gearing levels through significant debt issuance in 2002 made this clear.[115] Over successive determinations, we have adopted a consistent approach to the allocation of risk; underpinned by the principle that companies are best placed to make decisions about the timing, tenor, type and amount of debt that is issued. In effect, companies have always enjoyed the security of a 5 year fixed allowance for embedded debt and bear the in-period risks of out and under-performance before the allowance is reset.

5.23 This approach ensures a reasonable allocation of risk and return – it is possible that a company might adopt a debt issuance strategy that allows it to outperform in one regulatory period, but it would be an error for a regulator to subsequently increase the allowed return in subsequent periods to remunerate debt costs that subsequently turned out to be expensive. To do so would asymmetrically benefit shareholders over customers and would undermine our long-stated principle that companies hold the risks of their own financing decisions and should not unduly pass those risks to customers.

5.24 We have set out to the CMA that it would not be appropriate for the allowed cost of debt to be unduly influenced by companies taking on large amounts of debt for non-operational reasons. Anglian Water refers to a statement from the CMA's cost of capital working paper that '*it appears that Ofwat did not raise concerns about the use of non-operational debt at the time the debt was issued*'.[116] Ofwat has always been clear that companies carrying out a financial restructuring that resulted in gearing levels materially above the notional level should not pass undue risk to customers associated with their financing choices. This was clearly set out in our public position papers published at the time that such arrangements were put in place. For example, our position statement on the proposed financial restructuring of Anglian Water in 2002 (consistent with statements made at the time of the Welsh Water restructuring in 2001) made clear we saw risks associated with highly geared capital structures, and an expectation that customers should not bear undue risk:

5.25 "*We highlighted in our consultation paper the longer-term uncertainties. There was a range of views from respondents on whether Anglian Water's structure will*

[115] Since 2002, Anglian Water has adopted a highly geared structure. It increased its gearing levels from 52% in 2001-02 to 82% in 2002-03, through debt issuance, an inter-company loan and the introduction of a whole business securitisation. As part of this financial restructuring the company made an intercompany loan to a holding company above the level of the regulated company.
[116] CMA, '[Cost of debt working paper]', January 2021, p. 24, paragraph 70.

*provide sufficient flexibility to respond efficiently to future developments in the water industry or in financial markets.*

5.26 *No conclusive assessment can be made at this stage. Our view remains that it is up to the company and its investors and lenders to judge for themselves the risks and benefits of the structure. They should not expect customers to bear any undue risk either now or in the future …*"[117] (emphasis added)

5.27 The same sentiment was set out in other public statements, such as a speech by the then Director General of Water Services in 2001:

5.28 '*The key here is how efficient the company has been in structuring and managing its finances. In this context an efficiently-financed company would be one that retains the flexibility to respond to changing conditions; it would be likely to have a balanced portfolio of debt, with a mix of term and interest rate structures that diversifies its risks, including refinancing risk as well as interest rate, currency and inflation risks.*'[118]

5.29 Similar statements were in made in our position statements made at the time of the Yorkshire Water restructuring.

5.30 The statements highlighted above are wholly consistent with the policy objective applied in successive determinations – that the regulator should not be unduly influenced by circumstances where companies have taken the risks associated with financing choices that depart materially from the notional structure, this includes the concentration risk arising from large amounts of debt raised in short periods of time.

5.31 Setting a reasonable cost of embedded debt requires calibration of the allowed cost of debt against cross-checks or benchmarks informed by the regulated companies (not just the disputing companies). The aim of this calibration should be an allowance that an efficiently-run and notionally-structured company might reasonably have achieved.

5.32 In contrast to this approach, the disputing companies have attempted to insert a new 20 year 'notional tenor-at-issuance' assumption into the characteristics of the notional company that must provide the length of trailing average. The suggestion is that this should be mechanistically linked to a) Yield to maturity of

[117] Ofwat 'Proposals for the modification of the conditions of appointment of Anglian Water Services Limited – A position paper', 2002, p. 6.
[118] Director General of Water Services - Restructuring – Glas, 'Talk Schroder Salomon Smith Barney Sterling Bond Community Conference, London', 9 February 2001.

the iBoxx index b) Implied asset lives, or c) Actual tenor-at-issuance statistics. As set out previously, such an approach is simplistic, beset with data issues and is vulnerable to the length of trail being extended back through factors that have nothing to do with the incidence of historical water debt. Even accepting at face value the 20 year assumption, it is surely not correct to place equal weight on historic years – our analysis enclosed with this submission suggests that a notionally-geared company issuing in line with sector RCV formation would end up with higher issuance in more recent years.

5.33 The latest round of submissions adopts counter-intuitive definitions of risk and efficiency. A strategy of financing concentrating significant debt issuance in short periods to fund material shareholder distributions (in the case of Anglian Water a c.£1.5bn shareholder distribution and gearing to c.80%) is described as 'prudent',[119] and 'efficient long-term financing',[120] while low-cost and diversified structures from companies with gearing levels more consistent with the notional level are referenced as companies 'adopting different risk positions'.[121] These definitions fail to recognise that disputing companies are in effect seeking to pass excessive cost to customers and reduce their own risk exposure. In competitive sectors, investors in companies with expensive debt costs bear the consequences of such decisions, this should be no different in water.

5.34 We strongly disagree with the assertions of the disputing companies that the adoption of the matching principle creates incentives for companies to issue short term debt in a 'race to the bottom'. Scenarios referenced by the disputing companies make strong assertions about the impact of regulatory incentives without consideration of counterfactual positions or considering all relevant factors. We have previously set out that regulatory policy is just one of multiple, highly influential factors determining debt issuance policy.[122] We have also clearly set out, over successive determinations, that an efficient company is one that has a balanced portfolio of debt, that diversifies its risk and retains the flexibility to respond to changing market conditions. An important restraint on individual company risk-taking is a benchmark-based approach that prevents cost pass-through. It is important therefore that the regulator applies a balanced reading in setting the allowed return on debt and ensures its determination is not unduly influenced by the arguments put forward by a subset of companies.

[119] Anglian Water, 'Full response to the CMA's working papers on Cost of Capital', January 2021, table 1.
[120] Anglian Water, 'Full response to the CMA's working papers on Cost of Capital', January 2021, paragraph 20.
[121] For example, as cited in Northumbrian Water's visualisation.
[122] PwC, 'Efficient debt financing of water companies: A note prepared for Ofwat', December 2020

5.35 We have submitted evidence that supports the 15 year trail as the most appropriate choice for the calculation of embedded debt. We support also the use of matching adjustments and cross checks to a benchmark based on debt in the balance sheets of companies we regulate. Taking account of relevant evidence from a range of approaches, we consider a nominal cost of embedded debt of 4.5% lies towards the upper end of the range of benchmarks that are appropriate for the period of the control; indeed there is evidence this may be generous.

5.36 We are disappointed but not surprised at the generally poor standard of analysis provided by companies in their latest submission which is also contradictory in parts. For instance:

- Proposals to adjust the share of floating rate debt for end-of-year cash balances on the unsupported assumption that all cash comes from drawn down liquidity facilities.
- A new proposed 'cost of carry' allowance which incongruously assumes all cash comes from bond issuance.
- EIB debt analysis which calculates discount to the benchmark using a different benchmark to the one used by the CMA.
- A 'composite notional-actual' approach resulting in an allowance of 4.82% which is essentially based on retaining the assumption of a 20 year trailing average of the iBoxx A/BBB.
- Analysis which erroneously calculates that the RCV-weighted collapsing trailing average should result in an allowance of 4.84%.

5.37 These proposals simply aim to 'walk the CMA back' to its provisional findings decision, ignoring the substantial body of evidence from notional and actual perspectives that its working paper proposals embed an upwards bias and are, if anything, overgenerous.

5.38 We respond to more detailed points raised by companies in their responses to the CMA working papers in Table 5.2

## Aiming up the allowed return on equity

5.39 The disputing companies put forward claims about the CMA's probability distribution of the cost of equity and provide new Monte Carlo analysis

commissioned by Northumbrian Water and Anglian Water.[123] The submission claims to 'correct several serious errors in the CMA's simulation approach'.

5.40 Among the disputing companies, Northumbrian Water most vigorously pursues the CMA's claims about the need to aim up the allowed return on equity, claiming aiming up of 50 basis points is the minimum amount that could be considered to constitute sufficient aiming-up based on uncertainty in the WACC parameters. It claims, based on evidence from its advisers, a 50 basis point uplift is required to achieve the 75th percentile for the cost of equity, and that aiming up to the 25th percentile is equivalent to a calculation at the 62nd percentile.

5.41 We have set out previously that aiming up the allowed return is not necessary in water; it constitutes an unnecessary and expensive transfer of cost to customers. We do not repeat our previous arguments, however we provide the following comments on the Monte Carlo analysis submitted by the disputing companies.

