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PR24 AND BEYOND: CREATING TOMORROW TOGETHER

NWL Consultation Response

NWL Response to PR24 and Beyond: Creating tomorrow together

1 SUMMARY

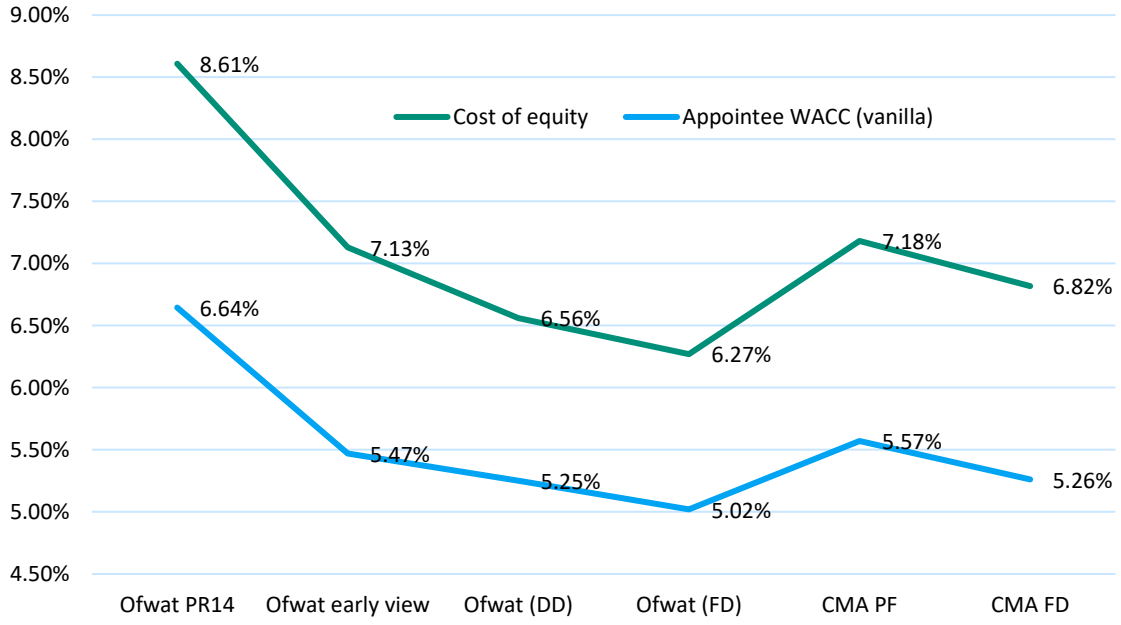
1. We appreciate the opportunity to understand and respond to Ofwat's early thinking ahead of the 2024 Price Review (PR24).

We broadly support Ofwat's PR24 themes but would suggest that 'stability and predictability' are added as an objective for PR24. Following these themes will also require Ofwat to work very differently.

2. We welcome Ofwat's stated focus on the long-term, reflecting the externalities of environmental and social value and a clear understanding of customers and communities. We also support the focus on efficiency and innovation; if we are to address the challenges of the future and deliver the ambitions of our customers and stakeholders whilst maintaining affordable services then it will require new ways of working and delivering more for less.

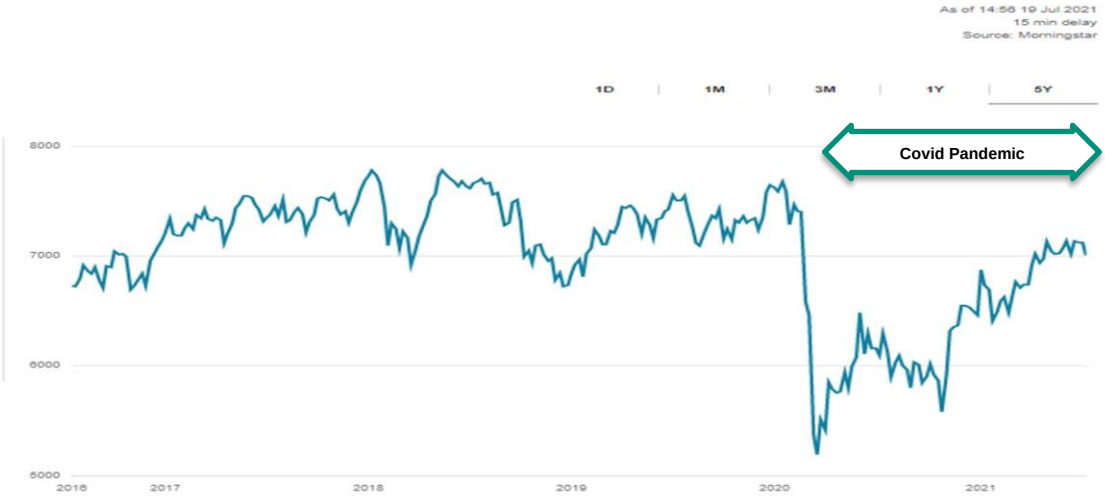
3. We consider that an additional theme should be added - PR24 should have a focus on ***stability and predictability of the regulatory model***. We consider that this is important given the significant regulatory reform seen at the last two resets, the unprecedented four appeals to the CMA and the significant volatility this has brought. We note for example that the cost of equity assessment during PR19 varied by 91 basis points over the course of one year of the review and subsequent appeals. There was also significant market volatility and uncertainty observed during the Covid pandemic and there are significant investment expectations required for PR24 beyond, these underline the need for stability and predictability in the regulatory model.

Figure 1: Nominal Cost of Equity and Appointee WACC- PR14, PR19 and CMA



Source: Ofwat and CMA

Figure 2: FTSE 100 Volatility over 5 years



Source: Morningstar

4. We note that setting a price determination in a long-term context and reflecting wider value in decisions will be a significant change for all parties, including Ofwat. Looking backwards at the last 25 years, average water bills at a national level will have been flat or falling in real terms for 15 years by the time of PR24, whilst earnings have grown or remained flat for most of that period and energy bills have risen significantly during the early part of that period. At the same time 'lower for longer' interest rates has enabled this to occur alongside growing rather than shrinking levels of investment, it is unlikely that this can continue indefinitely.

   Looking ahead to PR24 there are a number of significant investment drivers, the early information on the Government's ambition on the WINEP programme appears to suggest that it may be comparable to the PR19 programme which was the biggest ever[1], there may be significant ambition around reducing spills from Combined Sewer Overflows[2], in the South East of England there are several large supply-side investments proposed[3] and there is an important debate going on about capital maintenance funding[4]. In many of these instances investing now will involve customers paying far less than they may have to pay in the future if that investment is delayed. Setting business plans in a long term context may involve seeking to smooth these investments out over a long-horizon or indeed bring some investment forward to manage affordability pressures where costs may be higher if investment is delayed.

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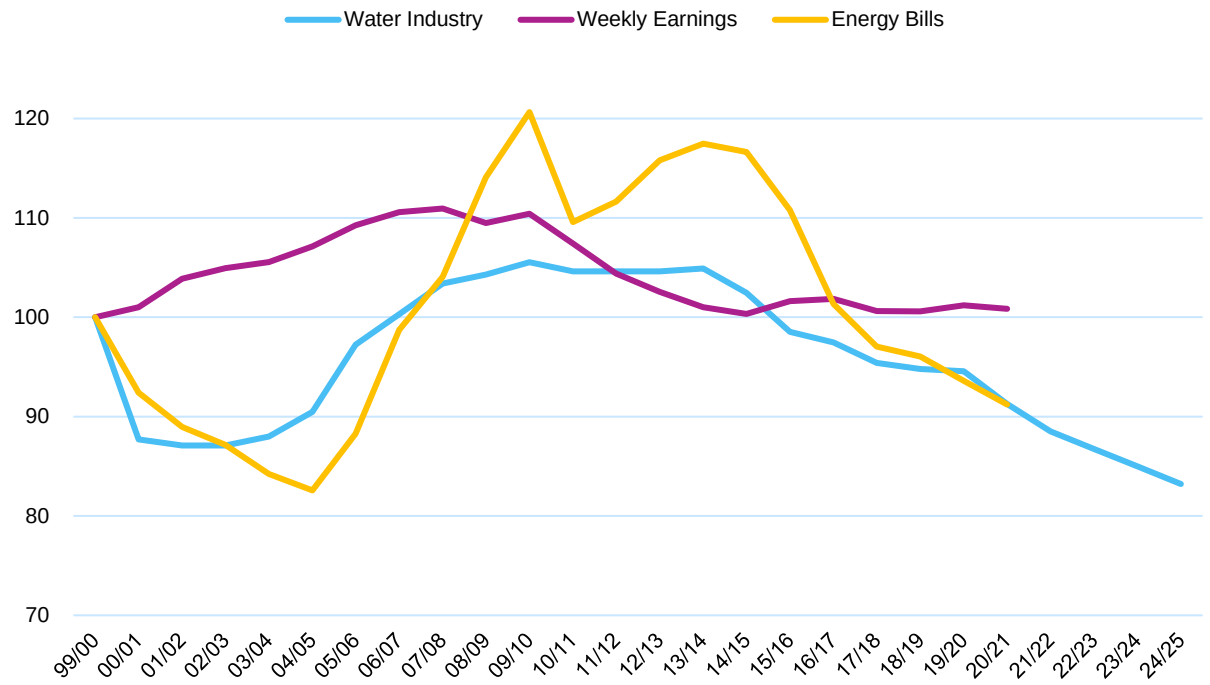
[1] *This reflects our early engagement with the Environment Agency and planning and investigations for the next WINEP programme*

[2] *As evidenced by Environmental Audit Committee (EAC) meeting on Water Quality in Rivers, 23rd June, and creation of the Storm Overflow Taskforce - https://www.gov.uk/government/news/taskforce-sets-goal-to-end-pollution-from-storm-overflows*

[3] *As evidenced by RAPID's focus on effective long term water resources resilience - https://www.ofwat.gov.uk/regulated-companies/rapid/achieving-effective-long-term-water-resources-resilience/ and NIC's work on "preparing a drier future" - https://nic.org.uk/app/uploads/NIC-Preparing-for-a-Drier-Future-26-April-2018.pdf*

[4] *As evidenced by WICS approach to setting capital maintenance allowances for its 2021-27 price review - https://www.watercommission.co.uk/UserFiles/Documents/2019%20Asset%20Replacement_Final.pdf , Ofwat PR24 Consultation, Creating tomorrow together, e.g. p24,37, CMA final determination para 4.258 onwards, this issue was also raised by Anglian Water during the 2019 Price Review - https://www.anglianwater.co.uk/siteassets/household/about-us/4a-providing-appropriate-regulatory-funding-for-capital-mainteance-activity.pdf*

Figure 3: Average combined household bills for water and wastewater services 1999-2025 compared to weekly earnings and energy bills (normalized to 100 at 99/00 in real terms)



Source: Discover Water, Ofwat website, ONS AWE data, House of Commons energy data

5. Reflecting wider environmental or social benefits in investment choices is the right approach albeit we must recognise companies core role in the provision of water and wastewater services. This will ensure that we maximise our contribution to society and the environment and is consistent with our objective of being the most ethical water company[5]. The current regulatory model does not fully capture the whole life cost of interventions, let alone the wider environmental or social costs or externalities, and moving fully to this new approach will present both practical and cultural challenges. Through 'Our Contribution' and more recently 'Our Purpose' reporting[6] we seek to measure on and report our wider contribution but measuring these externalities is notoriously complex and difficult. Water companies have been using stated preference techniques since at least the 2004 price review to understand and value customer preferences but even after more than twenty years there are still significant debates about the variation in these techniques[7]. Using stated and revealed preference analysis to value a much wider range of environmental and social benefits will be perhaps even more difficult to practically implement.

6. Interventions that maximise wider benefits in line with Ofwat's ambitions are often less certain and carry greater risk. We strongly support the focus on partnership working, for example the work of the Northumbrian Integrated Drainage Partnership (NIDP) is recognised as a leading example across the sector[8]. However, we do tend to find that the interventions that we support through this and other partnership groups often deliver a lower cost benefit assessment than direct interventions we would make on our own network when that analysis is focussed on improvements to service. Direct interventions onto our own network will generally do more to reduce sewer flooding, for example, in any given year than partnership schemes that seek to introduce sustainable drainage or nature based solutions even though the latter is clearly where we and the industry need to be investing in the longer

[5] *See - https://www.nwg.co.uk/news-and-media/news-releases/northumbrian-water-on-cloud-nine-with-worlds-most-ethical-water-company-accolade/*

[6] *https://www.nwg.co.uk/our-purpose/*

[7] *https://www.ofwat.gov.uk/wp-content/uploads/2015/10/pap_pos201507lessonslearned.pdf, https://ukwir.org/146387?object=151175 (Table 9) , https://www.ofwat.gov.uk/wp-content/uploads/2015/12/pap_pos20160525w2020cust.pdf page 14 , https://ukwir.org/eng/reports/11-RG-07-22/66874/Carrying-out-Willingness-to-Pay-Surveys , https://www.ofwat.gov.uk/wp-content/uploads/2015/10/pap_tec201507engagement.pdf*

[8] *https://environment-analyst.com/uk/65541/northumbrian-water-project-wins-at-flood-coast*

term. There are various proposals that have been suggested to address this incentive gap[9] that warrant further consideration as Ofwat develops its methodology. Given the significance of this reform it may be more effective to focus wider environmental and social benefits assessment on enhancements in the first instance as a stepping stone to wider implementation across base activities in PR29 and indeed it may also be sensible to focus on a subset of these externalities where valuation techniques are more mature across the sector and more widely.

Ofwat's proposals for centralised customer engagement appear retrograde and move in a different direction to broader regulatory thinking. We are concerned that they risk undermining companies' ownership of the relationship with their customers. If Ofwat remains committed to its model of centralised research, then the scope of that work should be narrowly defined.

7. We do not consider that proposals for the future of customer engagement are the best way of reflecting a clear understanding of our customers and communities. These proposals replace company led engagement with a central regulator-led approach that will remove or dilute companies' ownership of the relationship with their customers.

8. The water industry has made huge progress in putting the needs of the customer ahead of the traditional engineering focus on assets and pipes. This has occurred across many cycles and regulatory incentives such as the OPA and then the SIM alongside a focus on customer engagement first within the five year cycle and then on an ongoing basis have been critical to that change. These proposals appear to ignore and put at risk the success that has been achieved in customer engagement across successive price reviews and are clearly at odds with wider regulatory precedent and thinking. We are not aware of any other regulated sectors or precedent that would support Ofwat's approach and most appear to be moving in the opposite direction to Ofwat.

9. We accept that there has clearly been an issue with the diversity of the willingness to pay results at PR19. To address this Ofwat may wish to undertake a piece of central research that is focused entirely on this area and publish reasonable ranges or tramlines within which companies could then set out their plans. However, what is proposed for the centralised research is much wider in scope than this and it is not obvious at all that the wider scope covers areas that suffered from similar problems at PR19. There is a risk that the narrow problems encountered with stated preference values on ODIs at PR19 drives an unnecessarily wider scope that undermines the relationship between companies and their customers. A very complex framework of governance architecture is also proposed which feels unnecessary.

10. Ofwat states that it may decide to give 'primacy' to this research over other evidence, we would remind Ofwat that it must take all the evidence into account in reaching its decisions and that no one piece of evidence can ever be given 'primacy'.

11. If Ofwat still considers that it must take forward this centralised research approach then we would encourage it to narrow the scope to the ODI incentive rate issues, which represent the only genuine problem that has been articulated, and develop much more standardised guidance for companies to operate within in other areas. This resolves the difference in expectations that arose at PR19, addresses the clear problem on incentive rates but also critically leaves the customer relationship firmly with companies.

12. Ofwat is naturally free to choose whatever path it wishes in its approach to understanding the views and preferences of customers but we continue to believe that ongoing and direct engagement with our customers is central to ensuring that we are able to build a business plan that meets their needs and preferences. We are considering how best to undertake that engagement given Ofwat's proposed

[9] *For example United Utilities' proposals in relation to WINEP: https://www.ofwat.gov.uk/wp-content/uploads/2021/01/UUW-WINEP-review-discussion-paper.pdf https://www.entrade.co.uk/news/somerset-catchment-*

changes to the framework and requirements, but we do not envisage stepping back from those relationships.

Ofwat needs to understand and reflect the CMA decisions in its approach to PR24- there should be a very high bar for deviation

13. The consultation document helpfully makes significant reference to the findings of the CMA in the four appeals that followed PR19. The CMA is an expert regulatory body and their redeterminations, the longest and most detailed in their history, represent one of the most robust reviews of the water price control framework since privatisation. Moreover, companies choosing to make an appeal to the CMA do not do so lightly and it is critical for regulatory certainty that Ofwat embeds and reflects all of the findings from the CMA unless there are very strong reasons for not doing so. Similarly, companies also need to reflect upon and recognise the CMA findings. In this context it was surprising to see that Ofwat could not be more 'minded to' implement the CMA findings[10] and in some instances we found the Ofwat document to lack some of the important detail of the CMA decisions such as in relation to the Gearing Outperformance Sharing mechanism or the CMA's position on cost sharing incentives.

Ofwat's definition of the efficient notional benchmark company increasingly does not represent a credible yardstick for the sector

14. Ofwat's challenge on efficiency and productivity needs to be based on sound evidence, learning the lessons from the recent CMA appeals where the panel clearly considered Ofwat's stretch on efficiency and productivity improvement was not robust and made corresponding adjustments throughout its decisions[11]. No single company in the sector currently represents Ofwat's efficiency benchmark, no company is in the upper quartile for efficiency for each of water, waste and domestic retail services. No company is at the upper quartile for all of the common performance commitments and only one company has a level of gearing consistent with Ofwat's assumed 60%. Appointed companies are required by the terms of their licence to deliver all activities covered by the value chain and do not have choices about what they decide to undertake as companies would in a competitive market. Moreover, as Ofwat has itself recognised in its considerations of 'resilience' water and wastewater services are integrated 'systems'[12] with significant economies of scale and scope within those systems. It is critical that Ofwat's notional efficiency benchmarks are credible and reflect the integrated nature of water and wastewater services. We are concerned that some of Ofwat's proposals seem to continue to ignore this and indeed some, including the splitting of the cost efficiency challenge for water resources and bioresources, could make this position even more untenable. It is critical that regulation continues to drive improvements to efficiency and productivity but when those challenges are not credible they cannot be met and trust and confidence in the sector is damaged.

