



Technical representation

Financing, risk and return



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Overview

The plan we are looking to deliver out to 2030 will see a doubling of capital investment, targeted to deliver on the priorities customers have informed us are important to them. We welcome Ofwat's recognition that our operations are efficient and our outcome proposals stretching – an “outstanding” plan. We have plans in place to ensure we have the resources and supply chain to deliver on our commitments. However, for any plan to be deliverable, it also needs to be based on solid foundations – through strong financial resilience and returns that are appropriate for investors, if the business delivers efficiently and effectively.

As a result, we designed our plan to balance risks with rewards and to ensure that in the round it provided an appropriate return to investors, as well as delivering for customers. With a cost of capital determined based on the returns needed for a stable, low risk sector, our Plan sought to ensure that whilst our Plan was ambitious, our targets stretching and our cost projections efficient, returns could be achieved for investors within a reasonable range of upside and downside risk and our financial position could withstand shocks.

We recognise the benefit from the higher cost of capital in the Draft Determination, as well as the aiming up on cost of equity to support investability going forward. However, Ofwat's adjustments in the draft determination also result in lower revenues through lowering of RCV run off, a wider range of downside risks through ODI and other incentive mechanisms, as well as removing expenditure on our already efficient plans.

This increases the risks in our plan, whilst the methodology for the cost of capital remains unchanged. We have supported and continue to support Ofwat's approach to the cost of capital. However, for this to remain an attractive cost of capital for investors, it is vital that the balance of risk and reward is aligned with this return.

As a result, we provide representations on:

- Balance of risk and reward and ODIs – we demonstrate that the risks reflected in the Draft Determination are significantly higher than presented by Ofwat and request that we engage with Ofwat to better establish a balanced view of risks and rewards. With the cost of equity allowed of c£600m, the affordability levers Ofwat have pulled has eroded any risk buffer by c£200m and risks the financeability and sustainability of the plan.
- Cost of capital, financeability and investability – to deliver our Plan, we need the support of our debt holders and shareholders. Risks must be commensurate with the return investors receive; from our analysis, the level of risk inherent in the Determination exceeds the level for which returns are provided, both for the notional and actual company, and we therefore set out why this is the case and what adjustments are required to ensure the Determination supports a long term sustainable business.
- Deferral of run off – our plan reflected the natural rate of RCV run off and PAYG derived on a bottom up basis and reflecting the resources required to deliver and the natural rates of operating and capital charges, ensuring customers paid for the services they received, whilst providing appropriate returns to investors. We ask that the revenue deferred by Ofwat is returned to ensure that investors receive the return reflected in the cost of capital and preserves intergenerational equity for customers

Our plan

Our plan was based on strong foundations to ensure a plan that delivered for our customers, was efficient and ensured a balance return for investors. As such, it was built on a thorough assessment of:

- The customer bill impact of the building blocks of allowed revenues, including the cost of capital
- Financeability, taking into account the most recent market data on the cost of capital
- RCV run-off based on the remaining asset lives in order to fund asset maintenance, supported by customer research on intergenerational equity. The run-off rates were lower than at PR19 to reflect increasing the asset lives of recent maintenance expenditure
- The factors affecting risk and return to providers of finance
- How uncertainty and risks should be mitigated, and the approach to sharing fairly any outperformance or changes in our delivery with customers.

We supported our plan with new and compelling analysis, supported by expert third-party analysis, to ensure our plan was a fair balance of risk and return:

- We explored what change in service level has been achieved through past base ("what base buys") and enhancement expenditure, and what the performance trends are for cost benchmarks
- Our outcome incentives reflect new research on customer views, translated to a "top-down" allocation as a percentage of RORE
- Finally, we built our risk analysis by using the power of the "what base buys" analysis combined with the distribution of historical performance across the industry to truly ground our risk analysis in the relationship between service and efficient cost for customers.

This analysis allowed us to keep bill increases to a minimum, using regulatory levers with customer interests and financial resilience in mind – a fair balance of risk and return. It was supported by customer research on intergenerational equity. Importantly, we continue to work with our WaterShare+ Panel to ensure we represent the views of customers on affordability, as well as continuing our sharing mechanism to ensure outperformance is passed back through to our customers.