- The model is underpinned by ranges for the cost of equity parameter estimates in the CMA's provisional findings; we have previously set out evidence that these are upwardly-biased.
- The model then substantially assumes the views expressed by Professor Gregory of the appropriate calculation of beta (which we discuss in further detail below). The range of values uses a mid-point of 0.31 (and a mean of 0.31) versus the mid-point in the CMA model of 0.295. The use of overlapping standard errors might also in principle shift the Monte Carlo mean. The consequence is the effective equity beta mean is 0.757 compared with the CMA's 0.725, giving a mean cost of equity of 4.8% versus 4.58% in the CMA's provisional findings. This in turn elevates the uplifts at the stated percentiles.
- Around 42% of trials in the analysis adopt an unlevered beta above the top end of the CMA's plausible range from provisional findings (0.32). This means the shape of the distribution is materially driven by input parameters which the CMA considers to be implausible.
- The model uses a uniform distribution for the TMR, risk-free rate and debt beta, but constructed overlapping normal distributions for beta. There is no rationale given as to why the beta range should be interpreted in this way (as illustrated in figure 5.1). Indeed, it is not clear why there should be inconsistency in the treatment of different parameters – some normal and some uniform, or indeed why normal distributions for cost of capital parameters are not preferable to uniform distributions.

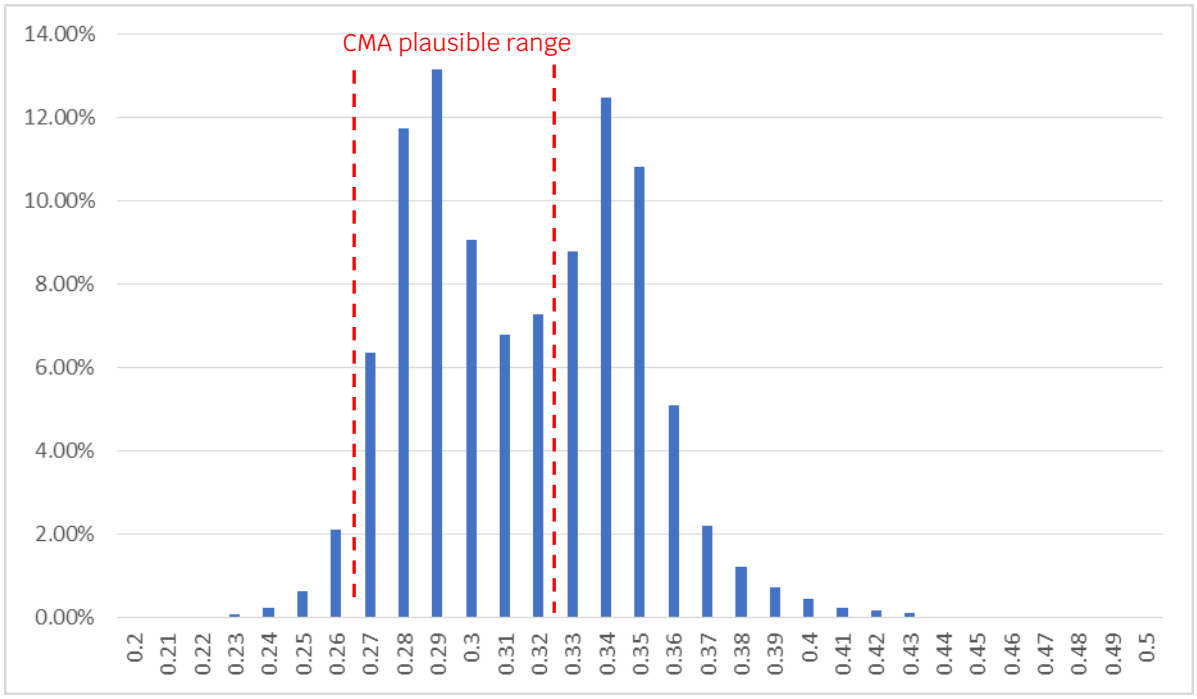
[123] AGRF Ltd, 'A Simulation of the Cost of Equity for the Water Industry', January 2021.

5.42 The disputing companies argue that beta estimates should exclude the effect of Covid-19; Northumbrian Water argues the CMA's cost of equity calculations effectively assume pandemics and their impacts occur 10-50% of the time. We consider this interpretation of the CMA's approach to calculating beta is incorrect.

5.43 The role of the CMA is to determine the return that is reasonable for the period of the control. As set out in previous submissions, Covid-19 is an event that impacts on all sectors of the economy, whose effects are expected to persist for a significant part of the 2020-25 control period. It is unclear why the effects of Covid-19 should be ignored for the purposes of assessing beta and setting the allowed return on equity. But even if the CMA chooses not to take account of current market data in assessing the mid-point cost of equity, the CMA's provisional findings were already upwardly biased, above the level reasonably expected by investors even before the effects of Covid-19 was seen in the data. We submit that the CMA should carefully weigh the evidence we have presented on the beta in making its final determination. We comment further on these issues in table 5.2.

5.44 The effects of the company's views significantly impact the results of the Monte Carlo analysis put forward by the disputing companies. In figure 5.1 we present a probability density plot of the resulting unlevered beta estimates. The distribution is underpinned by two normal distributions with the left hand peak driven by 10 year betas and the right hand peak driven by the higher beta estimates based on Professor Gregory's selective break point analysis of Oct 2014- Feb 2020 (ie excluding Covid-19 data) and whole period (1991- Dec 2020) beta. The chart illustrates that more than 42% of the unlevered beta simulations exceed the CMA's provisional findings upper bound beta estimate of 0.32.

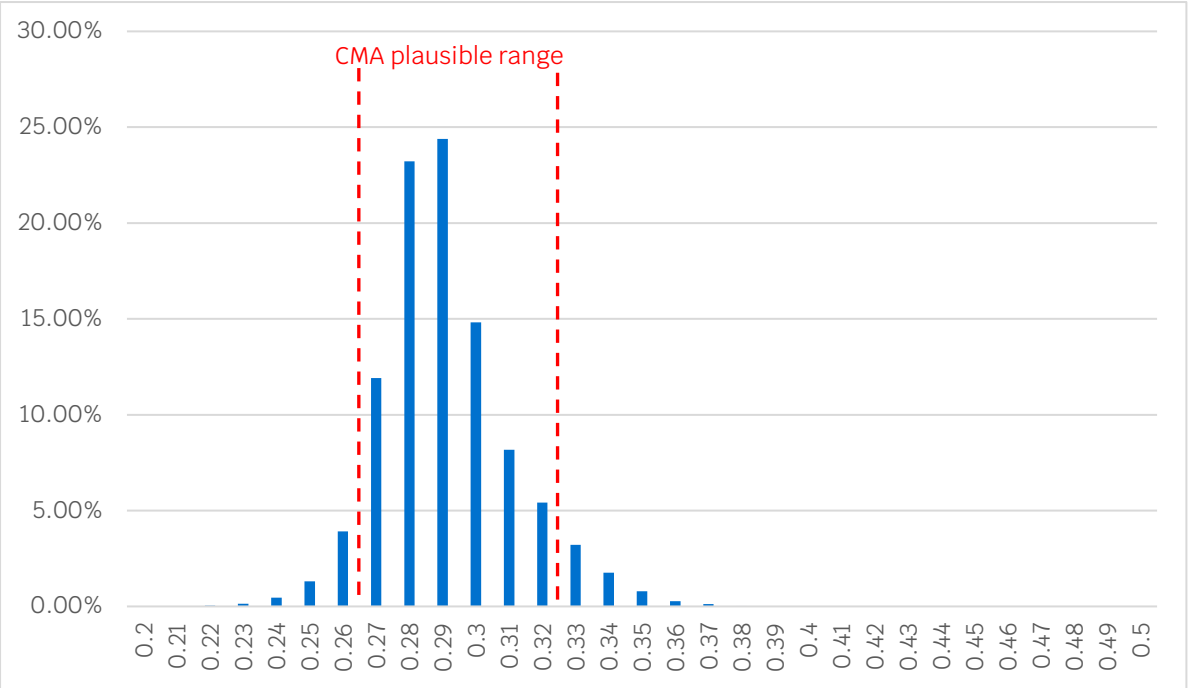
## Figure 5.1 – Frequency distribution of unlevered beta estimates underpinning the disputing company Monte Carlo simulations




Source: Ofwat analysis of AGRF Monte Carlo model

5.45 We submit that a more reasonable distribution drawing on the approach in Professor Gregory's analysis would be to base the beta estimates on the ten year betas. This produces the frequency distribution set out in Figure 5.2, which is similar to that presented by the CMA in its provisional findings, with only 6% of beta observations above the CMA's upper bound of 0.32.