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[10] *In particular see our responses in this document in relation to risk and return*

[11] *The CMA adjustments included, inter alia a) adjusting the 'catch-up' efficiency benchmark back to the upper quartile company, b) adjusting Ofwat's assumed rate of productivity improvement back to 1% p.a, c) providing an additional 25bps on the cost of equity for the asymmetric risk in the service incentive package and d) providing additional funding to meet the 15% 'targeted challenge' (as Ofwat refers to it) on leakage. The CMA also reflected the use of the 2019-20 data in its assessment of efficient costs which led to a material uplift in the allowed base costs demonstrating the clear underfunding of the FD19.*

[12] *Ofwat, 2017, 'Resilience in the Round', p.6 See:: https://www.ofwat.gov.uk/wp-content/uploads/2017/09/Resilience-in-the-Round-report.pdf*

Table 1: WASC water totex, gearing and interruptions to supply performance. Green denotes performance in line with or above Ofwat's benchmark, red below it

	Water Resources Plus	Water Distribution	Water Wholesale	Gearing	Interruptions to Supply 3 Hrs (2019-20 inc WOCs)
Ofwat PR19 benchmark	4th	4th	4th	60%	00:06:29*
ANH	4	17	12	79%	00:18:39
NES	7	11	8	67%	00:05:37
NWT	14	4	10	68%	00:10:11
SRN	16	3	7	70%	00:10:41
SVT	13	7	14	65%	00:08:41
SWB	10	2	4	65%	00:09:10
TMS	11	9	13	82%	00:17:59
WSH	15	12	17	60%	00:17:46
WSX	9	5	9	66%	00:07:52
YKY	6	8	2	77%	00:06:42

Source: NWL Analysis using data from CMA WW2 cost assessment models and 19/20 service performance and financial metrics
Notes: * Represents 20/21 performance target from PR19 FD

15. At PR19 Ofwat set its overall 'stretch' position based initially on the experience of three years of the AMP6 price control period. As the control developed it became increasingly clear that Ofwat's challenge was not robust, ultimately culminating in that challenge being reassessed with substantial increased in allowed costs by the CMA based simply on observed changes in the data[13]. Ofwat needs to recognise and consider how the price control could reasonably evolve over time based on past experience. This is particularly the case when the first year or more of the new control period is impacted by a global pandemic which may have delayed significant amounts of investment activity putting more upward pressure on expenditure in the latter years of the AMP when service performance targets are also most stretching. Ofwat should learn from the experience of AMP6 and PR19.

16. Finally we note that Ofwat is proposing to consider setting a higher level of productivity improvement given its support for innovation funding. The level of innovation funding is very small in comparison to the total investment in the sector- representing less than half of one percent and extrapolations from that to higher productivity improvement rates cannot be well evidenced in our opinion. As a recognised industry leader in this area[14] we observe that it is rare in our experience for innovations to be able to make a company or sector wide impact on productivity. Broader economy wide evidence and data of Total Factor Productivity improvement or input-output analysis and regulatory precedent provides a much better guide to setting productivity improvement rates. Like Ofwat we watch the energy network appeals to the CMA with interest.

We support the simplification of the regulatory framework including the rationalisation of PCs and ODIs but multiple stages of engagement during the price review will remain important

17. We strongly support Ofwat's drive to simplify the price review process, which has become far too complex. In particular:

[13] *CMA's decision to include 2019/20 data in base cost models – CMA final determination para 4.39 onwards.*

[14] *As evidenced by Ofwat scoring us as B for Innovation (test CMI1) in its PR19 IAP, p76 of: https://www.ofwat.gov.uk/wp-content/uploads/2019/01/PR19-initial-assessment-of-plans-Summary-of-test-area-assessment.pdf*

- We agree that efforts should be taken to rationalise the number and complexity of PCs and ODIs. Customers' preferences in different parts of the country are not homogenous but the number of PCs and ODIs has grown exponentially and there is scope to rationalise them to provide greater management focus on the real priorities. This will take time and needs to be done carefully especially where those PCs and ODIs were developed to directly reflect customer requests either through direct engagement or via representations from customer challenge groups. In the first instance the strongest case will be those PCs and ODIs for which there is a significant degree of overlap with Ofwat's 'common' PCs or other metrics. We set out some examples in our reply. This rationalisation back to common ODIs will also help to ensure that the regulatory regime continues to reward only sector leading performance and that customers don't pay rewards for average performance.
- We do not support Ofwat's proposals to further separation of the water resources and bioresource price controls in their cost assessment. This pushes in the opposite direction to simplification of the price control and as we set out above will further exacerbate the 'perfect company' problem. In fact Ofwat should be moving the other way to firmly establish wholesale water controls and remove the water resource control, for example, that has added little demonstrable value at PR19 and significantly increased the complexity and data burden. Whilst the separation of costs by sub-wholesale service is useful for benchmarking, it adds little to convert these into full price controls and as Ofwat has itself recognised in its considerations of resilience, water and wastewater services operate as integrated 'systems'[15].
- We have separately written to Ofwat to suggest a number of changes to the current reporting requirements that would rationalise some of those requirements, this would also reduce the number of data lines required for the price review[16].

18. However, proportionate regulation is not just about reducing the number of data lines that need to be prepared and assured. There are some areas, in particular the relationship between cost and service levels, that we consider requires more data collection by Ofwat to ensure that it can be adequately addressed at PR24 and that the efficient cost of service delivery can be understood.

19. Ofwat also proposed to reduce the number of steps in the price review process, potentially combining the IAP and DD stages. We believe that this misunderstands the complexity issue. It is the complexity of the price review framework in terms of the number of price controls, PCs and ODIs, cost models, other efficiency challenges, etc that drives the regulatory burden and it is these building block elements that need to be rationalised. The complexity of the building blocks creates a clear need for substantial engagement with the regulator during the process, the greater the complexity the more stages of engagement are needed to make sense of the complexity and separate issues of disagreement from simple misunderstanding. So reducing this engagement does not help aid the process or reduce the burden - it merely increases the scope for misunderstanding and miscommunication. We consider that the three stages should be retained.

We support Ofwat's focus on asset health and capital maintenance, the current approach needs reform to address the future challenges including net zero

20. We are pleased that Ofwat has put particular focus on the need to maintain a healthy asset base. We and the CMA have previously raised concerns about the extent to which the current cost assessment process is sufficiently forward looking and recognises the level of investment and funding required to

[15] *Ofwat, 2017, 'Resilience in the Round', p.6 See:: https://www.ofwat.gov.uk/wp-content/uploads/2017/09/Resilience-in-the-Round-report.pdf*

[16] *Letter on Data Burden from NWL to Ofwat, July 2021*

maintain a healthy asset base[17]. We believe that this framework needs reform to better recognise the appropriate funding level needed to ensure healthy assets for the future. The issue is best illustrated by the recent experience of Scottish Water where, recognising the future challenges of net zero, the Water Industry Commission for Scotland (WICS) redesigned the framework to better account for the appropriate investment rates for different asset groups/classes[18]. The historical approach of cost assessment appears to have allowed the companies that spent the least, perhaps because they had chosen to taken a holiday on some elements of capital maintenance, to set the benchmark for the rest of the sector. We believe that the scale of the delta between these two estimates clearly suggests that the regulatory framework has underprovided for this investment and this cannot be reasonably assessed as 'efficiency'.

"The Commission recognises that Scottish Water manages a complex portfolio of assets which are diverse in type, age, lifespan, condition and criticality. As such, effective and efficient asset management (and, in particular, managing asset replacement) is a core function.

The Commission is clear that, if Scottish Water is to play its full part in Scotland's achievement of net zero carbon emissions by 2045, there can be no question that Scottish Water faces a significant asset replacement challenge. It has a significant amount of work to do in understanding how it will meet this challenge. In common with other asset intensive businesses, Scottish Water cannot predict exactly when assets will fail.

As such, it is clearly in the customer interest that it is able to act prudently - particularly with regard to those assets that are critical to the performance that its customers and, more broadly, society value." WICS decision paper 2019

21. We recognise that increases in capital maintenance investment could carry a significant price tag for customers and there would need to be a high evidence threshold to justify what could be a significant and ongoing change of approach. We agree with Ofwat that customers 'should not pay twice'. We note that the sector has generally not done this and capex efficiencies have generally been delivered from enhancement investments in previous AMPs.

Table 2: AMP6 Plan v Actual

AMP6 B Plan v Actual £m, 17-18p			
Capital maintenance	B Plan	Actual	Variance
NES	877	875	0%
Industry	15,861	16,149	2%

Source: NWL Analysis

22. In the first instance companies should seek to be efficient against Ofwat's cost assessment framework and there may be opportunities to reduce operating costs and replace those reductions with some level of increased capital maintenance whilst still remaining efficient against Ofwat's cost assessment framework. In this instance customers would pay no more. Companies would need to make a case to adjust PAYG and Run-off rates with customer support to shift the balance in the price review reflecting the efficiencies achieved but this would allow some additional investment in capital maintenance at no extra cost to customers and is allowed now under the current 'totex' framework.

23. However, this may not be sufficient to address the gap required and where companies can make a strong case to go further we recognise that Ofwat will want to be assured that customers are getting benefits from those investments. In this case we can see some merit in more output-based measures and

[17] *See NWL's Statement of Case to CMA, Section 7, Furthering the Resilience Objective*

[18] *As evidenced by: https://www.watercommission.co.uk/UserFiles/Documents/2019%20Asset%20Replacement_Final.pdf*

asymmetric cost sharing rates to ensure that companies invest the additional allowances in their asset base.

24. We are more sceptical about Ofwat's Asset Management Maturity Assessments. This has been a helpful learning exercise to share experience but the framework is very qualitative, self-reported and not subject to any assurance requirements. The results also appear inconsistent with other expert external assessments (such as ISO55000) and the assured data we have as a sector on asset health and replacement rates does not correlate well with Ofwat's initial maturity assessments.

We broadly support Ofwat's approach to cost assessment from PR19 which was thoughtfully developed, widely consulted upon, and supported by the CMA during the appeals process. We also agree that there are limited opportunities to improve that process including in relation to assessing the efficient costs of growth and capital maintenance

25. We agree with Ofwat that the cost assessment framework and base cost models are robust. These were endorsed by the CMA and significant work and consultation was undertaken on them ahead of PR19[19]. The cost drivers have strong engineering rationale for inclusion and the models and the statistical performance is strong even when the data is tested for example by removing years or individual companies from the sample[20]. The focus for PR24 should be on the refinement of those models to address the well-known problems with them. We consider that the two areas of focus should be on capital maintenance (as per the points above) and allowances for growth.

26. Along with this response, we have submitted the review of the base cost models from the PR19 Final Determination we submitted as part of the CMA process (per below). Whilst the review was carried out on the Ofwat base models, the CMA ones were largely unchanged, so the points we made still apply. Ofwat will have seen this evidence but it was not published by the CMA and we provide it again now so that it can be considered more widely for PR24:

    "Overall, we support modelling growth enhancement costs together with base costs and the continued use of Ofwat's base cost models. Ofwat's base models best address the cost allocation issues and provide consistency with the other wholesale water models in terms of the impact of scale whilst they also provide a better intuitive relationship between the drivers and costs."[21]

27. The current framework for growth is not robust and was a particular challenge throughout the PR19 review, in particular we consider that:

    - The models already capture growth with existing drivers of number of properties being more than 90% correlated with growth intensity;
    - The ex-post adjustment mechanism that Ofwat used includes both growth costs and sewer flooding costs within the unit rate, these two items are totally different and in fact negatively correlated - high growth companies have lower sewer flooding costs - as a minimum sewer flooding should be removed; and
    - There may be opportunities, with the deregulation of developer services to scale back or even remove entirely the DSRA mechanism.

[19] *CMA largely endorsed Ofwat's approach, with only minor changes, see CMA final determination para 4.362 onwards.*

[20] *See NWL REP066, Appendix 2: Base Costs appendix from CMA appeal*

[21] *See Annex on Base cost assessment*

We are pleased that Ofwat has recognised that the relationship between cost and service levels needs special attention, more data should be collected to understand this for PR24

28. The 'cost service disconnect' was another significant issue throughout PR19 and at the CMA. In the end Ofwat has set a very challenging settlement with lots of efficiency and substantial service improvement to deliver. This represents a significant productivity challenge compared to previous price reviews even before assumptions around 'frontier shift' are added. Ofwat should set out requirements for companies to report what they invest or their costs to deliver each of the major service level improvements (e.g. leakage, sewer flooding, etc)[22]. This will enable comparison on a common bases at PR24 and allow Ofwat to resolve ultimately what the efficient cost/service relationship is or to develop efficient marginal cost curves for service improvement.

29. Ofwat proposes two more potential 'targeted challenges' for Combined Sewer Overflows (CSOs) and Per Capita Consumption (PCC). We agree that these areas are important but in the first instance any such 'targeted challenges' should be set based on customer evidence and support, and setting a blanket challenge for percentage reductions, irrespective of relative current performance, is not always appropriate. There is also no need to set them with such an absence of data and evidence as was done at PR19. If Ofwat is seriously considering setting these challenges then they should require companies to report spending on these activities now. We are seeing that significant additional investment requirements are likely to be needed to deliver the 15% leakage target which we were not funded for[23]. Where these targets are set it is important that customers are aware of and accept the expected impact on bills to meet them.

Risk and return proposals will drive further material change in an area requiring regulatory stability and predictability for little obvious benefit

30. We are surprised that Ofwat appears to continue to press many of the arguments and changes in the risk and return area that failed to convince the CMA. Examples of this include its apparent interest in reconstructing mechanisms to address its unproven concerns around higher gearing which the CMA roundly rejected and proposals to change the notional financing structure to address financeability which the CMA clearly chose not to pursue, instead focusing on setting the correct cost of capital[24]. Furthermore, we are concerned that its proposed changes to the Cost of Equity and Cost of Debt may attempt to move away from the CMA's final decisions in future, for example by ignoring the CMA's use of AAA corporate bonds in setting the risk-free rate or by prolonging the complex and difficult debate about what constitutes the appropriate 'average' cost of embedded debt across the sector which the CMA found 'surprisingly difficult'[25].

31. We are surprised that Ofwat continues to propose further material change in an area which, perhaps more than any other, now needs stability. After significant change at both of the last price resets, an unprecedented four appeals to the CMA and probably the most detailed review of the risk reward area ever undertaken in water since privatization by the CMA all within a period of enormous market volatility and in a sector that needs to attract substantial long-term capital investment[26], now is surely not the time for major reform.

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[22] *We note that Ofwat's recent RAG consultation requests data for leakage, but we are unclear why only this performance commitment has been requested*

[23] *See CMA decisions to allow Anglian, Bristol & Yorkshire enhancement funding to deliver leakage reductions , para 8.205 onwards, and further evidence in 2020/21 APRs.*

[24] *Regarding GOSM, see CMA final determination para 9.1222 onwards. Also para 10.125 re. broader points*

[25] *See CMA final determination, para 9.538 onwards.*

[26] *See NIC's work on "preparing a drier future" - https://nic.org.uk/app/uploads/NIC-Preparing-for-a-Drier-Future-26-April-2018.pdf and in particular Annex 1 on "the size of the problem". The report suggests that £21bn of investment will be needed to build resilience in water supplies.*

Figure 4: Some key changes to the risk and reward area

PR14	PR19	CMA redetermination
• Introduction of totex modelling • Introduction of separate wholesale price controls and retail margins • Introduction of Outcome Delivery Incentives • Use of iboxx trailing average for setting the embedded cost of debt	• Addition of water resources & bioresources controls • 50% move to CPIH indexation versus RPI • Change to calculation of the TMR including the approach to inflation • Move to a spot ILG rate for setting the RfR • Introduction of debt indexation • Expansion of debt outperformance sharing • 'Aiming straight' on the cost of equity • Gearing Outperformance Sharing mechanism • Move to 'in-period' ODIs • Asymmetric cost sharing	• Use of AAA bonds alongside ILGs to set the RfR • Use of RPI and CPIH to set TMR • 25 bps adjustment to the Cost of Equity to reflect downside risk • Use of actual company data to set the allowed cost of debt • Adjustments to beta to remove outliers from the dataset • 'Aiming up' • Rejection of GOSM

Source: NWL comments on Ofwat's PR14 and PR19 methodologies and the CMA decisions '21

32. It is also not clear that Ofwat's proposed changes are addressing any real problems for PR24. On financeability, for example, looking ahead to that review we would expect historical debt allowances to fall under an evolution of the data but with the potential for inflation and the flatting or rise in gilts in line with interest rates it is quite possible that the cost equity will rise. This is likely to improve credit metrics at PR24 compared to PR19. The expected full transition to CPIH will provide yet further headroom, so financeability is likely to be less of a concern at PR24 and the change to notional gearing proposed will deliver limited value but add significantly to regulatory uncertainty. A move to 55% gearing would imply a significant 7.5% change in the notional gearing assumption in just two AMP cycles. Furthermore, given the uncertainty of the trajectory of long-term inflation and therefore interest rates[27] the move to indexation of the risk-free rate could therefore drive an increase in customer bills.

33. We support the transition to full CPIH indexation in PR24 unless there is a need to soften bill impacts for affordability purposes, this was clearly trailed at PR19 and anticipated. Indeed, we note some companies are already fully transitioned. RPI is no longer a National Statistic and the UK Government have confirmed they will no longer be using RPI post 2030. Based on current forecasts for the cost of new debt over 2020-25, it seems possible that the fall in embedded debt costs by 2025 should largely offset the increase in the real cost of capital due to full transition to CPIH. We note that the change to CPIH inflation has no impact on the quality of historical inflation estimates, for example used in the calculation of the TMR.

[27] *See for example the recent House of Lords report on quantitative easing: https://publications.parliament.uk/pa/ld5802/ldselect/ldeconaf/42/4202.htm , the latest Bank of England monetary policy reports and the wide variance in forecast inflation https://www.bankofengland.co.uk/-/media/boe/files/monetary-policy-report/2021/may/monetary-policy-report-may-2021 and other press commentary https://www.theguardian.com/business/2021/jun/30/bank-of-englands-andy-haldane-warns-of-inflation-rises*

2 DETAILED RESPONSE TO OFWAT QUESTIONS

34. Our responses to Ofwat's individual questions are set out below. Note that we have chosen not to respond to 4.6, 5.4 and 6.6 which relate to the regulatory framework in Wales.

2 AMBITIONS FOR PR24

2.1 DO YOU AGREE THAT THE THEMES WE HAVE SUGGESTED FOR PR24 ARE APPROPRIATE FOR ENGLAND AND FOR WALES?

35. We welcome Ofwat's stated focus on the long-term, reflecting the externalities of environmental and social value and a clear understanding of customers and communities. We also support the focus on efficiency and innovation.

36. Ofwat needs to consider how the mechanics of its regulatory framework and decision making can be improved to maximise the incentive for companies to focus on these themes and to facilitate meaningful progress towards them. Our answer to section 3.1 signposts our suggestions for improvements.

37. As well as the themes suggested by Ofwat, we would welcome a similar focus on a. simplification of the regulatory framework and b. long term stability and predictability of the regulatory framework (which is explored further in response to Section 4 and Section 11.

2.2 Do you have comments on the considerations we've identified as relevant to the design of PR24?

38. In relation to the considerations highlighted by Ofwat in section 2.3 "How we'll get there" of the consultation document, our views are as follows:

39. ***"Providing more clarity about how we'll conduct price reviews in the long term, while retaining the ability to adapt"***

40. **We are supportive of providing long term clarity**, and set out more detailed thoughts in our responses to:

- Section 4 (increasing focus on the long term)
- Section 5.5 (incentivising high quality plans)
- Section 7.1 (bringing together the outputs from strategic planning frameworks)
- Sections 10.3 and 10.4 (setting allowed costs to achieve long term ambitions)
- Section 10.6 (long term, efficient funding of service levels)
- Section 10.8 (coverage of long term planning frameworks in relation to resilience)

41. ***"Streamlining the price review without losing the benefits of sophistication"***

42. **We do not support Ofwat's proposal to reduce the number of steps in the price review process**, potentially combining the IAP and DD stages. We believe that this misunderstands the complexity issue. It is the complexity of the price review framework in terms of the number of price controls, PCs and ODIs, cost models, other efficiency challenges, etc that drives the regulatory burden and it is these building block elements that need to be rationalised. The complexity creates a clear need for substantial engagement with the regulator during the process, reducing this engagement does not help aid the process or reduce the burden it merely increases the scope for misunderstanding and miscommunication. We consider that the three stages should be retained.