Our assessment of the draft determination

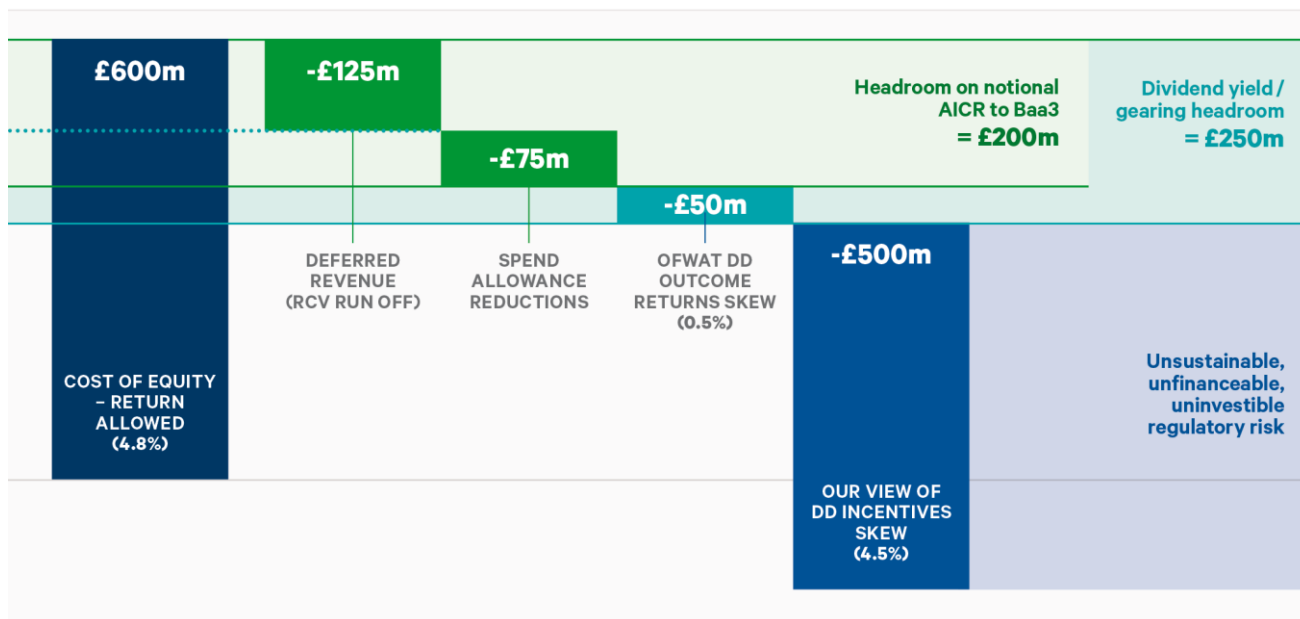
We welcome:

- The overall approach to the WACC and the updated allowance representing the market changes
- Ofwat considering further market rate updates and details of WACC methodology before the final determination
- The principle of a balanced risk and return framework that is essential to retain and attract equity investment
- The range of new backstop protection mechanisms that fairly balance risk and return and emphasise the importance of delivering investment, such as the Aggregate Sharing Mechanisms and Delayed Delivery Cashflow Mechanism.

With significant investment requirements ahead of us, a fair balance of risk and return and strong financeability is critical to both our business and the sector as a whole. The Determination increases the downside risk through tightening our already ambitious services levels, whilst reducing the potential for reward. Whilst the cost of capital has increased, the lower RCV run off coupled with the incentives framework, puts a strain on the investability of the company at a time when it is needed most.

Importantly, the allowed cost of equity of 4.8% forms £600m of our revenue allowance. This is higher than in past reviews, in part because Ofwat rightly wanted to have more financial headroom for the major investment programmes and so lowered notional gearing for PR24 from 60% to 55%. For investability purposes, Ofwat in the DD were also careful to "aim up" to get a 4.8% equity return in the WACC. In our plan we also proposed holding dividends to a yield of c2%, a lower assumption needed to keep gearing down and within the boundaries Ofwat believes is appropriate – something we support in practice with our track record of responsible financing and sharing past benefits with customers through our WaterShare+ mechanism.

Risk and return gap in the Draft Determination



The risk and return gap in the draft determination is therefore a concern. We explain below how the reduction in RCV run-off rates from c4.6% to 4.1% takes away the higher WACC from customers, and then triggers an assumption of a c£200m equity injection. The totex reductions reduce RCV run-off and PAYG allowances further, and result in a £200m revenue gap that removes the financial headroom and cashflow needed to ensure we can pay even a record low 2% dividend to retain and attract equity – investability is thus removed in the DD.