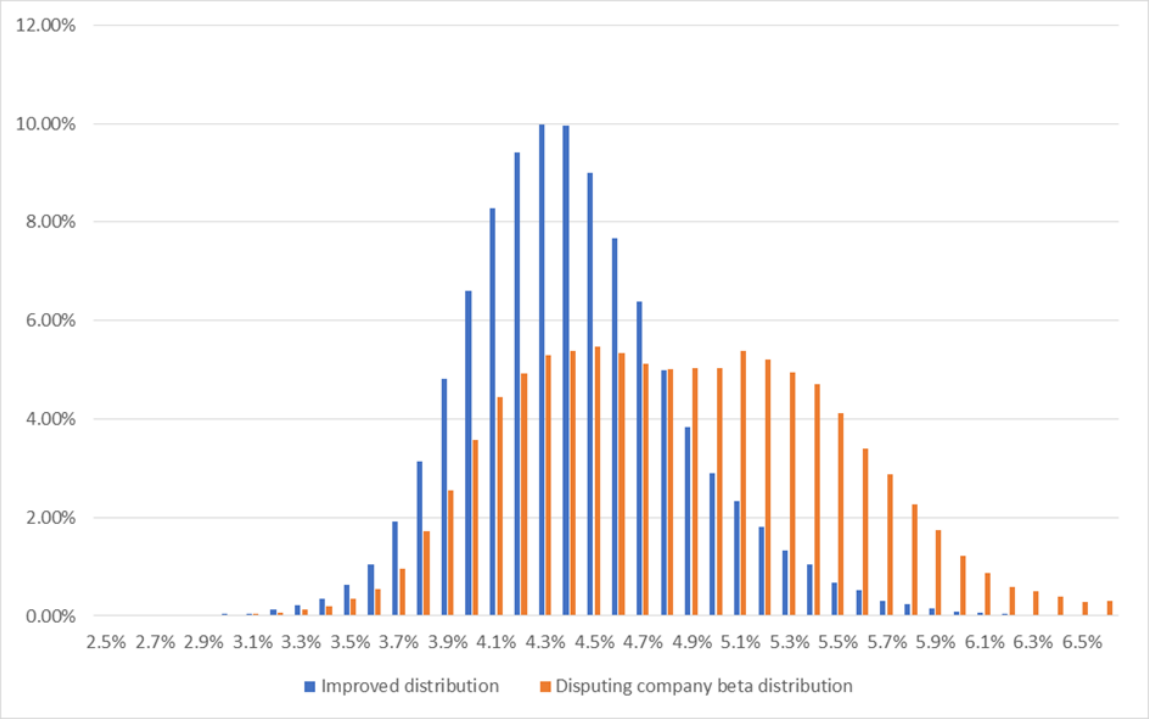
## Figure 5.2 – Frequency distribution of unlevered beta estimates based on 10 year data




5.46 Source: Ofwat analysis of AGRF Monte Carlo model

5.47 We illustrate in figure 5.3 the effect of this improvement in the calculation of the cost of equity in Professor Gregory's Monte Carlo analysis. The effect of the improvement to the beta estimate is to reduce the P50 cost of equity 0.45 percentage points to 4.33%, as illustrated in table 5.1. We provide this evidence to illustrate only the effects of an improved distribution of beta; our view remains as set out in previous submissions that the CMA (and in consequence, disputing company analysis) remains underpinned by upward biased estimates of total market return, debt beta and risk free rate, which, once corrected would further reduce the cost of equity midpoint.

## Figure 5.3 – Effect of improving the frequency distribution Frequency distribution of unlevered beta estimates based on 10 year data




5.48 Source: Ofwat analysis of AGRF Monte Carlo model

## Table 5.1 –Effect of improved beta estimates on the AGRF Monte Carlo analysis

| Percentile | Disputing company estimate | Beta improvement |
|---|---|---|
| 50 | 4.78% | 4.34% |
| 67 | 5.11% | 4.52% |
| 75 | 5.27% | 4.63% |

Source: Ofwat analysis of AGRF Monte Carlo model

5.49 Consistent with the view we set out in our response to the CMA's cost of capital working papers, we do not consider the CMA should place any weight on percentile calculations from Monte Carlo simulations proposed by disputing companies. To the extent Monte Carlo simulation is determinative of the CMA's cost of equity, this should be calculated by the CMA at the final stage, once the central estimate of the cost of capital has been calculated and reflect good regulatory judgement.[124] Care in particular should be taken to ensure that the

[124] Ofwat, 'Cost of capital – final response to working papers', January 2021, p. 9, paragraph 2.15.

percentile calculation used in further analysis does not imply a material contribution from inputs outside the CMA's predetermined plausible range.

### Comment on other cost of equity parameters

5.50 We have not identified any new arguments put forward by companies in respect of other elements relevant to the calculation of the allowed return on equity. However, we remain concerned that selective consideration of evidence by disputing companies would result in an upwardly biased cost of equity if not balanced with other evidence. For example, Anglian Water's 27 January submission focuses only on non-overlapping returns for the Total Market Return. And Anglian Water places weight only on the Bank of England's R* methodology and yields on long-term US TIPS for the risk free rate, ignoring evidence we have presented on the use of the SONIA swap rate as a cross check to the index linked gilt rate.

5.51 We have previously set out our views on the above issues, and set out that the CMA should place weight on contemporaneous data to inform the total market return when testing that the overall cost of equity applied in the final decision is not upwardly biased for the period of the control.

5.52 Finally, we note that there has been a non-trivial reduction in gilt yields since the July 2020 data cut-off used by the CMA to inform its estimate of the risk-free rate. We submit that the CMA should use the latest data on gilt yields to inform its final determination estimates.

## Financeability

5.53 We have set out in previous submissions our concerns that the CMA has uncritically accepted company proposals on the approach to financeability and has not given adequate consideration to alternative approaches to address a financeability constraint. We have set out that it would be an error for the CMA to continue to follow the approach advocated in the cost of capital working papers, which would have the effect of inadvertently following the approach we adopted at PR04 to address a financeability constraint.

5.54 In response to the working papers, Northumbrian Water and Yorkshire Water object to the suggestion made by the CMA at the cost of capital roundtable that

the CMA may consider reducing the notional gearing to 55%.[125,126] Equity injection was stated as one of the options available to the regulator to help address a financeability constraint in the PR19 methodology.[127] It is a reasonable response to addressing a financeability constraint that is consistent with economic theory. It is an option the CMA should consider further if faced with a financeability constraint in its final determination that it is not willing to resolve with modest PAYG adjustments.

5.55 A gearing reduction of 5% compared with the 60% notional gearing level is within the range of gearing adjustments that the CMA could reasonably make, and is consistent with precedent CMA has set in previous determinations. For example:

- Welsh Water, Bristol Water, Portsmouth Water, Affinity Water, Southern Water and Sutton and East Surrey Water have each in the past five years made year on year adjustments to their financial structures that have led to gearing reductions that have exceeded 5% and are up to 16%.[128]
- There is significant evidence of companies increasing gearing levels by materially more than an average of 5% year on year in short periods of time – including Anglian Water, Yorkshire Water, Northumbrian, and Bristol among the disputing companies and several other non-disputing companies.[129]
- Consistent with Competition Commission precedent in NIE (2014), the fact that companies have made such gearing year on year gearing adjustments is reason to believe that 5% adjustments to notional gearing levels are reasonable. In 2014, the Competition Commission said "if shareholders were able to withdraw large sums in periods with strong cash flow, it was reasonable they should also be willing to supply finance in periods of weaker cash flow. We considered that shareholders had an incentive to supply finance as long as the overall rate of return is in line with the WACC, and that the regulatory regime has appropriate provision for situations where shareholders are unable to, or refuse to, supply finance."[130]

[125] Northumbrian Water, 'Final response to working paper on WACC', January 2021, p. 15, paragraph 51.
[126] Yorkshire Water 'Final Response to CMA WACC Consultations' , January 2021, p.8, paragraphs 3.1.1-3.1.2
[127] Ofwat, 'Our final methodology for the 2019 price review', December 2017, p. 199-201.
[128] Company June returns and APRs. Gearing year end –Welsh Water (2015 64%, 2016 57%), Bristol Water (2015 75%, 2016 68%), Southern Water (2018 79%, 2019 69%), SES Water (2018 77%, 2019 61%), Portsmouth Water (2015 80%, 2016 70%).
[129] Company June returns and APRs. Gearing year end – Anglian (2001 44%, 2002 53%, 2003 82%), Yorkshire (2010 66%, 2011 73%, 2012 79%), Northumbrian (2014 61%, 2015 66%, 2016 70%) and Bristol (2012 58%, 2013 65%, 2014 71%).
[130] Competition Commission, 'Northern Ireland Electricity Limited price determination – A reference under Article 15 of the Electricity (Northern Ireland) Order 1992', March 2014, pp. 17-21, paragraph 17.100.