43. ***"Reflecting local and national diversity in the price review, while maximising the benefits of comparability across companies"***

44. **We are supportive of reflecting diversity in the price review**. We consider that centralising key aspects of customer engagement may be a barrier to this – for more detail see our response to Section 6.

2.3 How should we evaluate our progress, and how can we best develop or use appropriate metrics to do so?

45. Ofwat should be commended for conducing explicit exercises to evaluate the success of both PR14 and PR19 as well as the outturn of AMP6[28], and in time we hope an exercise will be conducted to evaluate the success of PR24.

46. Ofwat has also established very strong and consistent data capture systems which enable it to track progress and which contribute to the above evaluations by allowing consistent and robust measurement of progress.

47. However, Ofwat needs to avoid use of its own teams to conduct these evaluations, and take steps to ensure a greater degree of independence. We specifically refer Ofwat to HM Treasury's "Magenta Book" which sets out Central Government guidance on evaluation.[29] In particular it states that to be of high quality evaluations need to be 'credible', in particular:

48. "*To be useful, evaluations need to be credible. This is often achieved through ensuring a degree of objectivity. This can be achieved through the evaluation work being conducted by an independent group of evaluators, or through respected independent figures steering and peer reviewing both the design and outputs of the evaluation work. Transparency is crucial."*[30]

49. Both of the PR14 and PR19 evaluations were undertaken internally by Ofwat and led by people who worked directly on those price controls. An independent evaluation would have greater credibility.

3 HOW WE REGULATE

3.1 How can we best regulate the water sector to deliver value for customers, communities and the environment? Do you agree, or have comments on, our suggestion to maintain our 'building block' approach based on outcomes, costs and risk and return?

50. We are supportive of Ofwat retaining the fundamental building blocks in relation to Outcomes, Costs and Risk and Return as per the CMA's conclusions. We make specific suggestions for improvements to the regulatory framework in these areas in our response to sections 9, 10 and 11 respectively.

51. The regulatory regime generally aligns the interests of consumers and shareholders well which we support. The stretch on outcomes and costs was debated significantly at PR19 and there was limited empirical evidence about what the appropriate level of 'stretch' should be - taking into account the relationship between costs and service levels. Ultimately the CMA made a number of significant adjustments to Ofwat's PR19 Final Determination including softening the efficiency and productivity challenge that was applied[31], taking account of the 2019/20 cost data[32] and allowing additional funding

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[28] *See PR14 call for input: https://www.ofwat.gov.uk/consultation/pr14-review-call-for-input/ and PR19 review: https://www.ofwat.gov.uk/regulated-companies/price-review/2019-price-review/pr19-lessons-learnt/*

[29] *See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879438/HMT_Magenta_Book.pdf*

[30] *See p16 of above*

[31] *See CMA final determination pages 215-298*

[32] *CMA's decision to include 2019/20 data in base cost models – CMA final determination para 4.39 onwards.*

for leakage[33] amongst other changes. We support the 'building block' approach as Ofwat describes it where it is based on solid empirical evidence. In line with our strategy of being the leading water company we consider that yardstick regulation should set stretching but achievable targets for customers and stakeholders and should reflect the upper quartile benchmark on cost and service performance across the sector. We also agree it is important to ensure that customers do not pay more than the efficient costs needed to achieve these Outcomes, however, benchmarks need to be credible and based on strong empirical evidence of company performance **in the round**, not based simply on the performance of one hypothetical super company.

52. To enable this Ofwat needs to strengthen its understanding of the link between cost and service, and reflect this when setting future PCLs and base cost allowances. We elaborate on this further in response to Q10.5.

53. Further suggestions for improvements to the regulatory framework to deliver the desired objectives at PR24 can be found in our responses to:

- Section 4 (increasing focus on the long term);
- Section 5 (strengthening incentives);
- Section 6 (reflecting customer preferences);
- Section 8 (design and implementation of price controls); and
- Section 11 (risk and return).

3.2 To what extent is greater co-ordination required across the sector? In what ways might we promote better co-ordination across companies and with other sectors, and how might this benefit customers?

54. In our view the key area to focus on is improving alignment across the various strategic planning frameworks and regulators, and the associated decision making. We make a number of specific suggestions in the remainder of our response, including in:

- Section 5.5 (incentivising high quality plans)
- Section 7 (planning together)
- Section 10.8 (Strategic planning frameworks and operational resilience)

4 INCREASING FOCUS ON THE LONG TERM

4.1 What are your views on the need for greater focus in companies' regulatory business plans on how they will deliver for the long term?

55. We are supportive of a greater focus on the long term.

56. It is important that Ofwat's regulatory framework fully accommodates the potential outputs from improved long term planning, and in so doing effectively incentivises companies to robustly set their five year business plans in a long term context.

4.2 What should long-term strategies seek to cover and what details should we expect companies to set out in business plans? Would common requirements help us and other stakeholders to understand each company's approach?

[33] *See CMA decisions to allow Anglian, Bristol & Yorkshire enhancement funding to deliver leakage reductions , para 8.205 onwards*

57. In our view, long term strategies should cover similar areas to those considered for previous Strategic Direction Statements[34] incorporating the following key elements:
    - Long term service delivery strategies for water, wastewater and retail systems and their implications for investment including:
        - to ensure security of supply (on both the water and wastewater networks through WRMPs and DWMPs); and
        - to deliver long-term service levels for core common service metrics or PCs based on customer engagement evidence and ambitions set by Government and other regulators (including other long-term strategies such as the WINEP, RBMPs, etc).
    - A long-term view on the scope and role for markets, innovation and productivity improvement to support the delivery of those strategies.
    - Long term strategies for the financing of that investment.
    - The overall implications for bills and affordability interventions that could support those strategies.

58. ***Future Scenario Planning***. In order to understand the likely range of long term trends in external factors which are relevant to the development of water company plans. For example trends relating to climate, affordability, demand, customer expectations and behaviours, risks, stakeholder and regulatory expectations and so on. This will provide a basis against which companies can test their strategies and plans, and particularly the resilience of those strategies and plans to future shocks and stresses.

59. ***Customer engagement throughout*** to understand the service level targets customers support and their support for or disagreement with different interventions, investment choices or profiling. This will help to ensure that customers endorse the key aspects of long term strategies, particularly service levels and investment levels.

60. Long term strategies will need to align with outputs from the other strategic planning frameworks – we elaborate further on this in our answer to Q4.3, below.

61. We do not consider that common requirements are generally necessary – companies should be able to conduct this activity themselves, thus creating scope for innovation, differentiation, and industry wide learning. These approaches would also build upon the previous long-term planning exercises such as Strategic Direction Statements. The timeline for PR24 is also unlikely to accommodate the provision of significant common requirements. Our PR24 work programme at NWL dictates that work on our long term strategy is substantively completed in 2021, following which our focus moves on to developing our five year delivery plans and other companies may well structure their work programmes in a similar manner. This means that any common requirements are likely to be provided too late to have any meaningful impact on long-term strategies in any event. Ofwat could set out during the summer of 2021 guidance on the risks that it wished to see in companies long-term assessments and guidance to support effective and comparable long-term scenario planning.

62. Long term planning by its nature implies that there will be inter-temporal choices about investment, service improvement and other factors. Ofwat could also set out the evidence it would expect to see and in what circumstances it would support changes to the proposed investment profiles or service level targets of companies that deviate away from its central view of 'efficient' costs and service levels as defined through its 'building block' approach. This would similarly need to be available rapidly to support companies long-term planning exercises.

4.3 How would this build on the work completed in strategic planning frameworks?

63. This would bring together the various strategic planning frameworks into a holistic whole for each company alongside the expectations for long-term service delivery strategies. It would also enable

[34] See: https://www.ofwat.gov.uk/publications/strategic-direction-statements/

scenario analysis to consider risk and resilience shocks and stresses and incorporate systems thinking wherever possible. Effectively we would envisage these long-term planning exercises as recognising the interventions needed in each of those strategic planning frameworks and bringing them together to consider and stress test in a holistic way all of these elements.

64. In previous long-term planning exercises assessments have been highly qualitative. However, we hope that greater clarity on long-term service performance targets, more evolved and expanded long-term strategic planning frameworks (WRMP, DWMP, etc) and developments in technology will allow these assessments to be undertaken in a much more rigorous and quantifiable way.

4.4 How can we allow such strategies and plans to adapt to new information at future reviews while continuing to hold companies to account to deliver expected benefits into the future?

65. This could be facilitated by gaining an understanding of the reason why adaptations are required. For example:

- If adaptations are required because previously funded investments have under-delivered, then Ofwat should continue to hold companies to account for this via PCDs – see our responses to Q4.7 and Q9.2
- If adaptations are required to prevent a deterioration in external risks (i.e. climate) from impacting service levels, then funding should be allowed at the next review to address this – see specifically our responses to Q4.7 and in turn Q10.1.
- Conversely if there is an amelioration in external risks, and this is resulting in improved service levels, then Ofwat could consider tightening PCLs at the next review.
- If service levels improve, but this is instead the result of additional investment made by companies - justified by expected long term returns from the ODI framework, then Ofwat should not necessarily automatically tighten PCLs in response. (See our response to Q10.6.)

4.5 Would providing our views on comparable aspects of companies' plans in advance of business plan submission streamline the price review process?

66. As stated elsewhere in this response, early clarity on Ofwat expectations for service levels, cost allowances, and returns is welcome. Early clarity on these expectations allows companies to consider how and whether the overall stretch proposed can be achieved and whether they can support the package envisaged by Ofwat and if not what evidence they have to suggest an alternative approach. At the same time it also allows companies to consider where and how they may be able to go further than the level of stretch proposed by Ofwat pushing out the frontier of service or efficiency that could form the basis for differentiating between plans. Any expectations which are set out need to be aligned, for example Ofwat views on returns need to be aligned with the level of stretch and hence risk inherent in its expectations for service levels and costs.

67. If Ofwat wishes to streamline the price review process, then it needs to reduce complexity in terms in terms of the number of price controls, PCs and ODIs, cost models, other efficiency challenges, etc. As set out in the Executive Summary and section 2.2, reducing the number of steps in the price review process is not a substitute for this. Doing so without tackling the underlying complexity simply reduces engagement and increases the scope for misunderstanding and miscommunication whilst working within a very complex regulatory framework.

4.7 What are your views on how we could provide clarity over the long-term regulatory framework?

68. ***"Holding Companies to Account for Past Investment"***

69. We fully agree that customers should get the benefits they paid for, especially with regards to enhancement investment.

70. We agree with the use of PCDs to achieve this, and in our response to Q9.2, we set out suggestions for a standard framework for setting PCDs.

71. ***"Providing Greater Clarity over Future Incentives"***

72. We support Ofwat's aim of increasing the clarity of the incentives that mighty be available in future price control periods – this will strengthen the incentive for companies to invest in service improvements over multiple regulatory cycles and provide much needed clarity on the regulatory model across multiple AMPs that will support longer-term investment decisions.

73. To enable this it would be necessary to not only indicate future ODI incentive rates, but also future PCLs, as without an indication of both it will not be possible for companies to calculate the future costs and benefits associated with any intervention. It may be possible to establish broad "tramlines" within which companies could operate that could be finalised in future price reviews but this would increase complexity and just knowing the incentive rate is unlikely to be sufficient on its own to drive confidence in investment choices.

74. Offering future clarity would undoubtedly be beneficial, but Ofwat would also need to address some associated challenges, for example:

- How to respond if companies appear to be earning excessive rewards in the current period, which the tramlines indicate would be sustained into the future. Ofwat may want to consider different forms of customer protection to address this. It is also possible that future service levels may prove unachievable, and a mechanism for adjustments in the opposite direction may be required.
- Setting future tramlines for service, would require assumptions to be made regarding future base cost allowances, at a time when, at best, Ofwat will only just be starting to better understand the link between cost and service (see Q10.5). Sufficient flexibility would need to be retained to allow for this.

75. Ofwat also considers whether in order to strengthen the incentives for resilience, ODI outperformance payments for improved service should be deferred to future periods and only paid if improvements are sustained.

76. In the move from PR14/AMP6 (where the majority of ODIs where applied to the RCV at the end of the period) to PR19/AMP7 (where the majority are applied directly to revenue, in period), Ofwat observed that incentives are greatest if applied closer in time to the performance which generates them, in particular that:

77. "*Bringing the financial impact of an ODI closer in time to the performance that generated it focuses management on service delivery and improves companies accountability to their customers*"[35].

78. We agree with this observation, and do not support deferral of ODI incentives. Further, deferring rewards without similarly deferring penalties, would create asymmetric risk, while deferring both would significantly dilute the strength of the framework.

79. Ofwat also needs to accept that interventions which address/mitigate a deterioration in risk (for example climate risk) cannot reasonably be funded via the ODI framework. By definition these investments are

[35] *Ofwat PR19 Final Methodology, p61. https://www.ofwat.gov.uk/wp-content/uploads/2017/12/Final-methodology-1.pdf*

required to maintain stable performance levels, and cannot reasonably be expected to generate ODI rewards from improved performance. Further, they can only be funded via base costs if the associated cost models are based on forward looking cost drivers which capture this risk – which is not currently the case (see response to Q10.1). Accordingly, these types of investment can only currently be funded as enhancements.

80. In line with this, when the WRMP process identifies that increased drought risk has an adverse effect on the water supply/demand balance, it is generally accepted that interventions to address this (for example new water resources) are funded as enhancement (and cannot reasonably be funded by, for example, ODIs attached to improved Interruptions performance).

81. However, when deteriorating climate trends increase flooding risk, Ofwat's assertion previously has been that corresponding interventions can be funded via the ODI framework. Ofwat needs to reconsider this assertion in light of the above observations, and also the information provided by NWL during the recent CMA process which indicated that this was not always feasible[36]. This will become increasingly pertinent as DWMPs give greater clarity on future risk.

4.8 Are there barriers to water companies changing how they deliver their core functions to deliver greater environmental and social value? How can we address any barriers?

82. We are supportive of the increased focus on delivering greater environmental and social value, however this does raise a number of questions challenges regarding the current regulatory framework, which would need to be addressed.

83. In particular, companies currently tend to focus on delivering interventions which give the maximum future benefit (for example to service levels), for minimum cost – an approach which is heavily incentivised by the current regulatory model. These interventions do not always align with those that would deliver broader environmental and social benefits. For example, in order to address sewer flooding, network cleansing and traditional network solutions may have a stronger and more direct benefit than nature based and blue/green drainage solutions.

84. Conversely if companies did focus on the types of solution that delivered broader benefits, this may result in lesser direct benefits (per £) in terms of service level improvements.

85. This challenge has been partly recognised in the recent report from the National Infrastructure Commission[37], in particular that:

    "*the reliance on benefit-cost ratios for option selection in appraisal can come at the expense of clearly defined strategic direction, meaning projects' contribution to the delivery of government's strategic goals, such as environmental net gain or net zero, is not considered.*"

86. Addressing this is complex, and would require as a minimum:

    - for assessments of wider public value the key gap is a common framework for valuation of wider externalities. These assessments are notoriously difficult, and we note that it has taken multiple price controls to reach a common position on the best approach to stated preference research and willingness to pay, in many ways other externality pricing is likely to be even more complex. Ofwat should support an industry wide exercise to provide tramlines for these values in order to avoid the

[36] *NWL to CMA, Post Hearing Response, 17th August 2020, Section 2.1.2*

[37] *Natural Capital and Net Gain –a discussion paper" p22*

WTP issues seen at PR19 being replicated. Note that UKWIR has already initiated some work in this area[38].; and

- an improved understanding of the costs associated with these broader benefits, which could be done in a similar manner to understanding the cost service relationship in the broader sense – see answer to Q10.5.

87. Reflecting these valuations and costs in Ofwat's cost assessment approach is likely to be equally complex, and we would suggest that Ofwat attempts this for enhancements first, before seeking to incorporate them in its approach to determining base costs.

88. More broadly Ofwat also needs to recognize that where investments are prioritized on a wider externality basis this may well support investments that do not support service enhancements (which will typically involve schemes that more directly support service improvements) or other common core benefits that companies have focused upon. This change is fundamental and Ofwat will need to recognize that.

89. Given the challenge and scale of the change we suggest that for PR24 Ofwat focusses on building this framework and the wider benefits assessment for enhancement investments only, applying it to base costs will likely be too great a step in a single control. Accordingly, within the CBA for enhancements Ofwat should set out guidance for how enhancement cases will be assessed.

90. We make a number of further observations specifically in relation to net-zero:

- Net zero needs a common definition across the sector- we initially suggest a move to version 15 of carbon accounting workbook.[39]
- Ofwat needs to recognize that that achieving net zero involves some initial relatively achievable lower cost steps and then gets prohibitively more expensive - this implies the cost and service relationship involves substantially increasing marginal costs that are unlikely to be well served by a backward looking base cost model approach i.e. it would need to be addressed as an enhancement – see above
- Ofwat's framework for addressing net zero (as defined through the Green recovery process) whereby companies initially take forward cost beneficial investments, seek to influence policy and seek partnership funding before eventually taking recourse back to customers broadly works but this still implies that there may be strong cases for enhancement funding at PR24
- The move to net zero also clearly implies growing power prices above inflation, this is supported by BEIS forecast and evidence we submitted to the CMA and we are seeing this reflected in our own power prices. The industry should have a higher cost allowance for power and/or different cost sharing rates for these costs which are largely outside of management control.

91. Finally, with regards to achieving net zero, there are some aspects of the current regulatory framework with regards to treatment of non-regulated versus regulated activity, and use of non-appointed versus appointed assets, which do not always lead to the optimum outcome. We refer Ofwat to our response to its Public Value consultation.[40]

4.9 Do you have any further suggestions for increasing the focus on the long term? If so, what are these?

[38] *See UKWIR project RG/05/a/250 – BQ08 – Future Asset Planning Scenarios, Frameworks & Measures*

[39] *See NWL 'Annex 2" Submission on Greenhouse Gases ODI, 11/06/2021*

[40] *NWL response to Ofwat's Public Value Consultation - February 2021*

92. In our response to Ofwat's review of PR14, we made the case for longer control periods.[41] We consider that this suggestion warrants further consideration.

5 STRENGTHENING INCENTIVES

5.1 Should we undertake an initial assessment of plans at PR24? If so, what areas should we focus on in this assessment?

93. At PR19 Ofwat's initial assessment of plans (IAP) acted as a powerful incentive for companies to submit stretching plans – with the level of stretch being materially greater than observed at PR14. We support a similar approach at PR24, and the retaining of financial, reputational and procedural incentives.

94. However, we believe that in light of recent CMA redeterminations, where uplifts granted to the appellant companies were greater than the additional benefits gained by Fast Track companies, Ofwat will need to consider taking steps to strengthen the IAP framework either by increasing the scale of the incentives or by lowering the bar for what constitutes a 'fast track' plan. Without this incentive companies may choose to adopt a more cautious approach to the business plan, expecting Ofwat to seek more stretch and therefore holding back in their plans, this would not be a good outcome for customers and we maintain that the value gained from these incentives is generally greater than the value gained from the comparative benchmarking during the PR process.

95. For illustration, the PR19 Business Plans submitted were as ambitious as the PR14 FD targets, as companies accepted the incentivised challenge in the IAP framework. It is unfortunate that this incentive was undermined when Ofwat decided that no company plan would be classed as exceptional. Confidence would be somewhat restored were Ofwat to commit to awarding exceptional and fast track status to a specified number of companies in advance, a league table approach.