- Ofgem has adopted a differential approach to gearing for companies it regulates in RIIO-2, with companies separately subject to financeability testing at 55% and 60% gearing. [131]
- Similarly, at PR09 Ofwat adopted an approach that assumed an equity injection (with the funding of associated equity issuance costs) for three companies in its financeability assessment, equivalent to gearing reductions of up to 6.5%. [132]

5.56 Northumbrian Water argue that a 55% notional gearing would be difficult to justify as all companies report gearing levels above this level.[133] But if it is the case that sector gearing levels average 70.6% and Moody's report sector average credit rating at Baa1 (taking account of the PR19 allowed return on equity and debt), there must be some other feature of the CMA's financeability approach that needs to be revisited if the CMA is unable to meet its financeability constraint at market-derived costs of debt and equity.

5.57 We have previously set out the range of options the CMA could consider, which includes assumed gearing reduction by assumed notional equity injection, or adopting a consistent approach to gearing and beta, as was adopted by the CMA in the NERL RP3 decision. These approaches better balance customer and company interests than the approach implied by the cost of capital working papers.

[131] Ofgem, 'RIIO-2 Final Determinations – Finance Annex', December 2020, pp. 71-73, Ofgem, 'RIIO-2 Draft Determinations – Finance Annex', July 2020, pp. 105-111.
[132] Ofwat, 'Future water and sewerage charges 2010-15: final determinations', 2009, p. 140, 'in our financial modelling for Thames, Bristol and South East we have assumed equity injections amounting to 20%, 10% and 7.5% of opening notional equity respectively to relieve the financing constraint. For these three companies, we also included an allowance to recognise the transaction costs associated with the cost of new equity issuance, calculated as 5% of equity raised.' A 20% equity injection is equivalent to a gearing adjustment of 6.5% at the PR09 57.5% gearing level.
[133] Northumbrian Water, 'Final response to working paper on WACC', January 2021, p. 15, paragraph 51.

## Table 5.2: Our response to Risk & Return issues raised in post-WACC roundtable company submissions

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| **Aiming up** | NES 27 Jan main response para 27 | The CMA's probability distribution for the CoE is wrong because it fails to take account of the underlying variance in the estimators used to derive the CMA's range; | As set out in this submission, Northumbrian Water and Anglian Water do not address the inconsistencies in the use of uniform and normal distributions. Cost of equity ranges are likely best addressed with normal distributions of parameter estimates around the central estimate and standard deviation chosen to avoid picks outside the CMA's plausible range. To the extent probability distributions inform the CMA's final decision, these should be calculated only once the central view of the cost of equity has been derived. |
| **Aiming up** | NES 27 Jan main response para 27 | The CMA has underestimated the scale of the uncertainty in the CoE. For example, the CMA effectively assumes a standard deviation for the TMR of 0.29%, whereas the NZCC assumed 1.5% in a 2010 decision. Blackrock CoE variance is also wide. | Northumbrian Water has not provided the cost of equity equation or underlying distributional assumptions behind the Blackrock range; referencing distributional assumptions of just one equity analyst risks selection bias.<br><br>We are unclear as to the relevance of a New Zealand aiming-up estimate from more than a decade ago, particularly taking account of the NZCC's recent decision to 'aim straight'.[134] |
| **Aiming up** | NES 27 Jan main response para 28 | The Gregory Paper claims a superior distributional analysis which takes a Monte-Carlo simulation to illustrate the impact of beta on the cost of equity simulations. This requires aiming up of 50bps to achieve 75th percentile cost of equity. | The level of aiming up calculated by the Gregory Monte-Carlo approach is essentially the result of including two disputed beta estimation windows: Oct 2014-Feb 2020, and the full period (1991- Dec 2020). Unlevered beta from these approaches is outside the top end of the CMA's PFs plausible range of 0.27-0.32. This gives rise to an overall cost of equity distribution of which around 42% of picks use an unlevered beta above 0.32. It would in our view not be appropriate for the CMA to base its aiming up calculation so substantially on values it does not consider plausible. A better Monte-Carlo approach would be to use distributional assumptions which limit picks for each input to the plausible range as defined by the CMA in its final determinations assessment. |
| **Asset Risk Premium –Debt** | NES 27 Jan main response para 19 | The CMA has not read or understood Oxera's ARP-DRP evidence. | We note that Oxera's ARP-DRP analysis was a late-stage introduction to the appeals process, focused on the energy sector, and not raised by any companies in their |

[134] Commerce Commission, 'Fibre input methodologies: Main final decisions', October 2020, p. 484, paragraph 6.728-6.730.

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| **Risk Premium (ARP-DRP)** | | | statements of case or more widely in the PR19 process. We have nonetheless reviewed Oxera's latest (September 2020) analysis,[135] with the following observations:<br>Oxera claim that ARP-DRP is a cross check for the CAPM-derived allowed return on equity and even as a useful financeability metric (no rating agencies use ARP-DRP). However, rather than an independent cross check based on a non-CAPM approach (as for example, MAR analysis), the 'cross-check' is effectively based on Oxera estimating a historical Asset Risk Premium based its view of the appropriate CAPM parameters which is then compared to the Debt Risk Premium and used to benchmark the ARP-DRP implied by Ofgem's regulatory decisions. Oxera:<br>a) Add a 'convenience yield' of 50bps to gilt yields to derive the RFR<br>b) Assume a TMR based on regulatory precedents which omits recent regulatory developments (e.g. use of historical CPI).<br>c) Assume allowed notional asset beta as the asset beta for unlisted comparators (which make up most of its sample).<br>d) Assume the DRP is traded yields, expected loss, and the RFR.<br>None of these assumptions apart from perhaps d) are uncontroversial – indeed a) and b) are largely the disputing company view which we disagree with. It is therefore difficult to justify ARP-DRP as an independent cross-check on the validity of the CMA's CAPM cost of equity, as this would be to assume ex-ante (rather than validate) a significant number of company assumptions. |
| **Equity Beta** | ANH 27 Jan main response Chapter C | CMA should not use recent beta data to inform its point estimate, as low betas represent temporary changes due to government lockdowns. If it does decide to do this, it should use the whole span of share prices since 1991. | This is another proposal to 'cherry pick' beta data that ignores the attractiveness of water stocks as a defensive investment in times of economic turbulence. We do not agree that the period affected by Covid-19 is overweighted in the CMA's analysis for the following reasons:<br>a) The key question for the CMA is the return investors will be expecting in 2020-25, as at PR24 we will look at the evidence afresh when setting an allowed return. As the first year of PR19 includes the period affected by |

[135] Oxera, 'Asset risk premium relative to debt premium', September 2020

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | | | lockdowns, it is right that the beta dynamics observed in this period are reflected.<br>b) Censoring the period containing the Covid-19 data could only result in an accurate estimate for 2021/22 – 2024/25 if lockdowns shortly end, normality resumes, and betas return to their pre-Covid relationship. This is a strong assumption, with plausible alternative scenarios which could emerge (e.g. vaccine-resistant mutant strains).<br>c) The CMA's PFs decision placed weight on rolling betas with an estimation window of up to 10 years, capturing 15 years of data in its analysis. This approach already dilutes the impact of the period affected by lockdowns, therefore.<br><br>As previously set out, the proposal to extend the estimation window for beta back to 1991 is inappropriate given the presence of substantial non-regulated businesses prior to 2007 in the United Utilities and Severn Trent group structures. If adopting this approach CMA would be estimating a beta for a conglomerate rather than a notional water company. |
| **Embedded debt (length of trail)** | ANH 27 Jan main response p. 13 | CMA commits an 'error of principle' as ~20y w. av. years to maturity of iBoxx A/BBB is not matched to the length of trailing average. This presents the wrong incentives as it implies companies issuing 20yr debt cannot recover costs. | This is not an error but a matter of judgment. We set out in our previous submission that 'notional tenor-at-issuance' is not part of the notional construct from past price reviews. This gives the CMA discretion to choose its own assumption based on its judgment. Our analysis of water bond tenor-at-issuance data suggests that 15 years is a reasonable assumption, particularly as including non-bond instruments could be expected to reduce the median and average tenor at issuance (e.g. because bank debt is typically shorter term than bond debt.)<br><br>There is no particular reason to consider that notional tenor-at-issuance or trail length ought to be the ~20yrs of the iBoxx A/BBB. The benchmark is best thought of as a measure of a suitably long (i.e. 10+ years) borrowing rate for A/BBB rated companies – not a source of constraints on the notional company. In any case, as non-water companies dominate the constituents of that index, it is hard to see how this would be an assumption grounded in the characteristics of the water sector. |

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | | | The CAPM horizon applies to a forward-looking return expectation – i.e. it is not relevant to setting a reasonable allowance for embedded debt. There is no reason why historic debt issuance needs to assume a 20 year horizon; particularly given that previous policy was silent on a tenor-at-issuance assumption, the PR14 10 year trail, and evidence that tenor-at-issuance over PR09 and PR14 was 15.4 years. |
| **Embedded debt (length of trail)** | ANH 27 Jan main response p. 15<br>NES 27 Jan main response p. 7 & p. 16 | CMA commits an 'error' using 15yr collapsing trailing average as iBoxx A/BB tenor is ~20yrs so there would be no refinancing of debt in AMP7. | This is not an error but a matter of judgment. The company argument is based on the false premise that historic notional debt has been issued at 20 year tenors. We have provided evidence that 15 years is a reasonable assumption.<br>15 year tenor-at-issuance would imply the oldest 1/15 of debt falling due in each year, which would suggest a declining cost of embedded debt, as correctly used by the CMA. Failure to apply the collapsing trail would result in an assumption outside the reasonable range of benchmark-led estimates for WaSCs. |
| **Embedded debt (matching adjustment)** | ANH 27 Jan main response, p. 13<br><br>NES 27 Jan main submission p. 16 and video submission | CMA commits an 'error of principle' in using a matching adjustment as this implies customers are exposed to risk on short term and floating rate debt if rates rise in future.<br>An unadjusted 20 yr trailing average implies (1) clear allocation of risk to companies; (2) stability of bills over time. | This is not an error but a matter of judgment. The graphic used in the video and company submissions falsely suggests that customer bills would fluctuate in-period with changes to interest rates. At no point in the process has this been suggested – the proposal is simply to implement a 5 year reset reflecting the cost of balance sheet debt – as per the standard regulatory approach used in the post-privatisation water sector.<br>Customers have already paid for higher bills due to floating rate debt in price reviews when the iBoxx was not used (i.e. pre PR14) when interest rates tended to be higher. It is therefore consistent and symmetric for some of the current benefit of floating rate debt to be shared with customers at final determinations.<br>An unadjusted 20yr trailing average would represent expensive 'insurance' against the uncertain prospect of interest rate rises. This would imply vast headroom over an efficient cost of debt and ensuing windfall gains for the overwhelming majority of the sector. Large and persistent gaps between revenues and costs undermine the legitimacy of the regulatory framework and call into question whether it is working for customers. |

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| **Embedded debt (matching adjustment)** | ANH 27 Jan main response, p. 13<br><br>NES 27 Jan main submission p. 16 | CMA commits an 'error of principle' in using a matching adjustment as this implies a 'race to the bottom' with companies increasing exposure to interest rate risk and short-term debt. | This is not an error but baseless speculation. If this outcome were likely, the price reviews that used a pure balance sheet approach to set an embedded allowance (PR94, PR99, PR04, PR09) should have caused this to happen already. In practice we have seen floating rate debt averages around 10-15% of debt at a sector level and tenor-at-issuance is stable at about 15 years. As set out in the PwC note 'Efficient debt financing of companies', the embedded debt regime is just one factor influencing company financing decisions. We consider in any case that a balance sheet benchmark limits excessive risk-taking at the sector level as crystallised risk for individual companies cannot be passed through to customers. |
| **Embedded debt (matching adjustment)** | ANH 27 Jan main response, p. 13 and paras. 49-51<br><br>NES 27 Jan main submission p. 16 | CMA has committed an 'error of principle' in using a matching adjustment as this creates uncertainty around remuneration of debt costs and exposes companies to market movements and regulatory discretion which companies cannot manage. | This is not an error but rather describes the operation of water regulation in the post privatisation era which has always involved 5 yearly resets determined by the regulator, reflecting fresh evidence at each price review.<br>The risks described by Anglian are insignificant compared to those faced by companies in competitive sectors (who face no fixed 5-yearly allowance for embedded debt). It is also implausible to argue these are not manageable: for instance companies can reduce risk exposure through issuing a range of tenors and types of debt and not straying too far from the notional gearing. |
| **Embedded debt (matching adjustment)** | NES 27 Jan main submission p. 16<br>ANH 27 Jan main submission, p. 9 | The CMA's 'matching adjustment' cuts across Ofwat's 2016 policy decision that customers should not share risks with companies based on observed financial performance. | This incorrectly represents the position of the 2016 consultation and our policy approach to the use of the balance sheet benchmark. The 2016 consultation referred to by the company side clearly refers to a proposal around in-period risk sharing considering company-specific actual costs vs. the benchmark. It asked whether companies should share in-period outperformance (and underperformance) with customers. This is not relevant to the CMA's working papers, which deal with the well-established process of setting sector-level benchmarks on a 5 yearly basis at price reviews. |
| **Embedded debt (Floating rate debt)** | ANH 27 Jan main response, p. 14<br><br>YKY Paper 2A para 4.2.8. | The CMA has committed an 'error of fact' through assuming too high a share of floating rate debt due to including liquidity facilities (even adjusting for temporary Covid-19 liquidity drawdown). | The proposition that the share of floating rate debt should be further adjusted to remove all liquidity facilities is contentious. Firstly, the APR-led calculation of weighted average interest rate can be considered an 'all-in' cost of debt including the interest cost of liquidity facilities and floating rate debt. Any double-counting of liquidity and interest cost allowances can simply be addressed by not adding the ~5bps 'liquidity' component of the 10bps issuance and liquidity allowance to the |

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | NES cost of debt workbook | Proposals include:<br>a) Use of the median (ANH)<br>b) Adjusting APR shares for App20 liquidity facilities.<br>b) Excluding all liquidity facilities through adjusting for cash and equivalents (YKY and NES/KPMG) | APR-led benchmark. Secondly, It is in any case far from clear that liquidity facilities are not used for financing infrastructure. Moody's 13 March credit opinion for Yorkshire Water under 'Liquidity analysis' cites *'access to £560 million committed bank facilities to cover capex and working capital needs, of which £335 million was drawn as of 30 September 2019.'*<br><br>Were the CMA minded to make a further adjustment to remove liquidity facilities from its calculations, it would clearly be erroneous to derive an estimate of floating rate debt using a 'net debt' approach – i.e. netting off cash balances against floating rate debt. This firstly assumes without evidence that all cash comes from drawing down liquidity facilities. It also results in implausibly low estimates of non-liquidity facility floating rate debt. For instance, NWL's cost of debt workbook implies a 0% share of floating rate debt for ANH under this approach, but the company's App20 table of debt instruments clearly shows £383m of non liquidity facility floating rate debt with maturity implying they should be on the company's balance sheet as at March 2020. |
| **Embedded debt (EIB debt)** | ANH 27 Jan main response, p14<br><br>NES cost of debt workbook<br><br>NES – EIB Analysis workbook<br><br>NES 27 Jan main response p7 | The CMA has committed an 'error of fact' in its assumption of £7bn EIB debt is overstated – companies only have £5.3bn on balance sheets.<br><br>The CMA's estimate of a discount of 100bps is also overstated; it should use 60-70bps instead. | In the time allotted to prepare this response we have been unable to properly review the company analysis of EIB instrument-level data for completeness or accuracy.<br><br>We observe however, that NES's analysis informing its estimated 60-70bps discount of EIB debt to the iBoxx compares the yield-at-issuance of EIB instruments to the A-rated iBoxx, which is not the benchmark proposed by the CMA in its working papers for its 'matching adjustment'. Comparing to the relevant iBoxx A/BBB benchmark gives an average discount of 100bps. |
| **Embedded debt (length of trail)** | NES 27 Jan main response p7 | CMA commits an 'error' by moving to 15 years as this is based on weighted average years-to-maturity of the sector (13-14 years) which implies a 26 year trailing average. | As set out above, 15 years is well-justified as an estimate grounded in actual tenor-at-issuance data, regulatory discretion, and in terms of providing an outcome which is demonstrably a reasonable allowance with reference to cross-checks using balance sheet data. We agree the CMA does not need to rely on weighted average |