Table 3: PR19 Business Plan Ambition

	PR14 FD	PR19 BP	PR19 FD	Notes
Appointee WACC (nominal)	6.86%	5.47%	5.02%	The change in the WACC is driven in part by market movements which are independent of the incentive but almost all companies accepted Ofwat's 'early view' WACC in their business plans, driven by the business plan incentive.
Average Bill reduction	-5%	-5%	-12%	Average bills are driven by a range of factors but also include the efficiency offered in plans which we believe was partly driven by the strength of these incentives.
Leakage reduction	-5%	-16%	-16%	Companies accepted Ofwat's 15% target again this was driven by the business plan incentive.
Interruptions to Supply	-32%	-36%	-41%	Companies offered more 'stretch' on many common service levels again in part driven by the business plan incentive.

Source: NWL Analysis of Ofwat's PR14 FD, Company business plans and the PR19 FD

96. Ofwat also needs to review the test areas, to ensure that greater weight is placed on those areas of greatest importance to customers – such as bills, affordability, service levels and customer acceptability and less weight is placed on how companies respond to other elements of the regulatory framework for example markets, board assurance and governance.

[41] *NWL response to Ofwat's call for input on PR14 – January 2021*

97. In line with Ofwat's aim to simplify the assessment process, Ofwat could go further and set a very simple and bold threshold test in relation to bills, service levels and potentially customer acceptability – and companies who pass the test could be fast tracked through the assessment straight to an early FD. This would be facilitated by Ofwat's proposal to share an early view of costs, service levels and allowed returns. It would focus on the core elements of company business plans and their proposed 'stretch'.

98. Finally, while we can understand why Ofwat may not want to set out too much detail in advance on how the tests will apply (the risk being that companies may game the test), we consider it vital that Ofwat does take steps to improve the transparency of the process – particularly with regards to how much weight it has placed on each test area as this was a key area of misunderstanding at PR19.

5.2 Should we consider adopting a more light touch approach at PR24 for companies with a strong track record of delivery during the PR19 price review period? If so, what factors should we consider in our assessment and why?

99. The regulatory framework should seek to align customer and shareholder interests, and in particular we observe that the best performers in business plan assessments at previous IAP (or RBR) do not align with those who are the strongest performers on efficiency and service – on a ranked basis.

100. Clearly the tests involved at IAP should seek to balance past delivery with the quality of future plans, but as this is primarily a business plan assessment, greater weight should be placed on the latter. We note that the weight applied to the former should reflect the extent to which reconciliation mechanisms already protect customers against under-delivery.

101. In any case, it is the overall assessment across all test areas that should be used to determine any procedural incentives – not any individual test (i.e. past delivery).

102. Finally, Ofwat should take care to ensure that there is not too much divergence between its views on the quality of plans at IAP and the strength of past delivery – this could raise reputationally damaging questions for the industry.

5.3 Should we streamline the price review by combining different steps in the process? If so, which of the three options outlined in this paper should we consider? And are there other options we can usefully consider?

103. We do not support reducing the number of steps in the price review process, i.e. potentially combining the IAP and DD stages. We believe that this misunderstands the complexity issue. It is the complexity of the price review framework in terms of the number of price controls, PCs and ODIs, cost models, other efficiency challenges, etc that drives the regulatory burden and it is these building block elements that need to be rationalised. The complexity creates a clear need for substantial engagement with the regulator during the process, reducing this engagement does not help aid the process or reduce the burden it merely increases the scope for misunderstanding and miscommunication. We consider that the three stages should be retained.

104. To retain 'fast-track' style incentives Ofwat could sensibly align the Draft Determinations of both groups of companies or simply set an early Final Determination for Fast Track companies. We note that at PR19 it seemed that fast tracked companies were effectively given two Draft Determinations with the second being the DDs for slow track companies.

5.5 What incentives should we provide for high quality plans at PR24? If we don't make use of early draft determinations, how else might we strengthen incentives to table high quality plans on first submission?

105. See answer to Q5.1

5.6 How might we set cost sharing rates at PR24? Should we consider an approach based on our ability to monitor companies' asset health status?

106. At PR19 Ofwat applied asymmetric cost sharing to maintain strong incentives on companies to deliver stretching cost estimates in business plans in the context of asymmetric information.

107. The CMA, took a different view however, and corrected Ofwat's rate to bring them much closer to a symmetrical 55% / 45% position.

108. Ofwat should ensure that it fully reflects the CMA's view on cost sharing rates in the particular that:

- The objective of cost sharing rates should "be consistent with the broader regime of objectives of providing incentives to optimise investment"[42]
- The formula Ofwat applied to determine the sharing rates (at PR19 – i.e. asymmetric rates) may incentivise companies to submit unattainably low totex estimates in order to secure more favourable sharing rates"[43]
- Be sufficiently close to symmetric cost-sharing rate to avoid creating a significant risk of perverse incentives, particularly over multiple periods. [44]

109. We believe Ofwat overstates the value of using different cost sharing rates as an incentive to submit lower business plan costs. As we set out to the CMA, this approach has a chilling effect on companies that consider proposing risky, innovative schemes that may be ruled out by Ofwat on scope grounds, yet are treated as inefficiency in the totex assessments.

110. In response Ofwat needs to re-introduce the two sided adjustments mechanism, where schemes disallowed on a scope basis are removed from the business plan figures when calculating cost sharing rates.

111. In our view Ofwat's approach overlooks the extent to which company performance is incentivised by the strength of the cost sharing rate. When totex performance in water and energy price controls is analysed, there is a strong relationship between totex performance and the cost sharing rates that were set as part of the control. We analysed data through an econometric model that seeks to identify the impact of each company's cost sharing rate on totex performance between companies and between price controls. The model shows a statistically significant relationship between totex performance and the cost sharing rate. This is shown in Figure 5 below, which presents the coefficient estimates and their standard errors in parentheses.

[42] *CMA final determination para 6.97*

[43] *CMA final determination para 6.103*

[44] *CMA final determination para 6.105*

Figure 5: Econometric model results of impact of cost sharing rate on totex performance

Variables	Model output
Electricity Distribution	28.402 (10.06)
Transmission	19.785 (10.04)
Gas Distribution	26.296 (10.60)
Water	30.511 (10.31)
Wastewater	25.073 (9.99)
totex cost sharing rate (%)	-0.538*** (0.17)
No. of observations	118
R-squared	0.232

Source: NWL analysis

112. The cost sharing rate variable in our analysis was found to be statistically significant suggesting a strong relationship between the cost sharing rate and totex performance. The coefficient on the cost sharing rate of -0.54 implies that a 1 percentage point reduction in the cost sharing rate has been historically linked a 0.54 percentage point worsening in totex performance. This implies that the 16.4% reduction in the outperformance cost sharing rate between PR14 and PR19 could worsen totex performance by 8.8%, based on historical precedent. The analysis shows the value of incentive-based regulation under the yardstick regulatory model for water companies in England and Wales using the example of cost performance at PR14. It also shows how strong incentives can drive strong outperformance which customers benefit from significantly. We observe that there has been a steady erosion of some of these incentives under successive price control regimes over time, including PR14. Ofwat needs to consider more carefully the incentive properties of the overall price control packages that it is putting in place at future controls to ensure that incentives remain strong to drive outperformance otherwise benefits to customers will be reduced.

113. With regards to Asset Health specifically, we do strongly support Ofwat examining incentives for companies to maintain the health of their asset base.

114. Ofwat expresses concern that high cost sharing rates might incentivise companies to cut back on asset health. However, our analysis of AMP6 shows that the industry (and NWL specifically) spent capital maintenance in line with the Final Determination, whilst incentive rates of 50% were in place. Instead our view is in line with CMA's – that asymmetric sharing rates may incentivise companies to submit unattainably low costs.

115. To strengthen Asset Health we believe the primary focus should instead be on enhancing Ofwat's cost assessment framework to better recognise the appropriate investment level needed to ensure a healthy asset base. The issue is best illustrated by the recent experience of Scottish Water where, recognising the level of capital maintenance investment was too low, the WICS redesigned the framework to better account for the appropriate investment rates for different asset groups/classes and introduce a better framework for addressing the future challenges of net zero.

116. Conversely Ofwat's historical approach of cost assessment appears to have allowed the companies that spent the least, perhaps because they had chosen to taken a holiday on some elements of capital

maintenance, to set the benchmark for the rest of the sector[45]. The scale of the delta between these two estimates we believe clearly suggests that the regulatory framework has underprovided for this investment.

117. We recognise that it will be a high-bar for what would be a significant and ongoing change and we agree with Ofwat that customers 'should not pay twice'. We note that the sector has generally not done this, and capex efficiencies have generally been delivered from enhancements in previous AMPs.

Table 4: AMP6 Business Plan v Actual £m

Capital maintenance	B Plan	Actual	Variance
NES	877	875	0%
Industry	15,861	16,149	2%

Source: NWL analysis

118. If additional capital maintenance funding was granted, we would support greater use of PCDs to give greater assurance that this is invested as intended, and for similar reasons asymmetric cost sharing rates may be beneficial for this element only – but not for broader totex allowances for the reasons set out above.

119. Whilst further consideration will be required, the widespread use of uncertainty mechanisms by Ofgem would be a useful area for Ofwat to consult on:

"There are five main types of UMs that we are using in the RIIO-2 price control:

- *Volume drivers to adjust allowances in line with actual volumes where the volume of work required over the price control is uncertain (but where the cost of each unit is stable)*
- *Re-opener mechanisms to decide, within the price control period, whether changes in allowances are needed, e.g. to deliver a project or activity once there is more certainty on the needs case, and costs*
- *Pass-through mechanisms to adjust allowances for costs incurred by the network companies over which they have limited control, e.g. business rates*
- *Indexation to provide network companies and consumers some protection against the risk that outturn prices are different to those that were forecasted when setting the price control, e.g. general price inflation or sector specific cost pressures*
- *Use-it-or-lose-it allowance to adjust allowances where the need for work has been identified, but the specific nature of work or costs are uncertain."*[46]

120. An increase in capital maintenance allowance could be accompanied by a re-opener based around one or more of these uncertainty mechanisms to protect customers.

5.7 Which areas should we be considering targeted challenges for at PR24, and why?

121. We note that Ofwat has highlighted Storm Overflows and PCC as potential areas for targeted challenges at PR24. We agree that both are highly topical and important areas, but we consider that service levels should be set based on customer views in the first instance rather than targeted challenges.

122. Secondly, any such challenges need to be based on a more robust understanding of the links between cost and service (see answer to Q10.5) and in turn need to be matched with the efficient cost of funding them. This would be consistent with the position that the CMA adopted on leakage.[47]

[45] *As evidenced by WICS approach to setting capital maintenance allowances for its 2021-27 price review - https://www.watercommission.co.uk/UserFiles/Documents/2019%20Asset%20Replacement_Final.pdf , Ofwat PR24 Consultation, Creating tomorrow together, e.g. p24,37, CMA final determination para 4.258 onwards,*

[46] *Ofgem RIIO-2 FD p56*

[47] *See CMA decisions to allow Anglian, Bristol & Yorkshire enhancement funding to deliver leakage reductions , para 8.205 onwards, and further evidence in 2020/21 APRs.*

5.8 Should we use innovation specific incentive mechanisms at PR24? If so what would these be, and what would they add in addition to the other mechanisms outlined in this chapter?

123. We support Ofwat's focus on innovation, and consider that it will be critical to meeting future challenges. We also believe that we have a leading approach to innovation across the sector[48] Part of this approach is a well-established and effective process for managing our "pipeline of innovations" from initial idea through to delivery. This process allows ideas to be defined, via a proof of concept, further developed in a real world trial, and then scaled up to full delivery. A significant number of ideas drop out along the way when they are proved not viable. This process is shown more completely below:

Figure 6: NWL Innovation Pipeline

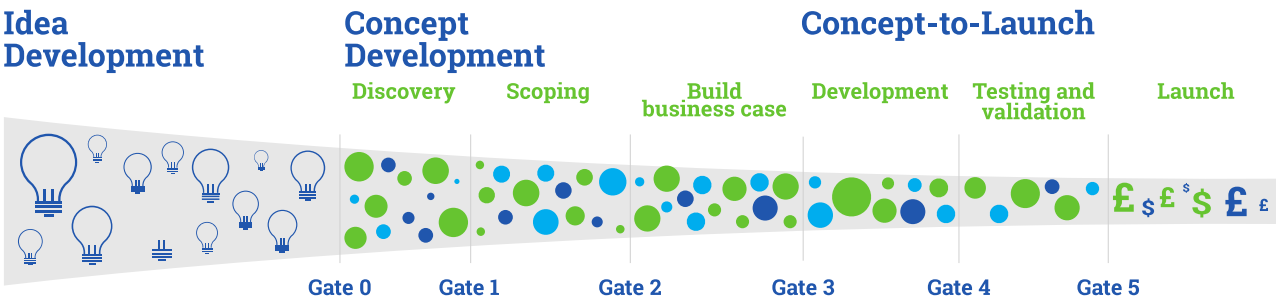

Table 5: NWL Innovation Pipeline Statistics – Number of current open projects by stage, and number completed

Idea Discovery	Definition/Proof of Concept	Development/Real World Trial	Delivery / Scale up to BAU	Completed (Successful/Discontinued)
5	28	10	23	52 (17/35)

Source: NWL analysis of Innovation pipeline projects

124. Examples of recent successful innovation projects include a mobile pressure vessel that can be used to maintain water supplies to a single or small number of properties while repairs are conducted on supply networks, and low cost flow sensors, used in conjunction with radio data networks, which can detect problems developing on rising mains.

125. We support the incentive framework including both:

- An assessment of innovation as part of any business plan incentive/IAP process AND
- Provision of targeted innovation funding

126. The major change at PR19 was the introduction of innovation funding streams[49]. These are still new and will take time to deliver benefit, noting that visibility of benefit after one price control cycle is likely to be limited given the lead times for this activity. We hence support the continuation of these schemes into AMP 8, as evaluation across a longer period should be more meaningful.

127. From our own leading experience we would highlight that relatively few innovations make their way to driving significant productivity improvement. Results from our own innovation pipeline show a success

[48] *As evidenced by Ofwat scoring us as B for Innovation (test CMI1) in its PR19 IAP, p76 of: https://www.ofwat.gov.uk/wp-content/uploads/2019/01/PR19-initial-assessment-of-plans-Summary-of-test-area-assessment.pdf*

[49] *As set out by Ofwat at: https://www.ofwat.gov.uk/regulated-companies/innovation-in-the-water-sector/water-innovation-competitions/*

rate in the region of 33%[50]. Further, in our experience most of these successful projects deliver small, incremental, improvements.

128. Hence we consider that assessments of productivity improvement are best made based on sector and economy wide assessments of productivity using input/output analysis or TFP improvement rates – as opposed to basing them on innovation funding – which is very small in scale compared to overall totex allowances and as shown above does not always lead to a fruitful outcome.

5.9 In what ways might we promote the themes of EBR through PR24?

129. The best way to promote EBR is to keep companies fully accountable for understanding their customer's needs, and responding to those needs in their future plans and services. This is inconsistent with centralising a significant portion of customer engagement – see our response to Section 6.

6 REFLECTING CUSTOMERS' PREFERENCES

6.1 What are your views on the merits of our proposals for a collaborative approach to standardised and/or nationwide customer research to inform company business plans and our determinations?

130. We do not consider that proposals for the future of customer engagement are the best way of reflecting a clear understanding of our customers and communities. These proposals replace company led engagement with a central regulator-led approach that will remove or dilute companies' ownership of their relationship with their customer.

131. **The proposals appear to ignore the success that has been achieved in customer engagement across successive price reviews.**

132. Since PR09 there has been a huge step change in the approach to and quality of customer engagement with customers of water and wastewater companies:

- At PR09 customer engagement was a three-stage process.[51] Stage 1 was company research with input from CCWater; stage 2 was stakeholder research led by CCWater; stage 3 was Ofwat led research with the results provided to companies.
- Customer engagement then evolved substantially at PR14 when Ofwat challenged companies to "take full responsibility for planning their business and listening to their customers, and not simply tick regulatory boxes."[52]
- For PR19, Ofwat built on the PR14 framework to make "further changes to empower and incentivise companies to address the future challenges that the industry faces".[53] Ofwat also encouraged companies to "to be much more innovative in their approaches to customer engagement."[54]

133. We strongly support this direction of travel. Encouraging companies to own the relationship with their customers, and reflect their preferences in their service offerings and future plans, rightly keeps companies fully accountable for delivering for their customers, and mimics the way that companies would operate in a competitive market place.

134. Given freedom at PR14 and PR19, companies were also able to be much more creative and innovative in their approaches. This allowed them to learn from each other and if given that same freedom for

[50] *i.e. 17/52 from the above table*

[51] *Ofwat, Setting price limits for 2010-15: Framework and approach, p15*

[52] *Ofwat, Setting price controls for 2015-20 – final methodology and expectations for companies' business plans, p3*

[53] *Ofwat, Delivering Water 2020: Our final methodology for the 2019 price review, p8*

[54] *Ofwat, Delivering Water 2020: Our final methodology for the 2019 price review, p22*

PR24, they will be able to be even more creative and innovative. Gamification, more creative and immersive exercises, and ethnographic research are all examples of improvements made by some companies at PR19- the current model works and continues to incentivize companies to focus on their customers preferences and seek new and innovative ways to engage with and understand them.

135. Companies already share best practice and learning from each other both within and outside of the water industry. For example, at the MRS Utilities Conference in 2017 we shared our innovative approach to taking customers on a journey to become active participants in the creation of their water services. In 2018, at the annual conference, we shared detail of our innovative service valuation tool.

136. The world has changed significantly since PR19 and the ongoing ramifications of the Covid-19 pandemic are likely to have significant consequences for the way engagement with customers is conducted at PR24, certainly in the early stages. Ongoing innovation will be vital to ensure that these challenges are overcome in a way that does not compromise the quality of that engagement.

137. We do not consider that Ofwat's approach of centralising engagement will improve outcomes for customers. We believe that it risks reversing the very positive trend seen in recent reviews and stifling innovation when it is needed most.

138. **The proposals are clearly at odds with wider regulatory precedent and thinking.**

139. Research across several other regulated sectors shows that the broader trend is to maintain the positive trajectory seen in the water sector over recent AMPs by encouraging greater ownership of the customer relationship. The table below looks at regulated network sectors including water regulation in other jurisdictions and other regulated network utilities where ex-ante price cap regulation is the predominant approach. This wider precedent would not support Ofwat's approach.

Table 6: Review of models for price review customer engagement in other regulated industries:

Sector	Observations
Water Industry - Scotland	Scottish Water is responsible for undertaking its own customer research to understand customers' preferences in relation to bills and service levels to inform business planning. The Water Industry Commission for Scotland (WICS) established the "Customer Forum for Water" to • "work with Scottish Water on a programme of quantitative and qualitative research to establish customers' priorities for service level improvement and expectations in terms of the level of charges; • understand and represent to the Commission and to Scottish Water the priorities and preferences of customers (as a whole) in the SRC 2015-2020 process as identified through the customer research; and • seek to secure, through its participation in that process, the most appropriate outcome for customers (as a whole) based on those priorities and preferences".[55] The forum was then requested to negotiate a settlement for Scottish Water's business plan, on behalf of customers[56].