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | ANH 27 Jan main response p. 14. | | years-to-maturity (YTM) data for the sector to justify using a 15 year collapsing trailing average.<br><br>Only under highly stylised assumptions is tenor-at-issuance twice the weighted average years-to-maturity figure. That is: a) debt issued at a constant rate each year, b) identical tenors, c) over a period of time equal to the tenor. These assumptions clearly do not hold for actual water sector issuance therefore the extrapolation of 26 years from 13-14 years YTM is not robust. |
| **Embedded debt (Notional debt-weighted average)** | ANH 27 Jan main response p16,<br>ANH 27 Jan 'Additional points on cost of debt' pp.8-10, | The CMA commits an 'error' modelling its RCV-weighted trailing average | This appears to be an error from the company side, not the CMA.<br>The company alleges that the CMA's estimate of 4.55% using our notional debt-weighted proposal to inform a collapsing trailing average is an understatement and should be 4.84% if 'corrected'. The company suggests that the error is using weights in the trailing average years which do not sum to 100%<br><br>We have supplied workings for this approach (Notional debt-weighted approach.xlsx) applied to a 20 year collapsing trailing average (assuming 20 year tenor at issuance) and a 15 year collapsing trailing average (assuming 15 year tenor at issuance). The results from these approaches are similar, at 4.55% and 4.51% respectively, with weights in each case verifiably adding up to 100%. |
| **Embedded debt** | ANH 27 Jan main response para 5, p.3 | The CMA's working paper approach 'penalises' Anglian nearly 20 years after the event, just for issuing long tenor debt that was in line with regulatory guidance of the time, and raised at a cost that was lower than prevailing market rates at the time. | A thorough appeals process has found Anglian's cost of debt (which we assess as 4.75% on a floating-adjusted basis) to be significantly less efficient than a wide range of both balance sheet-led and index-led benchmarks. This is not surprising given the company's decision to issue a disproportionate (£1.5bn) amount of debt in 2002 to fund a shareholder distribution and the resulting divergence from the notional financial structure (gearing rose to c.80% vs. the notional 50%). High gearing has placed downwards pressure on credit quality, and its debt structure is relatively expensive due to the weight on 2002 - an earlier, more expensive year.<br><br>Anglian references previous Ofwat policy, but as referenced in section 5 of this response we have always been clear that the risks of financing decisions should not unduly pass to customers. In particular, 5-yearly 'reset risk' from the regulator using |

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | | | observed costs to set a new benchmark has existed since PR94. By issuing large amounts of long-dated debt, Anglian increased its exposure to reset risk – effectively making a bet that rates would not fall. By its own admission it did well out of that bet initially – outperformance against the latter-day benchmark was not shared with customers. A symmetrical treatment of company and customer interests therefore demands that customers should not pay more than the efficient benchmark to subsidise its underperforming debt now. Acceding to the company's demands would signal to the rest of the sector that companies do not in fact hold the risks of their financing decisions, contrary to our previous policy statements. |
| **Embedded debt** | ANH 27 Jan main response paras 20-21 | The CMA should recognise the scale of changes it is proposing in its working paper and create a glide path to the future methodology ending in 4.80% for 2024/25 | The principles of the CMA's working paper (in common with those from our PR19 approach) are consistent with the way the embedded debt regime has operated since privatisation. In particular, placing weight on sector level balance-sheet debt (including floating-rate debt) to set a comparative benchmark is not new. It is Anglian's proposals to set an allowance based on ex-ante principles which are new and untested. |
| **Embedded debt** | ANH 27 Jan main response paras. 49-51 | Ofwat's approach to remunerating embedded debt lacks stable regulatory principles. Companies must take the risk of (1) changes in market conditions; (2) other companies' financing strategies; and (3) discretion in regulatory policy when setting the allowed cost of debt. This is not fair as they cannot manage this risk. | It is difficult to identify clear differences relative to previous price reviews when considering the principles behind both our PR19 approach and the CMA's working papers.<br>The balance sheet approach provides a credible benchmark that has been used through a number of determinations for setting the cost of embedded debt. Companies are protected from changes in market conditions over the long term through the regulatory approach to setting both the cost of new and embedded debt. Companies can manage their risk exposure through their own choices, by issuing debt over time, at a range of tenors and using a range of instruments. |
| **Embedded debt** | ANH 27 Jan main response para. 30 | Companies with lower costs of debt have adopted 'different risk positions' not reflected in the notional company (e.g. shorter than 20 yr tenors, floating rate debt). This is not efficiency but higher risk. | Previous regulatory policy encouraged issuing a diverse range of financial instruments; there is however no evidence that a particular tenor was incorporated into the notional structure.<br>We note the contradiction between the company assertion that: a) actual average tenor-at-issuance is 20yrs+; and b) balance sheet benchmarks are lower than the 20yr iBoxx A/BBB because of companies issuing shorter tenor debt than that benchmark. We have previously provided evidence that shows a relationship |

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | | | between companies with higher levels of gearing (and therefore all other things equal more risky capital structures) and higher overall cost of debt. |
| **Embedded debt** | ANH 27 Jan main response para. 37 | The CMA's conclusions on embedded debt for the 2015 Bristol Redetermination were based on long-term finance and did not include short-term or floating rate debt. | This is not true – the final allowance for embedded debt was based in part on Bristol's actual costs which did contain a contribution from short term and floating-rate debt.[136] We note that the 2015 decision also included a 26bps downwards adjustment to the WaSC benchmark (10 year trailing average of the iBoxx A/BBB), and a further downwards adjustment to reflect non-operational financing. |
| **Embedded debt** | ANH 27 Jan main response p.15 | The CMA commits an 'error' as its proposed 15 year collapsing trailing average results in unfunded efficient costs which results in the notional company not achieving its Baa1 rating. | This is not an error but a matter of judgment. It is again based on the false premise that the true notional cost of debt is best proxied by a 20 year trailing average of the iBoxx A/BBB. There is no evidence from companies close to the financial structure of the notional company that this is the case. For instance unsecuritised companies Wessex Water (Baa1), United Utilities (A3), and Severn Trent (Baa1), have gearing of 66%, 67% and 65% respectively, and cost of debt of 4.02%, 3.47% and 3.77%, respectively (floating adjusted – CMA approach).[137] |
| **Embedded debt** | YKY 27 Jan main response para 2.1.4 and Paper 2A | YKY sets out an alternative methodology capturing floating-rate and index-linked debt which results in an estimate of 4.82% and passes a cross-check for the actual industry cost of debt. | The point estimate of 4.82% is well above most of the balance-sheet led benchmarks featured in our analysis and the CMA's working papers, and even the 4.64% most companies (including Yorkshire) embedded in their business plan submissions in September 2018. It cannot therefore be considered a reasonable allowance. Further observations include:<br>a) The analysis implicitly assumes 20 year tenors for all debt, leading to artificially inflated costs. This is particularly evident in the assumption for floating rate debt (2.53%), which bears little resemblance to interest rates sourced from the APR data. We have previously set out that there is no need to make this assumption.<br>b) The company makes an upwards adjustment of 22bps to the iBoxx rate to derive an index-linked rate. This is based on the company's view that pre-2012 RPI expectations were 2.5% and so had a higher real coupon than post 2012 debt – requiring an adjustment. The company has not shared its analysis in support of the 2.5% assumption. We are only aware of gilt breakevens as a source of RPI expectations. This estimator is however badly |

[136] CMA, 'Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991 – Final report', October 2015, p. 304, paragraph 10.50
[137] Ofwat, 'Financial Monitoring Report 2019-20', December 2020, tab 'S7.Gearing' and CMA, 'Cost of debt working paper', January 2021, p. 51, Table 2

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | | | affected by liquidity risk in gilts and can give wildly unreliable estimates. The CMA should not therefore unquestioningly accept this uplift.<br>c) The analysis assumes equal weights in each year of the 20 year weighted average used to derive fixed rate and index-linked debt. We have previously explained that this assumption is a poor fit for a notionally-geared company issuing debt in line with sector RCV. |
| **Embedded debt** | ANH 27 Jan main response para 5 | Anglian Water claims the cost of debt proposed in the CMA's working papers would effectively lead to a penalty of £100 million | This is an overstatement that is based only on Anglian Water's assessment of the cost of embedded debt. Anglian Water confirmed in its query response the calculation is based on its claimed cost of embedded debt for the notional company (4.97%) less the cost of embedded debt proposed in the CMA's cost of capital working paper (4.52%). The cost of debt reported in Anglian Water's annual performance reports over the three years 2018-20 has averaged 4.84% and can be expected to decrease through 2020-25 as a consequence of the company's need to finance RCV growth. |
| **Issuance and liquidity costs** | YKY 27 Jan main response para 3.2.1 | The CMA's allowance of 10bps for issuance and liquidity costs is understated – in 2015 it allowed 0.2%-0.3% to Bristol and Ofgem allowed 0.25% for RIIO-2 FDs. | Our use of 10bps for issuance and liquidity costs was not contentious at PR19 – we received no submissions challenging our use of this assumption at draft determinations. We also note it was included in Bristol Water's CSA-adjusted proposal from its statement of case.<br>The CMA's Bristol decision in 2015 placed weight on the Bristol's company-specific and notional costs. The notional perspective allowed for an uplift of 0.1% for issuance a costs and no liquidity costs.[138] The 0.2-0.3% relate to Bristol Water's former actual structure, with limited read-across to the CMA's current exercise.<br>Ofgem calibrated the length of its RIIO-2 iBoxx extending trailing average based on a detailed projection of the sector's balance sheet interest costs over the RIIO-2 control period, resulting in a 10-14 year averaging period. If yield costs were overcompensated for (e.g. by adopting a longer averaging period) it does not follow that the issuance and liquidity cost allowance would remain the same – indeed there would be a strong 'in-the-round' case for arguing the basic index-led allowance was sufficient because of the greater amount of headroom. Ofgem |

[138] CMA, 'Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991 – Final report', October 2015, p. 311, paragraph 10.82

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | | | decided for RIIO-ED1 to not make an allowance for issuance and liquidity costs, as it considered that the 'halo effect' from its unadjusted iBoxx-led allowance provided headroom to encompass such costs.[139] |
| **Issuance and liquidity costs** | NES 27 Jan main response, pp. 7-8<br><br>'Databook for NWL Initial Submission on WACC Working Paper'<br><br>ANH 27 Jan main response, p15. | The CMA has committed an 'error' by not allowing for a 'cost of carry' for water companies of 9-18 bps. | This is not an error. The approach used by NES is inconsistent and not robust:<br><br>a) The 'cost of carry' tab calculation implicitly assumes that all cash on balance sheets is from iBoxx A/BBB bond issuance, and so attracts a cost of carry. We see no evidence for this assumption, which ignores any net cash contribution from non-bond sources (e.g. swaps or other debt instruments, asset disposals, cash management from slower invoice payments etc.).<br>b) Basing the cost of carry on balance sheet cash also wrongly ignores interactions with the 4-5bps allowance for liquidity costs in the 10bps issuance and liquidity costs allowance. This is based on companies holding 10% of borrowings as liquidity.[140] As this percentage is already larger than the 4.44% median ratio of cash to gross debt, and is already covered in the issuance and liquidity costs allowance, a further allowance for cash holding would be a double count.<br>c) The assumption that all cash comes from bond issuance is also inconsistent with the 'Adjusted APR using net debt data' APR-led cross-check, ('Variants of actual cross check' tab) which assumes that all cash comes from liquidity facilities and should therefore be stripped out. Cash can come from bonds or liquidity facilities – but not both at the same time.<br>e) Cash holding is volatile over the course of the year, and there is no guarantee that the end-of-year figure is a representative average for the year. |
| **Share of New Debt** | ANH 27 Jan main response, p15.<br><br>YKY 27 Jan main response p.2.1.6 and paper 2B | The CMA commits an 'error' as its share of new debt (20%) over-states the proportion of new debt across AMP7 | This is not an error but a matter of judgment, as the company's claim is based on the false premise that the trailing average must be 20 years. Using the 15 year collapsing average from the CMA's working papers we have demonstrated in our prior submission that the notional share of new debt should be 19%-24% depending on the extent to which nominal rather than real-terms RCV growth is used to estimate new debt issued for RCV formation. |

[139] Ofgem, 'RIIO-ED1 Final determination overview', November 2014, p. 92, paragraph 1.8
[140] Europe Economics, 'PR19 – Initial Assessment of the Cost of Capital', December 2017, p. 72

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| **Retail Margin Adjustment** | NES 27 Jan main response p. 6 | The CMA excludes measured income accrual balances in its calculation of the retail margin adjustment. When these are added in, the retail margin adjustment should be 3bps or 0 depending on whether creditor balances are included or not. | We continue to support the CMA's provisional findings approach. Companies did not challenge a much higher 11bps adjustment in their responses to the PR19 draft determinations. We note that most of the movement from the provisional findings' point estimate of 8bps to Northumbrian's lower range of 0-3bps is due to the company's assumption that the working capital financing rate is 5.57% - or the provisional findings allowed return on capital. Given the short-term nature of working capital financing we consider this to be a material overstatement of the actual costs faced by companies for this finance. We have previously submitted our analysis of the data provided by companies on their working capital financing rates, which indicates a trimmed average of 3.06% nominal in 2018. The subsequent decline in interest rates would however support a lower rate grounded in more recent financing conditions (e.g. 6 month LIBOR or SONIA + 100bps). |
| **Retail margin** | YKY 27 Jan main response p. 10 | Yorkshire Water argue the retail margin is insufficient as it implies a margin of 0.2%. | Arguments that the retail margin was insufficient was not identified as a material issue in PR19, either in response to the PR19 methodology, draft or final determinations – indeed Wessex and Bristol Water commissioned a report which supported our assumption.[141] The retail margin is to remunerate a return for retail activities provided to domestic customers which is a non-contestable activity. The margin is 1% not 0.2% - a properly comparable EBIT margin must include interest costs for financing fixed assets and working capital (which YKY excludes in its calculation). |
| **Market to asset valuations** | NES 27 Jan main response Appendix 2 | Northumbrian Water disagrees with our challenge that its MARs analysis is flawed and erroneous. | As stated at the cost of capital roundtable, Credit Suisse confirmed to us that the 'Outperformance on WACC' includes both cost of debt and cost of equity outperformance. Northumbrian's assertion that the outperformance adjustment is for cost of debt only is therefore a major flaw in its analysis. Northumbrian Water has also attempted to pass off its own assumptions (e.g. 'non-wholesale regulated business') as those from equity analyst reports. It has also not corrected the errors we identified in its analysis taking account of the analyst reports on which its analysis is based. Once corrected, this evidence supports our view that the market requires a lower allowed return on equity than our PR19 final determinations allowance. |

[141] Economic Insight, 'Household retail margins at PR19: a report for Bristol Water and Wessex Water', September 2017

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| **Inflation** | YKY 27 Jan main response, section 3.5 | Yorkshire Water claims the 'real world' inflation outlook should be reflected in the line by line estimates of the cost of debt and WACC parameters. | We have set out our position on this in previous submissions. Yorkshire Water's proposal would represent a material and unreasonable change to the allocation of risk. In successive price determinations, cost of capital parameters have been derived using long term inflation forecasts and this underpinned the PR19 methodology. Companies are protected by in-period changes in inflation through indexation of revenues and the RCV, and are expected to manage their financial structures to be resilient to inflationary movements. We would caution against trying to compensate for forecast inflationary underperformance over short periods; longer spans of data suggest CPI inflation broadly close to target. Outturn (ONS) and forecast (OBR Nov 2020) data suggests a 15 and 20 year trailing average of CPI to 2025 of 1.84% and 2.03%, respectively. |
| **CSA (embedded debt)** | BRL 27 Jan main response, para. 17(a) | A trail shorter than 20 years is not appropriate for a small WoC because small companies face higher transaction costs and cost of carry which are minimised by issuing infrequently at longer tenors. | Issuing more frequently at shorter tenors reduces the cost of carry as drawdown amounts can be better matched to the investment programme. Bristol arranged 2 RCFs (£50m capacity) in 2016, and 2 loans (£75m total) and another RCF (£50m capacity) in 2018. We are unclear how this constitutes infrequent issuance. |
| **CSA (embedded debt)** | BRL 27 Jan main response, para. 21 | If the CMA applies a matching adjustment to reflect floating rate debt it must include preference shares and debentures which would have an offsetting effect of 0.1% | This is another example of Bristol's shifting position on preference shares. At CMA15 it argued they were debt, at PR19 FDs it argued they were equity, now it argues they are debt again.<br>Preference shares may have more debt or equity like characteristics according to the contractual terms, and in any case make up a very small proportion of water sector financing costs. |
| **CSA (issuance & liquidity costs)** | BRL 27 Jan main response, para. 37 | Ofgem's allowance for issuance and liquidity costs (25bps) on its own would justify Bristol Water's 15bps premium on the cost of new debt. | Ofgem's decision relates to the specifics of the energy sector and is part of an 'in-the-round' package including a 10-14 year extending trailing average of the iBoxx calibrated using sector actual debt costs. Bristol Water did not raise issue with the 10bps issuance and liquidity allowance during the PR19 process or in its statement of case. It is therefore surely too late in this stage of the process to credibly introduce it as part of its case. |
| **CSA (share of new debt)** | BRL 27 Jan main response, para. 39 | Lower RCV growth in AMP7 implies lower new debt – but RCV growth is determined by a multitude of factors not under company control (e.g. | This is an argument made from an actual (i.e. BRL-specific, AMP7) perspective rather than a notional small company perspective, and so should not be given weight. RCV growth is projected to be low for BRL over 2020-25 but was sizeable over 2010-20 when BRL's RCV doubled. Giving companies uplifts when notional |

| Topic area | Reference | Issue | Ofwat response |
|---|---|---|---|
| | | government environment policy). BRL should not be penalised for this. | allowance disadvantages them (and they appeal), but not making a corresponding deduction when they are advantaged skews the balance of risk in favour of companies at customers' expense. |
| **CSA (cost of equity)** | BRL 27 Jan main response, para. 56 | Ofwat's outturn RORE analysis 2015-20 demonstrates the negative skew for water-only companies compared to WaSCs, demonstrating the higher asymmetric risk and skew faced by these companies. | As the CMA will be aware, outturn performance is the only scenario we have of how risk probability distributions manifested. It does not in itself provide a guide to the inherent skewness or downside bias of said risk distributions. In addition, RoRE performance reflects company-specific as well as systematic factors, making it difficult to assess whether a significantly different exposure to systematic risks exists between small WoCs and WaSCs |

# 6. Our reply to the response of Anglian Water to the Elsham DPC consultation paper

## Introduction

6.1 We welcome the CMA's consultation on the proposed process for the Elsham scheme and we agree with the CMA's proposals fully. We do not believe it is necessary to provide further comment on the proposal, but we do wish to correct some factual errors inferred in Anglian Water's response, regarding the views of Ofwat of the Elsham scheme. We can also confirm that the relevant licence changes (including the DPC interim determination process) have been made for Anglian Water.