[55] https://www.watercommission.co.uk/UserFiles/Documents/Legacy_report.pdf

[56] https://www.watercommission.co.uk/UserFiles/Documents/Legacy_report.pdf

	In broad terms, the Customer Forum acted initially as a CCG would at PR19, but then evolved to undertake a successful negotiated settlement (see section 6.3). We are unable to find any evidence to suggest that WICS undertook its own customer engagement in relation to the price review[57].
Northern Ireland Utilities	The Utilities Regulator for Northern Ireland (UREGNI) clearly identifies that NI Water should undertake its own customer research in relation to price reviews[58]. It then utilizes a partnership approach to provide of customer engagement for price reviews[59]. Stating that "we engage with principle stakeholders to identify and prioritise the outcomes that NI Water should deliver…"[60] The partnership approach, called the Customer Engagement Oversight Group (CEOG), is comprised of NI Water (Government Owned), Department for Infrastructure (DFI for NI Water) and the consumer representative (CCNI) and "supported stakeholders working together in the CEOG to advise and be informed about development and application of customer engagement."[61] The UREGNI are satisfied with the success of this format in relation to customer research at price reviews – a process similar to that of CCGs PR19, which we believe served the customer and company well[62].. We have been unable to find direct evidence to indicate that UREGNI undertook any price review customer engagement directly.
Civil Aviation Authority	Most airports in the UK are not subject to ex-ante price cap regulation. The exception to this is the ex-ante controls set on Heathrow Airports Limited (HALs) landing charges. The framework for this price setting is principally set through a 'negotiated settlement' approach whereby airlines negotiate directly with HAL the price and service levels offered in the settlement and the CAA effectively arbitrates over that process. In relation to the Heathrow Price Control Review (H7), Heathrow Airport Limited undertook its own customer research.[63] The CAA has then commissioned external providers such as Arcadis to review and assess how HAL has reflected consumer interest in its plan. The CAA utilises the customer challenge board (CCB) which was established in 2017 in partnership with the Heathrow Airport (HAL) and Heathrow Airline Community in order to strengthen the link between consumer outcomes and priorities and the regulation of HAL for the price control review. It acted as an independent advisory body to help assure HAL's business planning and consumer representation, customer research, economic and regulatory affairs, in a similar capacity to the customer challenge groups (CCGs) at PR19.[64] While the CAA commissions some of its own consumer research[65] - including the consumers survey which tracks customers' experiences of flying – this is broadly equivalent in Water to engagement on C-Mex, and ongoing research carried out by CCW on satisfaction.
Ofgem	Oversight of customer engagement for price reviews/business planning has most recently been provided by the RIIO2 Challenge group was established in September 2018. The objective of this group was to provide challenge to the energy network companies on their business plan for RIIO-2

57 https://www.watercommission.co.uk/view_Price_Setting_2021_27.aspx and https://www.watercommission.co.uk/view_Price_Setting_2015-21.aspx

58 https://www.uregni.gov.uk/files/uregni/media-files/PC21%20approach%20document.pdf page 12 and page 13

59 https://www.uregni.gov.uk/consumer-engagement-2

60 https://www.uregni.gov.uk/files/uregni/media-files/PC21%20approach%20document.pdf

61 https://www.uregni.gov.uk/files/uregni/media-files/PC21%20approach%20document.pdf page 13 and 14

62 https://www.uregni.gov.uk/consumer-engagement-2

63 https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/Licensing-and-price-control/Heathrow-price-control-review-H7/

64 https://www.caa.co.uk/Consumers/Guide-to-aviation/Consumer-Challenge-Board/ https://publicapps.caa.co.uk/docs/33/CAP%201476%20DEC16.pdf

65 https://www.caa.co.uk/Data-and-analysis/UK-aviation-market/Consumer-research/Analysis-reports/UK-Aviation-Consumer-Survey/

	and to Ofgem on their framework for RIIO-2, on behalf of existing and future consumers.[66] In broad terms this appears a combination of PR19 CCGs, and Ofwat's proposals for a PR24 challenge panel – as per Q7.14. We have found no evidence within their publications to indicate they undertake centralised customer research in relation to the core cost/service package at price reviews.[67]
ESC	The Essential Services Commission of Victoria (ESC)[68] began a review of its approach to setting water prices in 2016 which led to its PREMO model[69] for water price controls being established in 2018 and reflected in the current price controls. A key central tenant of the framework is companies engaging meaningfully with their customers. *'the pricing approach will pivot the businesses' attention squarely towards their customers. The water businesses will be required to express their price submissions in terms that reflect the outcomes they will be delivering to their customers. The future will be about customer outcomes rather than compliance with regulatory tick-boxes. Businesses are expected to couch their price submissions in terms that reflect the concerns, priorities and preferences of their customers, in order to achieve a successful regulatory outcome.'*[70] The approach has been independently evaluated and the ESC considered that it has delivered significant benefits for customers[71].

Source: NWL research

140. We have not found any evidence in the above examples of regulators conducting centralised customer engagement except in very isolated circumstances. The much broader and more obvious trend is for regulators to place the customer relationship with the company and provide incentives for companies to engage effectively with those customers through the price review often introducing independent challenge groups to support that process.

6.2 Do you have any suggestions for how we best implement the collaborative approach to customer research for the price review?

141. **If Ofwat does proceed with centralised engagement, this should focus on the stated preference valuation for common performance incentives**

142. We can see that there has been an issue with the diversity of the willingness to pay results for common performance commitment incentive rates at PR19 and that Ofwat may wish to undertake a piece of central research that is focussed entirely on this area and publish 'reasonable ranges' based on that research for companies to operate within.

143. However, what is proposed for the centralised research is much wider in scope than this and it is not obvious at all that the wider scope suffers from similar challenges or indeed addresses clear weaknesses or problems. Moreover, a very complex framework of governance architecture is proposed which feels unnecessary.

66 https://www.ofgem.gov.uk/publications/riio-2-challenge-group-independent-report-ofgem

67 https://www.ofgem.gov.uk/energy-data-and-research/ofgem-consumer-research

68 https://www.esc.vic.gov.au/water/how-we-regulate-water-sector

69 https://www.esc.vic.gov.au/water/how-we-regulate-water-sector/premo-water-pricing-framework

70 https://www.esc.vic.gov.au/sites/default/files/documents/Water-Pricing-Framework-and-Approach-Final-Paper-Oct-2016.pdf p.4

71 https://www.esc.vic.gov.au/sites/default/files/documents/victorias-water-sector-the-premo-model-for-economic%20regulation-20190411.pdf

144. Ofwat states that it may decide to give primacy to this research over other evidence- we would remind Ofwat that it must take all the evidence into account in reaching its decisions and that no one piece of evidence can ever be given 'primacy', and certainly not in advance of knowing the relative robustness of any competing evidence. Such an approach would also be at odds with the principles of triangulation of customer engagement evidence.

145. If Ofwat still considers that it must take forward this centralised research approach then we would encourage it to narrow the scope to the ODI incentive rate issues (which is the only genuine problem that has been articulated) and to develop much more standardised guidance for companies to operate within in other areas (see Q6.5).

146. This resolves the difference in expectations that arose at PR19, addresses the clear problem on incentive rates but also critically leaves the local customer relationship firmly with companies.

147. We consider that CCWater would be well placed to lead any central research that is conducted. Ofwat has not undertaken exercises like this in the past and so there is likely to be a capability gap and there are time constraints on when the information should be available. CCWater would be far better placed to undertake and lead any central customer engagement work given their substantial expertise in customer research.

148. Finally, timing will be critical. Early clarity on the scope of any central engagement is required so that companies can align this with their own work programmes for PR24, and the results from any engagement need to be shared in time to give sufficient opportunity for companies to reflect them in their plans. We provide further details in our response to Q12.

149. Once Ofwat has fully considered these timing implications, we hope it will see even more need to keep the scope of any central research tight, and to employ efficient governance arrangements.

6.3 Are there aspects of negotiated settlements that could be reflected in our price review framework?

150. Given the published academic evidence available in support of negotiated settlements and their benefits – which was effectively summarised in a letter from Stephen Littlechild to the CMA[72], we are somewhat surprised that Ofwat has so swiftly decided against their use at PR24.

151. In particular evidence which indicates that it has become "*apparent that this route was more efficient than the conventional rate case (price review)*", it "*eased the burden on the regulator*" and "*left both customers and the company feeling satisfied because they had negotiated an outcome that was mutually acceptable and preferable (to both parties) to the regulatory alternative*"[73]

152. It has also been identified that the negotiated settlement approach has been particularly effective at solving problems with the traditional regulatory process[74], and that "*they open up a wider range of processes that can be used in order to bring different and potentially more acceptable and indeed more attractive options to the attention of the regulatory body, options that this body might find preferable to the outcome of what has become a routine but unduly time-consuming and costly price control process*"[75]

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72 *This is effectively summarised in Stephen Littlechild's letter to CMA dated 20th May 2020: https://assets.publishing.service.gov.uk/media/5eda3e6ce90e071b7bd7a2ed/Stephen_Littlechild_submission.pdf*

73 *Summarised on page 4 to 5 of the above letter, particularly in relation to US power regulation.*

74 *Above letter, page 5.*

75 *Above letter page 5*

153. In addition, the evidence base goes on to support the success experienced recently by Scottish Water and WICs[76] with the negotiated settlement approach, which we describe further in Section 6.1.

154. While the evidence base is balanced and also indicates that the process does not always work completely, and in such cases the regulator has to retain some degree of oversight and make minor modifications[77] to certain elements, given the potential for negotiated settlements to deliver a win-win-win across customers, companies and regulators, along with a more streamlined and efficient price review process, and surely given these observations their potential to reduce the need for future appeals, it is doubly surprising that Ofwat has rejected the concept so readily without investigating further.

155. Finally, while Stephen Littlechild concluded that "*Is it not time to consider developing and applying an appropriate variant of this approach, which has proved successful internationally, and in the Scottish water sector in particular, to the rest of the UK water (and potentially energy network) sectors?*"[78], Ofwat has not only rejected the concept outright without presenting any supporting counter evidence, it is also intent on moving in the diametrically opposite direction by seeking to centralise engagement and hence dilute the scope for direct interaction between companies and customers.

156. If Ofwat wanted to proceed cautiously with the negotiated settlement approach, there are some discrete aspects of the price review where strong demand-side market power is present and where the approach could be tested. For example, developer services and non-household wholesale services where agreements on levels of service could be negotiated directly with developers and retailers respectively. We note that often when discussing with these groups they would prefer some form of national negotiation with greater commonality across the sector.

6.4 What are your views on our proposals for customer challenge of business plans and assurance of customer engagement?

157. At PR19, our CCG added considerable benefit to our business planning process. Our Water Forum provided a valuable source of challenge on behalf of our customers and these challenges often prompted us to amend our plans to be more responsive to customers' needs and wishes. Examples include:

- Adding a bespoke performance commitment on response times to visible leaks into our PR19 business plan;
- Adding a bespoke performance commitment on repeat sewer flooding into our PR19 business plan;
- Challenge around inclusivity and affordability, leading to an ambitious strategy and our ground-breaking commitment to eradicate water poverty, which was the first in the industry;
- Tightening the performance commitment on interruptions to supply, aiming to achieve the original target for 2025 by 2020; and
- Increasing the detail and evidence provided in our plan on how we would achieve our environmental goals.

158. Subsequent to PR19, we have taken further steps to ensure the independence of the Water Forum. These include:

- Appointing an independent chair through a robust process managed by the Forum's Nomination and Review Committee (chaired by one of the Forum's independent members and includes representation from CCW a statutory member);

[76] *Above letter page 6.*

[77] *Above letter page 5.*

[78] *Above letter page 7*

- Providing an independent author with resource to enable attendance of all Forum meetings, regular liaison with the chair and vice chairs, and writing of all formal statements on behalf of the Forum;
- Maintenance of a full Challenge Log;
- Facilitating opportunities for members to meet without company representatives, before and after main meetings and at other times as required (e.g. to agree comments on NWL's Annual Performance Report).

159. At the end of the PR19 business planning process our Water Forums carried out a review of their operation. This identified a number of potential improvements in order to support more effective working in future. In response to this, we merged the NW and ESW Water Forums into a single NWL Water Forum enabling more effective discussions on company performance and plans, and have worked with the Water Forum to implement a series of further steps, including:

- Recruitment of a new independent chair;
- A new set of sub-groups that reflect the Water Forum's areas of focus with clear terms of reference, individual chairs and reviewed membership;
- Improving the Challenge Log process to enable better recording of and more timely responses to challenges;
- A skills and experience matrix, used by the Nominations and Review committee to identify priority areas for new members;
- An annual review process to support more regular assessment and improvement of how the Water Forum operates.

160. If Ofwat is concerned that not all CCGs across the industry have consistently added the same level of value, then rather than judging they are no longer required, we believe there are steps that can be taken to enhance CCGs' effectiveness. It would be helpful to be clearer on their role in business planning, and tighten up the remit to enable them to better focus on where they can add value. For example, the Water Forums struggled to engage and comment effectively on some of the technical financial aspects of the price review process. Being clear that areas such as this are out of scope would enable them to concentrate where members have relevant experience and insight.

161. Removing the requirement for CCGs would leave the water industry out of step with other regulated public service sectors. These include policy challenge groups in the energy sector; Airport Consultative Committees; and Patient Participation Groups in the NHS. While there is scope for innovation, moving away from this approach without being clear what improved practice would be put in its place appears a retrograde step.

162. Much of the value of CCGs comes from the involvement of the statutory members from CCW, the Environment Agency and Natural England. The Water Forum creates an opportunity for open discussions on how to approach different topics between different regulators working to different priorities. Doing so in a Water Forum setting, with input from independent members helps us to discern how to prioritise different considerations, rather than seeking to mediate between separate organisations with a customer or environmental bent. Without this or a similar vehicle for having such discussions, there is a risk that less effective judgments could be made on how to triangulate such opinions.

163. It should be recognised that while the consultation states that individual companies are free to maintain CCGs, it would not be completely in companies' gift to maintain a body that operated in a similar way if the statutory bodies choose not to engage as before, or have to direct their resource towards other mechanisms for PR24. While we would want to continue to engage with the stakeholder groups represented by our independent Water Forum members, this would be qualitatively different if their input is not informed by the experience and expertise provided by discussions involving members from CCW, the Environment Agency and Natural England.

164. We are proposing to conduct further work in this area to examine best practice approaches to both customer engagement, and associated assurance arrangements.

6.5 What are your views on whether we should develop minimum standards or provide guidance in other areas?

165. We support minimum standards or guidance as an alternative to centralising engagement. They would be most useful where a degree of comparability is needed across engagement results from different companies.

166. Such guidance needs to cover not only the manner in which engagement is conducted, but also how it should be reflected in decision making. The latter should be applicable to both Company and Ofwat.

7 PLANNING TOGETHER FOR PR24

7.1 How can we ensure that companies bring together the outputs of the strategic planning frameworks in the most coherent and effective way for business plans?

167. This section should be read in conjunction with our responses to Q4.2 and Q4.3.

168. In general we consider that companies have sound experience of aligning the outputs from various strategic planning frameworks, which has been gained over multiple planning cycles.

169. In our view Ofwat could most usefully focus on two aspects:

- Ensuring that its regulatory framework fully accommodated the outputs of stronger long term planning (Q4.2 and Q4.3); and
- Continue to focus on any areas where the timetables for the different planning mechanisms could be better aligned.

170. Regarding the second point, Ofwat are to be commended for ensuring recent greater alignment between WRMP (and now DWMP) and WINEP timetables and the price review process but (as it has highlighted), aligning a 5 year price review process with a 6 year RBMP (and FRMP) cycle remains a challenge. We would encourage Ofwat to continue to work with the EA and UK government to determine how this could be tackled.

171. Finally there are some (relatively minor) areas where more could be done to ensure ongoing alignment between Ofwat PCDs/PCs and EA changes to the WINEP programme, for example.

7.2 What are your views of our thinking on our and companies' roles in engaging with other regulators between business plan submission and our issuing of the final determinations?

172. Our views in relation to Company engagement with other regulators is covered in our answer to Q6.4. Our views on Ofwat engagement are set out in our answer to Q7.3 – below.

7.3 How could we best involve a 'PR24 Challenge Panel' in the price review process to help ensure that our decisions best reflect the interests of customers, communities and the environment?

173. In order to achieve a successful outcome at PR24, we consider it vital that companies' plans, and particularly Ofwat's decision making in respect of these plans at DD and FD, are subject to independent scrutiny to ensure that decision best reflects the interests of customers and the environment. At PR19

scrutiny of the former was undertaken by CCGs. Scrutiny of the latter appeared to be absent from the process.

174. We would welcome the formation of a PR24 challenge panel to address this (and view this as separate to governance arrangements surrounding any centralised customer research). Such an approach would be consistent with our views shared in response to Q5.1, and in particular could help ensure that Ofwat's IAP focuses on those aspects of company plans which are of most important to customers.

175. Such a panel could be broadly equivalent to a CCG for Ofwat, and many of the PR19 guidelines for CCGs would apply – especially in relation to independence and transparency.

176. We would suggest that to be effective any PR24 challenge panel would need to:

- Meet at key stages in the process i.e.:
  - To review companies' plans and a draft of Ofwat's initial assessment prior to publication of IAP.
  - Again prior to DD
  - Again prior to FD

- To be meaningful, the challenge panel would need to dedicate time to reviewing the detail of individual company plans – not just generic aspects.

- Membership could comprise:
  - The quality regulators, especially DWI and EA
  - CCW
  - Ofwat
  - Key stakeholder groups

- And for company specific elements:
  - Representative from company's own independent assurance/challenge arrangements
  - Company representative.

8 DESIGN AND IMPLEMENTATION OF PRICE CONTROLS

8.1 Do you agree with, or have any comments on, our general approach to the design and implementation of controls, i.e. to retain separate controls with the same broad structure as at PR19, but with improvements to our implementation?

177. We support the decision not to extend the five price controls, although as noted, we feel that the separation of water resources into a separate control has added little value for customers and we consider that a simplification of the PR19 controls could be to remove this control entirely and create a single wholesale water price cap. Any further disaggregation of the network plus controls would have significantly multiplied complexity without any additional value created.

178. For each of the wholesale controls, it is important to recognize that both the wholesale water and wastewater services are operationally integrated, with constant decisions over cost trade-offs between these controls being made.

179. For water resources, treatment and distribution, companies may make the decision to use more expensive sources of treated water so they can minimize distribution costs. Similar decisions are made over network design.

180. For wastewater, the degree of de-watering and general sludge quality affects the cost trade-off between treatment and bioresources. Companies will optimize on a combined service basis, with some companies opting for lower treatment costs and some for lower bioresources costs.

181. Ofwat recognized these trade-offs in PR19 by setting the Upper Quartile targets for the wholesale services in aggregate. Whilst we recognize that disaggregated cost models may be worth considering as part of a composite, it is critical that, when setting an Upper Quartile target, Ofwat does this in aggregate. This will ensure that it uses a real rather than a virtual perfect company that sets the Upper Quartile targets for each of the wholesale controls.

8.2 Do you agree with, or have any comments on, our proposals for specific parts of the value chain, i.e. for water resources, developer services, residential retail and business retail in Wales?

182. **Water Resources**

183. There is some operational logic for adjusting the boundary of the water resources cost assessment so that it includes water treatment. As Ofwat notes, it can be difficult to separate the costs of borehole pumps between the two.

184. The existing water resource control is arguably too small for modelling and price control purposes – once abstraction charges and business rates are excluded, it is only 9% of the total water wholesale modelled costs (see WW2 cost model). Allocating water treatment to it would create a more material value control.

185. It is important to remember that both water controls will have unfocussed RCV values (i.e. at around 20% of MEAV), so both revenue controls will underestimate the true 'value of water' on a marginal basis. If Ofwat uses the adjusted boundaries for cost assessment only, there will be no need to repeat the time consuming exercise of re-allocating the water RCV.

186. Whilst we agree that the separation of costs within water wholesale between sub-services can be useful for benchmarking, we do not believe that the allocation of these into two water services price controls has added any value for customers or the sector generally. Moreover, in line with our comments elsewhere, we do not consider that there is value per se in the separate water resources price cap. The challenges present in water resources are best addressed through RAPID, the regional planning groups, the bidding market proposals and trading incentives. A separate control adds little and increases complexity.

187. **Developer Services**

188. We support the deregulation of contestable developer services activities. The developer services market is growing rapidly and the historical cross subsidies such as the income offset are being withdrawn which has increased the incentive for developers to engage with the market.

189. The growth of the developer services market is at risk of being constrained should Ofwat try to continue regulating incumbent contestable services. Even with additional data, setting developer charges up to 5 years in advance requires Ofwat to predict efficient market prices, an extremely unpredictable dataset. If Ofwat regulates incumbent developer charges that are too low (e.g. by setting a zero margin), this will exclude new entrants from competing. If they are too high, then developers could be overpaying.

190. Finally, it has proved very difficult for Ofwat, the water industry and developers themselves to accurately predict housebuilding activity up to 5 years in advance. Major events such as the 2008 recession and Covid-19 were not predictable, yet impacted significantly on housebuilding rates. Ofwat's current

approach is based on such forecasts, so, to correct for this, Ofwat have had to create the Developer Service Revenue Adjustment model. De-regulating developer services removes the need to make such forecasts and corrections, as revenue is calculated ex-post rather than ex-ante.

191. We note that the current revenue single till approach still creates a disincentive for companies to provide developer services for large industrial customers. Whilst companies can charge such customers to recover the connection costs, the income is captured in the single till control whilst there is no increase in the RCV (net totex is zero). The DSRA does compensate with a per property revenue adjustment, but this will be well short of the much higher unit costs of connecting an industrial customer.

192. Whatever Ofwat's appetite for deregulation, there are technical adjustments that would improve even the current regime. Rather than try to fix the new property forecasts in advance, it is more practical to exclude both revenue and totex from the single till revenue control, removing the need for a DSRA adjustment. The current developer services guidance requiring cost reflective charging would continue to protect developers until market discipline could be relied upon for efficient pricing.

193. **Residential Retail**

194. As Ofwat note, the average revenue control for retail, accompanied by a volume risk mechanism allows the control to flex as customer numbers change. For PR24 we suggest Ofwat could consider an average revenue control per property which would allow for even more in-period flexibility and remove the need for an end of period adjustment model to deal with customer number variations.

195. So, we suggest simplifying the control from Rt = TR + (AC-FC)*M by recognising that TR=M*FC, which makes the control simply: Rt = AC * M

196. We agree that the residential retail reconciliation model could be simplified by simply using the forecast and actual customers, as the re-forecast numbers don't change any of the adjustments.

8.3 Do you agree with, or have any comments on, our proposals spanning multiple parts of the value chain, i.e. for major projects and future reconciliations?

197. We have set out an extract from our comments on the Green Recovery process as they are relevant here.

198. The consultation recognises the value of early engagement on material issues in advance of business plan submissions and the Green Recovery process does precisely that. One of the historical challenges with major enhancement schemes is that the clarity on scope, options, risks and costing of major projects evolves over time in line with best practise to asset management and project development. Typically, the further away from construction the project is the more risk and uncertainty is plans and costing estimates and this can make alignment with the fixed five-year price review cycle very challenging.

199. We suggest that large, discrete enhancement schemes similar to the ones covered in this Green economic recovery proposal would be best shared and considered as early as possible in the regulatory process perhaps through a gated process which may have some similarities to the processes being developed through the RAPID/DPC arrangements. This would give more time for both companies and Ofwat to present, discuss and provide additional evidence where required outside of the formal price review submissions. We recognise that this is a broader point around the process of price controls and intend to make a similar suggestion in response to the Ofwat consultation.

9 OUTCOMES

9.1 What kinds of performance commitments should we include in the price review? What outcomes require financial incentives for all companies for the foreseeable future?

200. We are a strong supporter of the outcomes regime, in that it focuses company efforts on areas of value to customers and the environment and, through appropriately calibrated ODIs, it effectively aligns customer and shareholder interest in delivering improvements.

201. Whilst we do not consider that customer preferences are homogenous nationally, we nonetheless agree that efforts should be made to rationalise the number and complexity of PCs and ODIs. This needs to be done in a way which does not undermine the effectiveness of the current regime.

202. Rather than attempt to set out prescriptive thoughts on which PCs and ODIs ought to be included, we have instead chosen to describe some principles that could be used as a basis for rationalization.

- We agree that PCs should focus on providing financial incentives for achieving a select number of Outcomes. This retains the strength of the Outcomes approach regarding aligning customer and shareholder interests and retains management focus on a smaller number of priority service targets.
- This means that PCs should focus on aspects of service where out-performance is of direct value to customers and/or the environment, and under-performance is of detriment, and hence those aspects of service to which it is appropriate to attach financial incentives.
- Ofwat could consider removing PCs where any or all of the following are true:
  - PCs which are not a true Outcome measure, where the impact of any failures on customers or the environment are adequately captured in other PCs. Examples include sewer blockages and collapses, where the impact on customers and the environment is adequately captured via flooding and pollution PCs, and Unplanned Outages, where any customer impact is captured in Interruptions PCs.
  - PCs which relate to aspects of service already closely scrutinised by the quality regulators, where existing enforcement powers are sufficient to incentivise appropriate levels of performance.
  - PCs which are not fully within company control. For examples measures of customer trust, value for money and affordability are very susceptible to changes in the wider socio-economic and political climate – as well as company actions and Per Capita Consumption is an area where companies can only 'nudge' customer behaviour. These measures tend to be inappropriate for attaching financial incentives to, for the same reason. Similarly environmental PCs where water companies are only one of many contributors, for example Bathing Water Quality.
  - PCs which are duplicated. A good example is C-Mex, which reflects customer perceptions of many aspects of service, and in particular may duplicate separate PCs which assess customer complaints
  - Ofwat also needs to ensure that the design of C-Mex is coherent with the rest of the framework – and particularly that companies aren't incentivised to have more service failures of a type they respond to well – which in turn improves the balance of their C-Mex scores.
  - We also support the use of PCDs, which could be used to further reduce the number of Outcomes per-se.

203. Ofwat already has a well-established Outcomes working group which we suggest it could use to take this process forwards. It could start by building on the above points to develop a set of principles for what constitutes a robust PC, and what does not. These principles could then be applied by the group in the first instance to the suite of common performance commitments. The results could be shared in the draft PR24 methodology (or ideally sooner) and the principles shared to assist companies with the development of bespoke PCs

204. The consultation document also suggests Asset Health and Resilience should be one of three categories for Outcomes, and hence PCs. We suggest that Ofwat needs to carefully consider what it is trying to achieve in this regard.

- Well-chosen measures of operational resilience that effectively measure current and future risks to customers could be effective performance indicators. For example % of customers at risk of supply restrictions / flooding in a 1:x year drought/storm. Ofwat would need to be mindful, however, of how any attached ODI incentives interact with a. allowed costs (see Q 10.5/10.6) and also b. the fact that performance levels will be linked to external climate trends. ODIs which then penalise companies for deteriorating climate trends, and in so doing deprive them of the very funds they need to respond to such trends, are likely to be counter-productive.
- Similarly on Asset Health. Evidence shared in section 5 of this response shows that companies are fully investing capital maintenance allowances, and evidence shared previously[79] with Ofwat demonstrates that these levels are resulting in asset replacement rates across the industry which are unlikely to be sustainable in the long term. As and when this trend starts to manifest in the established 'Asset Health' measures, penalising companies via attached ODIs will only exacerbate the issue by further depriving companies of funding.

9.2 How do you think we should monitor outputs that are not clearly linked to the outcomes incentivised in the price control? Would it help to distinguish between PCs that monitor outcomes and PCDs that monitor outputs? What other options could we consider?

205. We are supportive of an approach which separates the monitoring of outcomes (as PCs) and Outputs (as Price Control Deliverables – as PCDs). This nomenclature should improve clarity, although it does not reduce complexity in any way as it does not decrease the number of items which require monitoring.

206. It is important that customers continue to be adequately protected against late or non-delivery of PCDs which have been funded as enhancements. To do this consistently across companies it would be helpful if Ofwat set out a supporting framework along the lines indicated:

- For volume driven enhancements such as smart meter replacements or lead pipe replacements, a simple true up mechanism based on the volume of over or under delivery x a unit rate should suffice to protect customers.
- For one off investment schemes, key principles of a customer protection mechanism should include:
  - A clear definition of successful delivery of the scheme in terms of the customer outcome achieved, as opposed to the technical solution delivered. This gives companies scope to innovate to deliver the best outcome for customers, as opposed to being tied to a provisional solution set out at the time of business plan submission – which in some cases could be 8 years prior to scheme delivery.
  - A mechanism to compensate customers for late delivery - based simply on the time value of the money/funding allowed for the investment (at prevailing rates of allowed cost of capital) x the length of delay.
  - Clarity on when late delivery becomes non-delivery, at which point the full value of any allowed funding should be returned.
  - The above should take account of the totex sharing mechanism which already returns a portion of funding to customers if companies choose not to make an investment.

9.3 Do you consider there are aspects of company performance where it would be better not to set expectations as part of the price control? What approaches should we consider in these cases, so that companies act in the interests of customers?

[79] *NW: response to PR14 call for input, January 2021*

207. Measures relating to trust, affordability, and support for vulnerable customers could be effectively tracked outside the price control. These measures tend not to lend themselves well to financial incentives in any case – for example an ODI reward for improving affordability would in turn increase bills – having the opposite effect.

208. CCWater could potentially play a greater role with regards to tracking and publishing this data and holding companies to account.

9.4 What should be our aim in setting the levels of performance commitments? Do you agree with the proposal that performance commitment levels should be set, as a starting point, at what can be achieved by an efficient company with base costs and that deviations from this are proposed in company business plans? If not what alternative proposals should we consider?

209. We agree that, as starting point, setting benchmarks for PC levels at what can reasonably be achieved by an efficient company within base costs, is a sensible approach.

210. However this needs to reflect what is deliverable **in the round** by an efficient company, recognising that no company achieves the current (UQ) benchmarks on all aspects of service (or cost). We elaborate on this point further in response to Q10.5, and in our Summary.

211. It also needs to be based on a better understanding of the link between cost and service, which we also elaborate on in response to Q10.5, and see also response to Q9.5 on the need to retain marginal cost data to support this.

212. For customer service and environmental PCs, clearly there are benefits associated with improving service over time, and a degree of stretch, facilitated by benchmarking across companies (recognising the need to balance this with cost) is clearly advantageous to drive improvements over time.

213. However, if Ofwat chooses to continue/proceed with Asset Health PCs at PR24, it needs to carefully consider what it is trying to achieve when setting target levels. While there are advantages to PCs which incentivise companies to avoid a deterioration in asset health – Ofwat needs to carefully ask itself what it is trying to achieve in any instances where it proposes an improvement for example it may not be appropriate to stipulate a single target/benchmark (for example UQ) for Asset Health measures and expect companies below the benchmark to 'catch up'. Depending on the resilience of their systems in the broader sense, different companies may well be able to tolerate different levels of asset health with no detrimental impact on service.

214. Unplanned Outage at WTW is an example of AMP7 asset health measure where Ofwat is stipulating improvements, even though in some cases the current levels of asset health have no detrimental impact on customers.

215. In summary, while there is a case for avoiding deterioration in Asset Health, there needs to be a very clear rationale for any instances where PC levels stipulate improvements.

9.5 What approach should we take to setting ODIs? How should we take account of marginal costs and marginal benefits in setting ODI rates? What are the risks and benefits of the approaches that we set out, or any others that you propose?

216. We are a strong supporter of the Outcomes and ODI regime, and agree with Ofwat's observation that it aligns incentives for companies and customers.

217. In response to the specific points made in section 9.4 of the consultation document:

- We agree that ODI incentive rates should continue to take into account totex sharing mechanisms and rates.
- We agree that marginal costs can be difficult to derive (and in any case in previous periods were only used to determine penalty rates, not reward rates), however abandoning them may undermine the credibility of the regime. Without retaining an understanding of marginal costs alongside marginal benefits, there is a risk that continued ratcheting of PCLs could in the future result in service targets which are neither affordable nor cost beneficial to achieve – especially as marginal costs tend to increase as service levels improve. This is not in customers interests. See also our response to Q10.5, which looks at strengthening understanding of the link between cost and service.
- We agree that customer valuations can be challenging to obtain accurately. At PR19 Ofwat 'triangulated' results obtained across companies, and removed outliers. This would appear a more robust approach than relying on a single set of centrally sourced values.
- We are supportive of Ofwat seeking to provide clarity on incentive rates (and PCLs) in future periods (see response to Q4.7).

10 COST ASSESSMENT

10.1 What should be the priorities for improving our approach to cost modelling and assessment?

218. **Scope of base cost benchmarking: base and enhancements**

219. We are surprised to see Ofwat considering developing total expenditure models including base and enhancements. This top down totex approach taken by Ofwat at PR14 was widely criticized, particularly by the CMA in the PR14 Bristol appeal (paras 4.46, 4.85) who instead separated base and enhancements in their modelling. Ofwat moved to separating base and enhancement cost modelling for PR19, which was widely supported by the industry and was also accepted by the CMA in the PR19 appeals. It seems extremely unlikely to us that a move to totex modelling can be made to work effectively.

220. As one example – the WINEP programme made up 58% of enhancements (Table A1.3, PR19 FD Cost Efficiency Appendix). The scope and thus total costs of these programmes are company-specific and require separate modelling, as done in PR19. To try to build these programmes into single top down totex models would require recreating the complex models that the CMA criticised in PR14 (CMA 4.53-4.54).

221. **Cost drivers in econometric models**.

222. We support the use of assured, reliable and operationally intuitive cost drivers in base cost modelling. The use of high-level drivers such as number of properties, length of mains/sewers and wastewater load allowed the models to remain relatively simple, which were supported by the CMA.

223. We have supplied our review of Ofwat's base cost models as submitted to the CMA alongside this response.[80] Our conclusion stated:

Overall, we support modelling growth enhancement costs together with base costs and the continued use of Ofwat's base cost models. Ofwat's base models best address the cost allocation issues and provide consistency with the other wholesale water models in terms of the impact of scale whilst they also provide a better intuitive relationship between the drivers and costs.

224. The PR19 models are widely recognised by all parties are more intuitive and reliable than the PR14 ones. We believe this is in large part due to Ofwat's preference for simplicity rather than 'data mining' (i.e. adding arbitrary drivers to make the cost models 'better'. Ofwat's transparent process and consultation on the models was also helpful in gaining industry confidence in the models.

[80] *NES CMA Rep066 Appendix 2 Base costs Appendix*

225. The Ofwat models choice of cost drivers largely followed the CMA criteria as set out in their Final Determination (4.57):

226. Does the variable make sense from an engineering and economic perspective? When considering whether to include explanatory variables, we include variables which are consistent with the underlying engineering tasks and economics of supplying water. For example, the costs of supplying water are likely to be related to the number of properties supplied and therefore including variables which represent the scale of the network makes sense from an engineering and economic perspective.

227. Are the variables substantially under management control? Including variables which are substantially under management control is likely to cause statistical problems, including biased estimates, and could lead to unintended incentive issues. Service variables, such as leakage levels and the number of water supply interruptions, are under the substantial control of the water companies.

228. Are the coefficients of the expected value and significance? We want to include variables where the coefficient is consistent with our understanding of how the variable should influence costs. For example, larger networks are likely to be more expensive to operate, so an explanatory variable related to scale, such as length of mains, should have a positive coefficient.

229. Is the variable highly correlated with other variables? We are concerned where there is the potential for high correlation between explanatory variables. The concern is that a high correlation between variables leads to model instability. The common approach in econometrics, which we follow, is to exclude variables that are highly correlated.

230. Are there too many variables compared to the sample size? In the sample used by Ofwat, the number of observations is not large, which means that we may be able to only include a limited number of explanatory variables.

231. We support all these criteria and we have one observation on a driver used that is largely under management control.

232. We suggest that Ofwat should re-consider the role of pumping station data as a cost driver for the PR24 models. The data is not exogenous and is arguably somewhat within management control. There is also now a perverse incentive for companies not to remove pumping stations through efficient rationalization, which is not in customer interests.

233. We understand Ofwat was keen to consider topology as a cost driver, and, due to the lack of an exogenous measure, used an endogenous driver instead. We would also question whether topology in terms of hilliness is a direct cause of increased pumping costs, as hilliness may either increase or decrease costs, depending upon the direction of travel (i.e. the location of water resources and end customers).

234. Finally, as we noted in our CMA appeal, there is no cost driver for the impacts of climate change. Increased risk of sewer flooding is due to increased rainfall events and has no relationship to the number of new properties built (as Ofwat claimed at the CMA hearing). We recommend that Ofwat reconsiders the allocation of sewer flooding as part of growth costs in PR24.

235. **Growth related costs**. (see also response to 8.2)

236. The most significant challenge to Ofwat's base cost models in the CMA hearing was around the modelling of growth related costs. To correct for shortcomings in the base models, Ofwat have had to create two

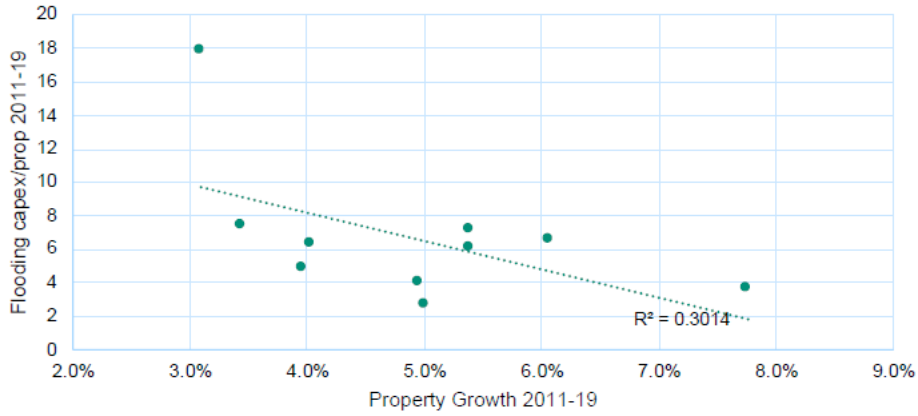
off-model adjustments models – the Growth Base Adjustments model and the Developer Services Revenue Adjustment model. The CMA amended the application of both models in its Determination.

237. We maintain that, on a marginal basis, the cost models are underpowered for growth, but the growth base adjustments model was overpowered.

238. We maintain that growth should be modelled as an enhancement, as this would allow company specific growth rates to be modelled in a transparent and simple way rather than the current approach of including them implicitly then adjusting for them explicitly.

239. We maintain our view that sewer flooding is not related to growth but is instead related to climate change, which is not a cost driver in the Ofwat models. There is no correlation for example between sewer flooding and high growth rates, as we showed for the CMA hearings:

Figure 7: Sewer Flooding capex v property growth



Source: NWL analysis using data from Models WWW1 & WWW3
Note: the y axis is £/total properties. The scatter graph is plots for individual companies.