6.2 In Anglian Water's Elsham Consultation Response dated 11/01/21 (ECR) it states in several places that Ofwat does not support the Anglian proposal that the Elsham Scheme be descoped so that only the treatment element is progressed through DPC. Ofwat has not provided any indication on whether descoping is the appropriate course of action. We have only requested that the strategic outline case provides a detailed and evidence based recommendation by Anglian Water as to the best procurement route for the Elsham scheme. This will assist us to determine what is in the best interests of Anglian Water's customers.

6.3 Anglian Water has now provided the detailed evidence required for Ofwat to make a proportionate and considered decision on the facts presented through the strategic outline case. We agree that it is appropriate for companies to review whether a scheme (or parts thereof) is suitable for DPC, and as previously mentioned our 5-case approach which includes strategic, outline and full business cases provides the opportunity for the company to make that recommendation at any of those stages.

6.4 Anglian Water provided a revised strategic outline case on 19 January and supplementary evidence on 26 January and 2 February. Ofwat also engaged further with the Environment Agency. Ofwat will now put forward a recommendation to its Major Projects Committee being held on 3 February for a decision on whether descoping is the appropriate course of action. We intend to submit an update to the CMA after this meeting once all issues have been appropriately addressed.

6.5 Anglian Water submitted its strategic outline case to Ofwat on 24/12/20. We have provided feedback on the version submitted on 24/12/20 and Anglian Water have

now submitted a further version, making the strategic, economic, and commercial cases both for the full Elsham scheme and the de-scoped treatment only option. We also requested Anglian Water to make in the strategic outline case a fully evidenced recommendation for its preferred route and how this is in the best interests of customers. Anglian Water has now addressed this feedback and provided an evidenced case for a preferred delivery route although still appear to have deferred to the CMA to make the decision.

6.6 As the CMA has recognised, this case is complex, and our decision will need to be made on all the evidence. We are now in the process of deciding on the appropriate course of action. We therefore remain of the view that the CMA should allow the process to run its course and for the project to progress in accordance with the DPC framework. .

## Factual errors or misrepresentations in Anglian Water's response

6.7 Anglian Water states (ECR, section 6) that Ofwat "undermines the need for investment underpinned by the WRMP and PR19 processes". As detailed below, Ofwat seeks to understand the risks associated with the forecast reduction in headroom post March 2025.

6.8 Anglian Water states that "Ofwat continues to misrepresent the role of the WRMP in determining need" (ECR para 31) and that "Ofwat …… fail to understand that the WRMP investment modelling considers all years" (ECR, para 33). This is untrue. Ofwat understands the WRMP process and are supportive of the need to invest in the Elsham scheme. However, Ofwat asked Anglian Water to evidence the criticality of delivering the Elsham scheme by March 2025 and to what extent the estimated headroom acts as risk mitigations to late delivery of the Elsham scheme via DPC beyond March 2025. In addition, we needed clarity on the extent to which other operational and tactical measures could be put in place to mitigate the risk of late delivery beyond March 2025.

6.9 Anglian Water has stated that it has presented "clear evidence that the full Elsham scheme, relative to the descoped scheme, has significant operational, commercial and contractual complexity" (ECR, heading 4, page 9). As mentioned, Anglian Water submitted an incomplete strategic outline case which failed to evidence and recommend that the descoped scheme is the preferred delivery route. An example of a gap is that it did not include detail of the comparisons of value for money between the different options, including for the descoped scheme.

6.10 Anglian Water states that "the Elsham Consultation gives no weight to the financial benefits of descoping the DPC project" (ECR, heading 5, page 10). Anglian Water presented a range of conflicting and inconsistent value for money assessments in its strategic outline case, with an NPV difference (for the full scheme) between in-house and DPC routes as negative £0.3m and elsewhere in the same document it described NPV benefits for a DPC delivery route of between £13.78m and £15.85m for the full scheme and £1.61m and £2.62m for the treatment only option. Ofwat had to seek further clarity on Anglian Water's value for money assessment.

6.11 Anglian Water states (ECR, section 9) that "Ofwat's suggestion that in-house and DPC processes can fully progress in parallel is incorrect" (ECR, heading9, page 13). Ofwat has continued to engage with Anglian Water to enable Ofwat to decide on the recommendation in the strategic outline case. Ofwat does not believe it is necessary for Anglian Water to progress both DPC and in-house commercial routes simultaneously if the case for descoping can be made in the strategic outline case. Further, there are areas where the project can be progressed such as the BAPA (Basic Asset Protection Agreement), through Anglian Water undertaking the enabling works to mitigate risks of delay.

6.12 Anglian Water states that we are not concerned about the significant detriment to customers and the environment from delivering via a DPC route (ERC 14 ). It is not true that we are not concerned about any potential detriment to customers or the environment. Rather we found it difficult to understand the real implications of delivering the Elsham Scheme later than March 2025 and consider that Anglian Water may be overstating the implications, or may not be considering all tactical options available to it to mitigate the impact of delay beyond March 2025. For example (Section 6.2, page 18, WRMP Technical Document – Managing Risk and Uncertainty) Anglian Water identifies in its WRMP at least one water resource zone that will have a large deficit for most of AMP7 and has identified a potential temporary mitigation if that risk materialises. Anglian Water did not explain to us why the same tolerance of risk and temporary mitigation measures could not be applied to the Elsham scheme and why other mitigations are not viable for the Elsham scheme.

6.13 *Section 6.2, page 18, WRMP Technical Document – Managing Risk and Uncertainty: "We have one WRZ with a residual deficit: Ruthamford South. Ruthamford South has a large deficit starting in 2020, mainly due to climate change, which is resolved in 2024 by the transfer of additional resource from Lincolnshire into the Ruthamford system. We will manage this risk by being prepared to request a Drought Permit at Offord, which would provide sufficient temporary resource in the event of a severe drought. In discussion with the*

*Environment Agency we have developed a new trigger level, which if reached would activate detailed assessment on the need for a permit. The trigger level has not been reached in recent drought events. The permits would be a temporary, winter-only application."*

# 7. Our reply to Anglian Water's response on the revised grants and contributions (RFI 033 question 2)

7.1 RFI 033 question 2 asked Anglian Water to explain why its wastewater DSRA unit rate would increase materially because of using Anglian Water's latest 'gross' grants and contributions and new connected property forecasts.

7.2 We do not consider Anglian Water's response sufficiently answers the CMA's question. We therefore encourage the CMA to explore the issue further, given the 44% increase in its forecast wastewater developer services unit rate will substantially increase the revenue exposure under the DSRA.

7.3 We outline our key concerns below in relation to Anglian Water's response:

- Anglian Water says that population growth drives the need for network reinforcement if the additional demand means that existing capacity at water recycling centres is exceeded, which leads to an increase in grants and contributions. But if population growth causes a water recycling centre to exceed its capacity then any related investment should be captured within 'growth at sewage treatment works' and would not be chargeable to developers.
- Anglian Water says it has accounted for changes to developer charging rules and structural changes to charges in its latest grants and contributions forecasts. But it has not explained what impact this has had on its forecast grants and contributions. At a minimum, Anglian Water should explain whether these changes mean they now expect to recover more or less from developers. Based onthe company's current explanation, we do not understand why/how a 6% increase in forecast wastewater 'new development and growth' expenditure leads to a 24% increase in forecast wastewater gross grants and contributions.

**Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales.**

Ofwat
Centre City Tower
7 Hill Street
Birmingham B5 4UA

**Phone:** 0121 644 7500
**Fax:** 0121 644 7533



This document is also available from our website at www.ofwat.gov.uk.

Any enquiries regarding this publication should be sent to mailbox@ofwat.gov.uk.