Source: NWL CMA Post PF December 2020 submission: 2.4.1.1, Figure 1.

240. The current developer services guidance requires companies to make cost reflective charges for developers. The growing contestable developer services market ensures that incumbents do not overcharge (competitive pressure) or undercharge (Competition Act).

241. With these protections in place, we believe that the whole of the contestable developer services market revenue and associated costs can be excluded from the PR24 price controls. This would allow Ofwat to simplify the base cost models and abolish the Base Adjustments model and much of the DSRA.

242. It would remove a great deal of data requirements (six tables in the APR) and give new entrants confidence that incumbents were not cross subsidizing developer services. It could even allow incumbents to exit the contestable developer services market, or consolidate, thus following the pattern of the non household retail market.

243. **Disaggregated cost models**.

244. Whilst disaggregated cost modelling such as sub-wholesale models can be useful for benchmarking and other comparisons, we caution over its use in assessing efficiency. Companies will frequently make trade-offs within wholesale services, as they will be working on maximizing whole service efficiencies. Companies may also have differing approaches to cost allocation between controls. Simply choosing an

upper quartile position for each sub-wholesale model risks generating a 'perfect company' that ignores such trade-offs and means that all companies are behind upper quartile in aggregate.

245. Companies cannot choose which sub-wholesale services they provide, so any regulatory approach that tries to mimic market forces should not separate sub-wholesale services in setting efficiency challenges.

246. Ofwat refer to being unable to develop growth/developer services models in PR19. There would be no need for such models were the contestable developer services costs to be excluded from the controls, per our previous recommendation. We believe excluding this from the base models would improve those models, which currently struggle to account for the incremental costs of growth.

247. We agree that the transfer of water treatment to the water resource control would make it easier to develop a treated water sub-wholesale model.

10.2 In what areas (both historical water sector and external) can we improve the range of benchmarks we use in cost assessment?

248. The addition of Scottish Water and NI Water to the Ofwat framework would increase the number of datapoints and likely improve the model performance if these could be added, which would require agreement with other regulators. These companies provide a similar set of services in a similar economic and environmental framework. Ofwat also emphasises other benchmarks such as pipe-laying.

249. Other benchmarks can have a role to play but the determinations must be based on an efficient company in the round, recognizing that companies must provide all the services under their licence and that these are 'systems' in line with Ofwat's recognition of resilience and this implies complex interrelationships across these systems. Ofwat needs to be very careful not to set benchmarks for the perfect hypothetical company.

250. Companies do themselves carry out external benchmarking to improve efficiency & service. Northumbrian Water has participated in European Benchmarking and we are currently working with the Water Services Association of Australia on a benchmarking exercise. We urge Ofwat that, whilst such studies are of interest, to try to convert them into setting top down targets would be an unwise overreliance.

10.3 How can we take account of longer term ambitions such as delivering net zero and increasing public value in our approach to assessing costs?

240. See answer to question 4.8.

10.4 Do we need to amend our cost assessment approach to take account of nature based solutions?

241. We see three opportunities for Ofwat to slightly amend the cost assessment approach to encourage nature based solutions.

242. For specific enhancements, as an example, companies may be considering two options for a particular driver (e.g. a WINEP scheme). The first could be a traditional capex one, with no natural capital gain. The second one generates natural capital benefits that are not monetized. If the company can show that, net of the natural capital gain, the second option is more efficient, then the cost assessment for the scheme should take that into account.

243. We also favour the 'lump sum' allowance that United Utilities presented at a recent CAWG meeting. Natural capital solutions often have an enduring opex cost rather than a one-off capital cost. The opex can continue beyond price control periods, and could be penalized as inefficiency at later Price Reviews. UU's proposal that the opex could be funded as a lump sum addition to the RCV (i.e. the same as capex) has merit in our view, as it equalizes the RCV and revenue funding of the totex between opex and capex in period and doesn't rely on future controls.

244. Finally, the most appropriate way to incentive natural capital gains may be through bespoke outcome delivery incentives. Such ODIs would need to demonstrate customer support and would require performance commitments for delivery.

10.5 Where can we enhance our evidence base on the relationship between costs and service?

245. We accept that the relationship between cost and service is not a straightforward one. We suggest the following:

246. As indicated on p110 of the consultation document, we would strongly support Ofwat improving its evidence base regarding the cost of service improvements. During the PR19 water appeals, the CMA made some progress in determining and comparing the unit costs of Leakage reduction across companies, this allowed some reasonable basis for understanding the marginal cost of service improvements and setting an efficient level of costs to hit the service performance targets across a range of companies. The availability of data was key to this comparison and analysis and without it Ofwat attempted a 'flat earth' argument that there was no strong relationship between costs and service - this is not credible and the CMA rejected this argument. Ofwat should adopt a similar approach to seeking information from companies in relation to other key service metrics otherwise we will simply see a repeat of the PR19 experience. Companies should be required to report their expenditure across AMP6 on key service performance metrics and this should be subject to external audit and assurance. This will ensure that empirical evidence can be used to assess efficient costs and the relationship with service. If Ofwat chooses not to require this information collection then it must set out a strong alternative bases for understanding these relationships otherwise its failure to collect this data could form a basis for regulatory challenge at PR24.

247. In its latest reporting consultation[81] it is pleasing to see that Ofwat is starting to tackle this for leakage, however Ofwat needs to consider other area – particularly anywhere it is considering a targeted challenge at PR24.

248. Currently Ofwat's base cost models contain no drivers for service levels, relying predominantly on historic costs combined with a limited range of exogenous drivers. As a result any service improvements which are required to be delivered from base funding are essentially an additional efficiency challenge – layered on top of the multiple productivity and efficiency challenges which Ofwat already applies. Ofwat also tends to assume that historical service improvement trends can be projected forwards, which overlooks the fact that marginal costs of improvement tend to increase as service levels improve. Ultimately this approach is likely to prove unsustainable – when increasing marginal costs of improvement can no longer be met from efficiency gains. Ofwat needs to first gather the evidence base and then consider how best to respond to this.

249. Finally, Ofwat's assumptions on cost and service need to result in a deliverable package in the round. As set out in our introduction, no single company in the sector currently achieves Ofwat's benchmarks for efficiency and service across all aspects. The more that Ofwat disaggregates these benchmarks the more the results depart from what is currently being achieved by any real company. In particular no company is at the upper quartile for all of the common performance commitments.

[81] https://www.ofwat.gov.uk/consultation/consultation-on-regulatory-reporting-for-the-2021-21-reporting-year/

Table 7: WASC performance rankings, 2019/20, UQ metrics.

	Interruptions /17	Internal Flooding /11	Pollutions - Cat 3 /11
ANG	18	1	4
HDY	15	10	10
NWL	5	8	1
SRN	13	7	8
SVT	8	6	7
SWB	9	5	11
TMS	17	4	6
UUW	12	9	2
WSH	16	3	5
WSX	7	2	2
YKY	6	11	9

Source: NWL analysis – note Interruptions ranked/17 which includes WoCs

250. Ofwat needs to ensure that this is taken into account and that any challenges applied to cost and service are credible in the round in the real world.

10.6 What mechanisms should we consider for the efficient funding of performance levels, set in a long-term context, that vary from those an efficient company would deliver through its base allowance?

251. We are supportive of Ofwat's goal of ensuring that service improvements are funded at an efficient cost in the long term. In our view it also makes sense for PCLs to be based on what can reasonably be achieved from base cost allowances (noting the points made in response to Q10.5 above).

252. As set out in response to Q4, we are also supportive of Ofwat providing greater long term on clarity regarding ODIs and PCLs, so that companies can effectively understand the CBA for interventions aimed at improving service beyond PCLs

253. Where companies do make service related investments in good faith, based on long term clarity of PCLs and ODIs, Ofwat needs to ensure that they don't lose out as a result of subsequent changes (for example because Ofwat choose to ratchet down PCLs in future periods due to a number of companies delivering improvements).

254. Ofwat also needs to ensure that where companies have received additional funding via other mechanisms (for example in relation to Green Recovery) that any associated performance benefits are treated in a way which ensures a level playing field.

10.7 Is there more that we need to do to reflect future pressure on operational resilience in our approach to cost assessment?

255. Ofwat needs to accept that future risks (especially low likelihood/high consequence) can be challenging to quantify, and that the absence of such quantified analysis should not result in outright rejection of a scheme, but that in such instances a degree of judgement is required. We would remind Ofwat that the CMA concurs with this view:

256. "*Ofwat appears to consider that without such quantified evidence, Northumbrian's proposal is effectively unsustainable. We disagree with this view. While quantitative analysis of the kind Ofwat has described is often helpful and is widely used within the regulatory regime, we do not consider that its absence should result in an outright rejection of a proposed resilience scheme in all cases. Instead, this case falls*

to an exercise of judgement regarding the evaluation of the specific facts available, and their implications.[82]*"*

257. As stated earlier in this section, Ofwat also needs to ensure that either its choice of base cost drivers adequately reflect increasing future resilience risk (especially in relation to climate change) or that it allows costs to mitigate such risks as enhancement.

258. Finally, the regulatory framework could do more to support Asset Health by providing appropriate capital maintenance allowances – see our response to Q5.6.

10.8 Are the most significant challenges to the operational resilience of the sector adequately captured within current strategic planning frameworks?

259. Resilience is about a holistic view of risk against a clear and structured framework. A significant proportion of these risks are surfaced within existing planning frameworks (e.g. WRMP, DWMP), however these are not completely comprehensive.

260. For example, WRMPs ensure that in aggregate each water resource zone has sufficient water resource to fulfil demand, they do not focus on whether companies supply networks are sufficiently robust and interconnected to maintain supplies in the face of future risks. None of the statutory frameworks examine Cyber Resilience.

261. We consider that companies are best placed to assess and value these broader risks and consider them as part of the development of their plans. This also allows vital innovative thinking in the approach.

262. We don't think any additional common framework is necessary (and this would likely stifle innovation), however Ofwat could usefully ensure that where more robust long term planning does effectively identify risks, that mitigation activities are allowed for in its approach to cost assessment (see Q4).

10.9 How can we strengthen incentives for long-term operational resilience and improve the assessment of resilience enhancement expenditure while continuing to protect customers' interests?

263. As described above, companies already take a long-term view and Ofwat needs to recognize that (whilst not entirely comprehensive) the existing frameworks provide a strong platform from which to build.

264. In particular Ofwat could make Long Term Focus and Resilience part of its IAP, and - as described previously- ensure that the outputs of stronger long term planning are allowed for in its approach to cost assessment.

265. We are hence disappointed to see Ofwat suggesting that they will remove the resilience cost category- Ofwat's justification appears to be that business cases were weak - however Ofwat may wish to reflect on CMA's views regarding what constitutes an acceptable resilience business case (See Q10.7). In general there were strong and weak business cases submitted against many categories, and the presence of the latter in our view does not automatically make the category redundant.

266. As set out previously, interventions to address increasing external resilience risks cannot reasonably be funded via ODIs or base costs, and this, combined with the fact that the potential consequences for service of not addressing these risks can be extremely high, should be more than sufficient justification to retain the resilience cost category.

[82] *Para 5.358 of CMA PR19 Final Determination*

267. If Ofwat is concerned about weak resilience cases, it would be better to define the evidence base that it wishes to in support of such proposals – and we recognize that this ought to be a high bar.

268. None of the above addresses the fundaments weaknesses of cost assessment for addressing capital maintenance funding, which we responds in Section 5.

11 RISK AND RETURN

11.1 Are there areas of our risk allocation framework where mechanisms could be added, simplified or removed in a way which would benefit customers?

269. As previously stated, we consider that an additional objective for PR24 should be maintaining the stability and predictability of the regulatory regime. In the area of risk and return the sector, which provides highly essential services with significant long-term investment requirements[83] that will require material additional investment has been subject to very significant levels of regulatory change especially in the area of risk and return in the last two price controls. During PR19, for example, some of the key changes including:

- Amending the inflation index from RPI to CPIH with a 50% transition;
- A move to indexation of the cost of new debt with an end of period reconciliation mechanism;
- Significant changes to the setting of the Cost of Equity parameters including material changes to the approaches to set the Total Market Return and the Risk Free Rate;
- Introduction of a Gearing Outperformance Sharing Mechanism;
- A move to in-period Outcome Delivery Incentives; and
- Outperformance sharing on the cost of debt.

270. All these changes ultimately contributed significantly to an unprecedented four companies seeking a redetermination from the CMA during a global pandemic period in which market parameters were themselves subject to very material volatility. The CMA added an uplift to the mid-point on the cost of equity precisely to reflect this need to attract additional investment and avoid the significant risk of consumer harm that could arise if investment was put at risk.

271. We therefore concur with the central finding of the CEPA report into risk published by Ofwat, which suggested that:

"We do not consider that there are errors in Ofwat's approach that necessitate extreme change" CEPA, 2021,p.5[84]

272. CEPA set out two illustrative options in their report, including 'incremental change' and 'fundamental change'. Our view is that the right approach would be closer to the 'incremental change' option and that any option reasonably described as 'fundamental change' is very difficult to reconcile with the context of the sector or indeed CEPA's findings about risk in the sector. We note that the incremental change option would still see potentially the indexation of the cost of equity, changes to RoRE, ODIs and reconciliations and additional risk allocation changes (undefined). This still seems to us to constitute a material level of change.

273. The same CEPA report also sets out some potential changes to the risk allocation framework, highlighting ten issues for consideration. Some of these are picked up elsewhere in the Ofwat consultation and the

[83] *NIC, 2018, Preparing for a drier future, England's Water Infrastructure Needs: See: https://nic.org.uk/app/uploads/NIC-Preparing-for-a-Drier-Future-26-April-2018.pdf This report suggests that £21bn of investment will be needed to build resilience in water supplies in England and that if that investment is not forthcoming then the consequential cost would be in the order of £40bn. See also: https://www.gov.uk/government/news/taskforce-sets-goal-to-end-pollution-from-storm-overflows*

[84] *See: https://www.ofwat.gov.uk/wp-content/uploads/2021/06/CEPA-report-Allocation-of-risk.pdf*

questions below and we respond to them there but in response to the other issues raised by CEPA, we provide some observations below.

274. We support:
- the deregulation of developer services, the removal of the ex-post growth adjustment and the DSRA. This would allow the strong market competition that currently exists in the developer services area to protect these customers, allow growth effects to be captured by the base cost models (which already include cost drivers that are more than 90% correlated with growth) and drive material simplifications to the regulatory regime by removing the DSRA and its complex reconciliation models all the data requirements around Developer Services and the complex ex-post growth adjustment model;
- the principle of encouraging a more long-term approach and would support consistency in the setting of PCs and ODIs if this can be developed effectively (see our answer to question XX); and
- the simplification of the ODI regime and the focus this would bring to management as well as the reduction in regulatory burdens.

275. We reject the CEPA position that the CMA decision implies that Ofwat should 'revisit the GOSM' this misrepresents the CMA position, where the CMA decision was to remove the GOSM entirely without replacing it with some other mechanism.

276. We would caution that:
- changes to the use of caps, collars and deadbands in the setting of ODIs needs to recognise the extent to which service performance is within management control or not. We accept that where companies are taking greater risk this needs to be matched by greater reward and vice versa and caps, collars and deadbands can reduce risk to companies. However, for many service metrics water and wastewater companies do not have a high degree of control. Per Capita Consumption for example is an area where Ofwat is proposing a 'targeted challenge' but where companies can only 'nudge' customer behaviour. There are also numerous examples where we have received material ODI penalties for actions entirely outside of management control[85]. It is sensible to make proportionate use of caps, collars and deadbands; and
- reopener mechanisms in the price review are sensible and proportionate tools to be used in extreme circumstances to protect the ongoing delivery of the essential service for customers. Whilst we agree with CEPA that these mechanisms were written some time ago and the mechanisms and triggers for their use could be updated we would not consent to their removal or changes to them that increased the trigger level. So any proposed changes to these mechanisms would need to be handled carefully. As CEPA states these mechanisms have not been triggered since 2013 but their use is clearly intended in more extreme circumstances and for example the IDoK process has been used successfully for other purposes, including to support the development of the Direct Procurement for Customers market.

11.2 How should we improve our use of RoRE risk ranges to provide insights into the balance of risk and reward, and improve comparability across companies?

277. We agree that RoRE risk ranges, particularly for ODI outturn performance have been problematic to estimate with confidence, but other elements of the RoRE stack are generally clear and the framework is well understood. The framework also provides a decent comparative benchmark both between companies in the sector and across to other sectors who also use a RoRE based approach, such as the energy sector.

[85] *For example in Autumn 2020 some 100 tonnes of construction spoil was dumped (without permission) on soft ground under which was a major supply main. The resulting burst had a material impact on our interruptions performance.*

278. A key issue with the estimation of RoRE ODI ranges has been the calculation of the P10 and P90 values of the associated expected outturn PC performance and the subsequent Ofwat adjustments, for example to reflect 'information asymmetry'. We note that the CMA accepted that there was asymmetric risk in the settlement and this was part of its justification for 'aiming up' on the Cost of Equity. However, Ofwat and the CMA both considered cashflow risk to be limited (effectively assuming that risk exposure was capped at 1% RoRE) despite the tough settlement with step changes in service performance targets and ODIs.

279. Part of the challenge arises from the relatively novelty of the PC/ODI framework and the comparability of that framework in PR14 (before common PCs and ODIs were introduced). So, to some extent observed performance and empirical data should improve the quality of the analysis that can be done and reduce the scope and need for arbitrary 'information asymmetry' adjustments. Ofwat could further enhance the setting of RoRE ranges on ODIs by:

- Providing greater guidance on the setting of P10 and P90 values across the sector and developing that guidance based on observed industry performance during AMPs 6 and 7; and
- Requiring greater data collection on PC investments alongside service performance to understand the cost and service relationship better.

280. We agree with Ofwat that risk analysis could play a stronger role in PR24 and that this will be important. In particular risk analysis can help to understand financeability and financial resilience of the settlement in the round. In particular it can be used to ensure that the financial headroom implied by the allowed Cost of Equity is sufficient to support the management of risks and to ensure that the price control represents a 'fair bet', i.e. investors can expect to earn their required base return on a mean expected basis.

11.3 Should we index the allowed return on equity, and if so, how ought this to be implemented?

281. For the reasons set out above we believe that stability and predictability should be a key theme of PR24. We therefore do not support the indexation of the CoE, including any of the individual parameters. Now is the time for stability given the scale of recent regulatory changes in the risk and reward balance, the scale of the required investment and recent market volatility driven by the Covid pandemic.

282. Ofwat (and CEPA) present the benefits of CoE indexation as principally around the removal of volatility in the setting of the Risk Free Rate. We assume that, despite the reference to indexation of the 'Cost of Equity' in reality Ofwat is considering indexation of the RfR. CEPA also notes that the changes would deliver a 'second order benefit' associated with within period financeability by ensuring that both cost of debt and cost of equity are indexed[86]. In response to these points we would observe that:

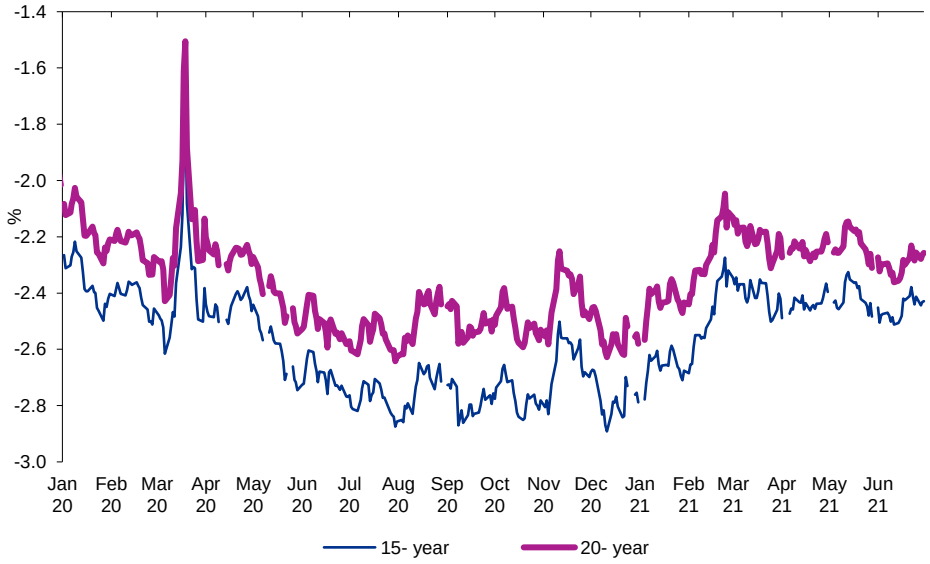
- Ofwat effectively took a spot rate for the RFR based on gilts, it was the taking of the spot rate that really increased the volatility in the process rather than volatility in gilts. Had Ofwat taken a longer period average or a weighted average of AAA bonds and gilts (as the CMA did) the volatility would have been much lower;
- in any event the volatility was still lower than the volatility observed on other parameters such as the beta estimates over the period, which Ofwat and CEPA are not proposing to index; and
- whilst we agree that there is a financeability benefit to the matching of debt and equity, it is likely to be small in line with the impact of the RfR on the Cost of Equity and it could also have a negative impact on financeability or imply different levels of financial headroom on an ex-ante basis given the long term fixed embedded debt costs across the sector.

[86] *See: https://www.ofwat.gov.uk/wp-content/uploads/2021/06/CEPA-report-Allocation-of-risk page 60, https://www.ofwat.gov.uk/wp-content/uploads/2019/07/Decision-document-on-strengthening-the-regulatory-ring-fencing-framework...-1.pdf p.6*

283. We therefore cannot see very clear and material benefits of this change.

284. We can also see some disadvantages of the change, including that:
- the indexation approach is likely to create significant complexity and uncertainty including the need for ex-ante rate setting, in-period adjustments and then an end of period reconciliation model; and
- with price inflation rising there is a risk that interest rates are raised, Ofwat's change could potentially raise bills in the future and will certainly increase bill volatility within the control period because of the need for ongoing adjustments which is inconsistent with customers consistently stated preference for stable bills. Following a period of volatility since December gilts have risen.

Figure 8: Current 15 and 20 gilts



Source: BoE

285. NWL continues to believe that the CAPM and the associated CoE should be set on the basis of a 'through the cycle' view and taking account of all the elements of the CoE 'in the round'. Rather than using an evolving spot rate, each CoE parameter needs to be assessed and considered in the round with appropriate cross checks, including in relation to risk and financeability in line with the independent credit rating agencies methodologies and companies licence condition requirements to maintain those credit ratings. Given the above points the risk transfer argument also appears finely balanced and such a change would not necessarily imply a transfer of risk from shareholders to customers that would justify a reduction to be reflected in the CAPM.

286. Ofwat's consultation makes little mention of the role of AAA bonds, which CMA was very clear should form part of any assessment of the RfR[87]. If Ofwat does decide to construct an index for the RfR then these should form part of any indexation approach to ensure consistency with the CMA's decisions. There are a number of ways that this could easily be facilitated by either:

- Using an index for AAA corporate bonds and simply reflecting the volatility; or
- Calculating a long term differential 'wedge' between ILGs and the AAA bonds and then making an upward adjustment to reflect that wedge, potentially with an end of period true-up.

[87] *CMA Final Determination para 9.162*

287. In its report CEPA highlights that the application of a wedge would be *'a relatively straightforward adjustment to a mechanistic approach'*[88]

11.4 To what extent should we place weight on a) balance sheet data; and b) index data when setting the allowed return on debt?

288. NWL supports the greater use of company balance sheet data in setting the allowed cost of embedded debt. Companies investment cycles largely drive when they need to raise debt and when companies do so they use a competitive market which ensures efficient pricing for customers. The approach of using an independent benchmark index creates winners and losers with little bearing on efficiency and can erode financeability .

289. It is also in customers interests for companies to raise debt over the long term seeking to match assets and liabilities and there is some evidence that the use of a benchmark index may actually be driving companies to issue more short-term debt which is unlikely be in customers' interests given company investment cycles[89]. We therefore support the greater use of actual company data either as part of the assessment framework alongside an independent benchmark index or in conjunction with one. We would suggest:
   - The 'balance sheet' approach is used as the primary methodology, consistent with the CMA findings but the devil is in the detail of the calculation here and the CMA noted that it found it 'surprisingly difficult' to calculate a simple sector average. The calculation is highly sensitive to adjustments, for example in relation to the inclusion or exclusion of derivates, the assumptions for 'non-pure' debt, floating rate debt, EIB debt and other elements as well as the assumptions made around the cost of carry and the averaging methodology. We believe that Ofwat should consult formally on the approach to the averaging calculation and consider evidence from companies as well as the CMAs approach; and
   - The 'benchmark led' approach is then used as a cross check. Regulators often emphasise that an independent benchmark can provide clear long-term incentives and risk allocation but for the reasons previously stated we consider that company data should be used under the balance sheet approach in the first instance. There is merit in developing this index as a cross check or to act as a floor for the cost of embedded debt.

11.5 Should we allow adjustments to the sector allowed return based on company size - and how should this be assessed?

290. Smaller Water only Companies are better placed to comment on the extent to which the allowed return should be adjusted for company size. It is surprising that after three consecutive appeals and three consistent CMA decisions supporting the arguments that smaller companies have a higher cost of capital and rejecting Ofwat's methodology for considering such adjustments Ofwat is not able to accept and adopt the CMA's position.

11.6 Should we make different assumptions for the PR24 notional structure compared to PR19, and how should such a change be implemented?

291. We are surprised that Ofwat has decided to raise this point. Ofwat made the same point to the CMA during the appeals process, many times, and the CMA chose not to pursue it instead focusing on setting the appropriate cost of capital to ensure financeability. If Ofwat considers that there is a strong need to adjust the notional structure then it needs to set out a better conceptual framework for making changes to the notional gearing assumption than it has with real evidence of both the problem it is seeking to address and why an adjustment to notional gearing is required.

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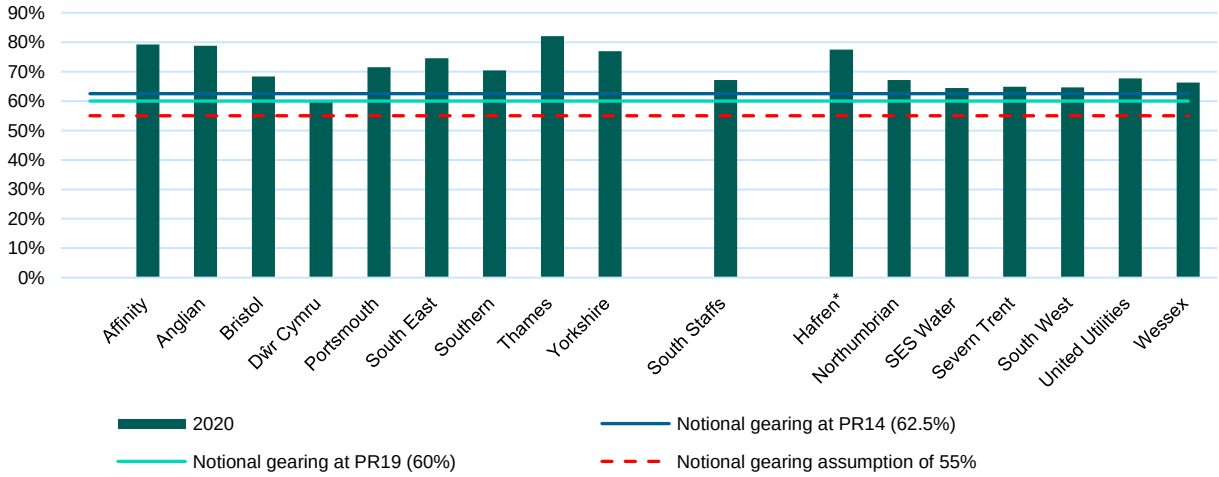
[88] *See: https://www.ofwat.gov.uk/wp-content/uploads/2021/06/CEPA-report-Allocation-of-risk page 69*

[89] *Average tenor of bonds issues in the sector has been reducing under Ofwat's previous approach, this evidence was discussed at the CMA*

292. The notional company is meant to provide a guide to the potential efficient financing model of a water and wastewater company and is used to set the cost of capital and for assessments of financeability. Whilst the notional structure need not represent an 'average' for the sector, the further it departs from the sector precedent the less likely it is to represent an 'efficient' benchmark. At the current notional gearing of 60% which was set for PR19 there is only one company that has a level of gearing at or below that level, Dwr Cymru which operates under a mutual model, all other companies have levels of gearing above the 60% notional level with some substantially above. The sector average for 2020 was around 71%. NWL's gearing sat at 67% in 2020, below the sector average.

Figure 9: Actual water company gearing 19/20 versus notional assumptions PR14 (62.5%), PR19 (60%) and 55%, chart splits securitised (left) and non-securitised (right)



Source: Ofwat, 2020, Monitoring financial resilience report

293. The above gearing analysis is not surprising for an asset intensive sector like the water industry and competitive project finance models, such as those being promoted by Ofwat through its DPC model, would typically have much higher levels of leverage, gearing for the Thames Tideway Tunnel project, which was subject to market competition and which Ofwat also regulates currently stands at 81%. The independent credit rating agency Moody's uses an upper bound of 72% in its assessment of Baa1 and in its final report the CMA noted that "this range relates to a notional target level from the credit rating agencies of around 65-70%"[90]. This approach and assumption recognizes that water companies have a licence obligation to maintain a strong investment grade credit rating. A notional assumption of 55% is therefore very difficult to justify and would represent a level of gearing entirely inconsistent with any company in the sector or rating agency threshold and well below what we would expect to see in competitive models which regulation apparently seeks to mimic. At this level the notional company is likely to be inefficient.

294. Moreover, the notional assumption is meant to be enduring, stable and predictable, this provides certainty to companies and their shareholders about the impacts and risks of changes to the notional capital structure. NWLs actual capital structure (including both the gearing and the mix of debt) has been set for example very close to Ofwat's historical notional assumptions and this has been a clear strategy for the business. If Notional gearing were to fall to 55% PR24 then this would amount to a very significant 7.5% drop in the gearing assumption since PR14, this is not consistent with stable and predictable regulation. Furthermore, Ofwat would need to recognize that changes to financial structures incur costs and we note that Ofgem included a 5% equity issuance allowances in its RIIO2 Final Determinations to reflect this.

90 *CMA Final Report para 10.99c*

295. As in other areas of risk and return we also do not recognize the issue Ofwat is trying to fix, Ofwat states that companies have been "adopting risky financing strategies in order to arbitrage gains for investors"[91]. We do not recognize this risk, which was comprehensively considered and roundly rejected by the CMA and this concern certainly cannot be levied at our own financial structure, which is geared below the sector average. Ofwat had a full and fair opportunity to justify its GOSM mechanism at the CMA and this mechanism was removed. It was clear through that process that the CMA were sceptical of Ofwat's concerns in the first place and the CMA had an opportunity to replace the GOSM with some alternative arrangement including a change to the notional gearing assumption but they did not choose to do so. In short Ofwat's concern is inconsistent with both theory[92] and observed practice both in the water industry and elsewhere.

296. Financeability has been a significant concern at PR19 but looking ahead to PR24 it is quite possible that those concerns will be smaller. Equity cashflows may be stable or even growing given macroeconomic trends with the potential for inflation and interest rate rises as well as the full transition to CPIH whilst allowances for embedded debt if set on a benchmark index bases as at PR19 are likely to fall significantly with the evolution of the debt trailing average beyond the global financial crisis period. Cost of debt will go down significantly whilst cost of equity will not. Since financeability is in part about the balance between equity and debt cashflows, it is unlikely to be the problem at PR24 that it was at PR19. This is further rationale for not making the change Ofwat proposes.

11.7 Do you have any suggestions for mechanisms which could incentivise financial resilience within the price control process?

297. NWL is geared at below the average for the sector with a vanilla financial structure and strong credit rating.

298. It remains very unclear to us that there is a risk associated with higher leverage, this was also not clear to the CMA[93]:
    - The Modigliani–Miller theorem does not support the concerns Ofwat highlights;
    - Water sector gearing is consistent with or below competitive market benchmarks and within tramlines used by the independent, expert credit rating agencies. Water companies also have a licence obligation, introduced by Ofwat recently, to maintain an investment grade credit rating and so companies must remain within those thresholds or put their licence at risk;
    - The sector has successfully navigated the global financial crisis, and now the Covid pandemic with no demonstrable issues and the other regulatory protections (such as the regulatory ring-fence) have worked effectively in the case of Wessex Water and Welsh Water in the past, no water company since privatisation has ever had to go into special administration; and
    - Ofwat has introduced Long Term Viability Statements (LTVS) in recent years to again encourage companies to consider the long-term financial viability of these businesses.

299. We therefore do not recognize the financial resilience concerns that Ofwat highlights.

300. Moreover, we do not believe that an 'incentive' or dynamic mechanism is needed within the price control. As can be seen from higher leverage is only an issue for a subset of companies across the sector and a remedy applied to all companies is therefore not required. Where a company has financial resilience issues this will become clear, first from LTVS, then credit ratings. Ofwat can and should simply

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91 *See Ofwat consultation document, section 11.3.1.*

92 *The Modigliani–Miller theorem (of Franco Modigliani, Merton Miller) forms the basis for modern thinking on capital structure. The basic theorem states that in the absence of taxes, bankruptcy costs, agency costs, and asymmetric information, and in an efficient market, the value of a firm is unaffected by how that firm is financed. Since the value of the firm depends neither on its dividend policy nor its decision to raise capital by issuing stock or selling debt. The theorem is often called the capital structure irrelevance principle. Ofwat's apparent concerns over the level of gearing in the capital structure are inconsistent with this influential theorem.*

93 *CMA Final Report, p.36, para 102*

focus on individual companies and work with them to address their issues and seek remedies. Then it can tailor its approach and remedies to individual circumstances. This is fundamentally not an issue to be addressed through the price control as it is not only about company business plans. Ofwat has other regulatory tools which are better suited to addressing this perceived problem which requires a more targeted approach consistent with Ofwat's better regulation duty.

11.8 To what extent should we further increase the share of the notional company RCV which is indexed to CPIH in our assumptions for the period 2025-30, and how should this be implemented?

301. We support the transition to full CPIH indexation of the RCV in PR24. RPI is no longer a National Statistic and the UK Government have confirmed they will no longer be using RPI post 2030. Based on current forecasts for the cost of new debt over 2020-25, it seems likely that the fall in embedded debt costs by 2025 should largely offset the increase in the real cost of capital due to full transition to CPIH, making PR24 the ideal opportunity to make the full transition without adverse bill incidence effects.

302. It is worth noting that historical embedded debt will include RPI index linked debt as part of the mix and so this should be included as part of the balance sheet approach (see 11.4).

303. Obviously the transition to CPIH has no impact on the quality of historical inflation data such as that used in relation to the setting of Total Market Return.

12 NEXT STEPS FOR PR24

12.1 What are your views on the draft timetable for PR24?

304. The proposed timetable appears broadly sensible, however there are some unknowns (which present significant risks to a successful outcome) and these need to be clarified prior to the proposed methodology consultation in June 2022 in order that companies can accommodate these in their work programmes.

Timing of provision of early views on base costs, PCLs, ODIs and financing costs.

305. Given that these items will be informed by information in companies' APRs, it is likely that information in APRs published in July 2023 will be available too late to for companies to give any meaningful consideration to in their plans published 2nd October 2023. Ofwat will firstly need a few weeks to assimilate and process this information, at which point companies will be well advanced with testing customer acceptability and assurance (including board assurance) of their final plans.

306. These aspects are also complex and interlinked, and companies will need time to consider these fully. For example the early views on base cost allowances will directly affect what is achievable in terms of PCLs, and the overall package of base costs, PCLs and ODIs will affect overall levels of risk – which in turn will need to be reflected in financing costs. (At PR19, Ofwat set an early view on the WACC in advance of the level of risk present in many other aspects of the package being known – which makes no sense.)

307. Hence Ofwat should rely on information up to that shared in APRs in July 2022, which will allow sufficient time for the information to be properly processed and reflected upon in plans. Provision of early views on PCLs and ODIs may also rely on the results of any centralised customer engagement, and as base costs and financing costs are linked (see above), it may be that the timing of this engagement, as opposed to provision of APR information, dictates when these early views are made available. (see below).

Timing of centralised customer engagement

308. While we are not supportive of Ofwat's approach in this regard, we do understand that the most likely topics for centralised engagement are in relation to ODIs for common PCs. Based on our timeline for PR19, these engagement results will need to be complete and made available to companies during Q4 2022 at the latest, if Ofwat wishes companies to have adequate opportunity to reflect on these in their final plans.

309. Beyond these items, there remains a significant unknown in relation to the precise scope of any centralized engagement. Given that companies will already be commencing their engagement programmes for PR24, Ofwat needs to clarify this scope asap, and as a minimum before end 2021, so that companies can adequately take account of Ofwat's scope in their own work programmes.

Early clarity on other unknown matters.

310. The timeline refers to potential "early submissions" in May 2023. The default assumption is that this will relate to Bespoke ODIs as per the approach adopted at PR19.

311. If the scope of any early submissions is to be broader than this, it will have a material impact on companies' work programmes. To allow for this Ofwat needs to advise companies of requirements prior to its PR24 methodology consultation (June/July 2022) and ideally before end 2021.

312. We also suggest Ofwat sets out a detailed timeline for PR24, with milestones as months rather than the more vague references to 'seasons'. This should include Ofwat deadlines on the issuing of key data requirements such as business plan tables, the financial model and the cost assessment models that companies are to refer to in their plans. Ofwat set the industry these precise deadlines for Periodic Reviews, so we believe a similar commitment from Ofwat is reasonable to expect.

14 APPENDIX – EXAMINING THE BOUNDARY OF THE TARGETED CONTROL FOR WATER RESOURCES

14.1 How can costs and incentives for the existing water resources control be targeted more effectively? and

14.2 Would amending the boundary to include raw water distribution or to extend it further to include water treatment improve the operation of the control? What are the issues involved?

313. As per our response to Q8.2, we support the allocation of water treatment to the water resources for the purposes of cost assessment. We do not support the separation of water wholesale into separate controls, as we believe this has added complexity without any benefits.

314. In our view, the greatest opportunity for water resources efficiencies is through the efficient procurement of new resources. The trading and procurement code, the bidding in process, the WRMP and the RAPID programme are all designed to encourage the most efficient market solution to demand for water resources. None of these processes require a separate water resources price control and it could be removed to reduce regulatory burdens.

315. Ofwat should be careful not to try to re-regulate the sunk cost historical decisions around the location, sizing and capital costs of existing water resources, many of which were inherited at privatization.