This is before considering ODI risks. Ofwat’s DD has a 0.5% difference between the P10 and P90 levels in aggregate (+0.9% outperformance to -1.4% underperformance). This skew in itself reduces the returns available to investors, and implies the cost of equity should be c0.25% higher than in the DD, increasing customer bills further to close the risk and return gap. As we show below, this is based on a very optimistic view of the performance risks faced in the ODI framework – the gap in our view is £500m larger than this and results in negative returns to investors which is not sustainable. This shows the importance of resolving the three key topics we want to discuss ahead of the FD.

ODIs and the balance of risk and return

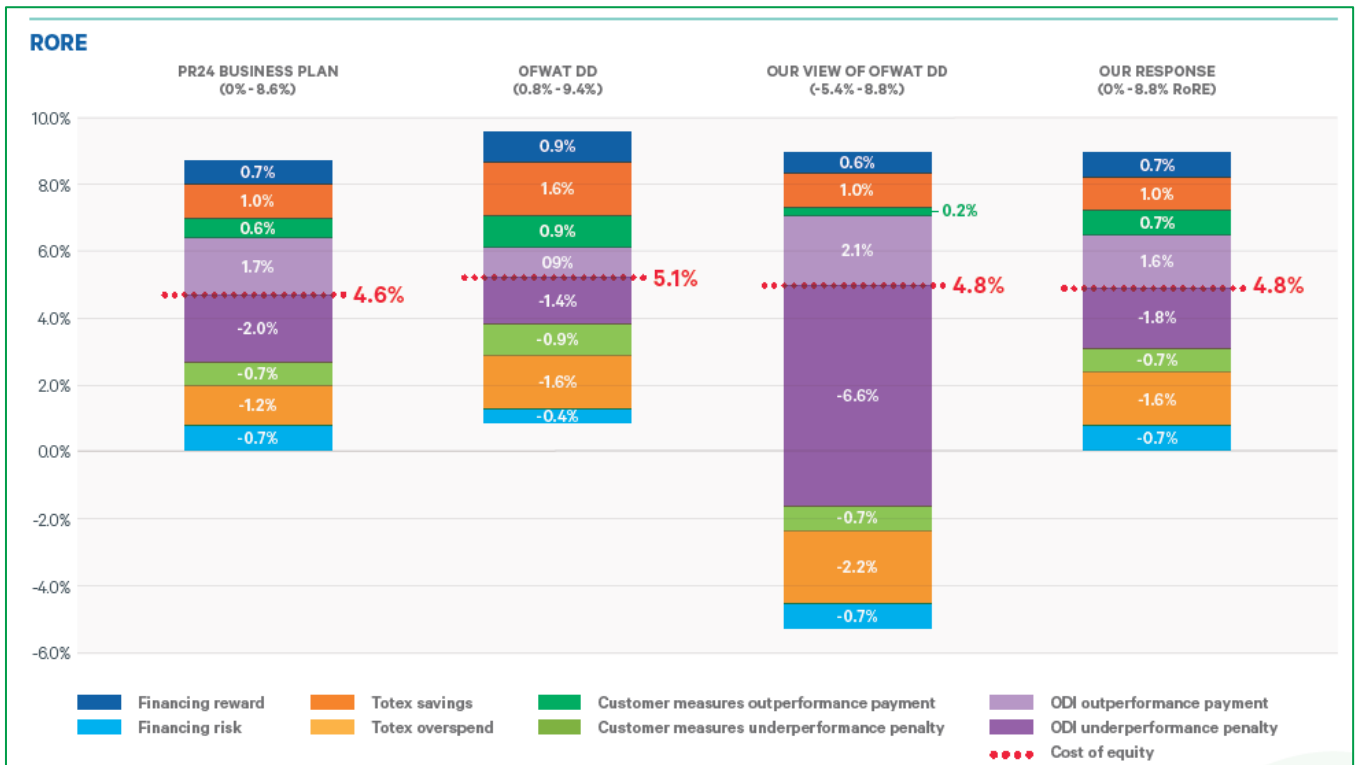
Outcome Delivery Incentives (ODIs) are of particular importance to the risk and return balance in the Draft Determination. We describe in our outcomes response document our detailed ODI analysis; here we describe the risk and return impact.

The water sector is spending more on totex in AMP7 than allowed at PR19, whilst also underperforming against ODIs and performance commitments; as such, Ofwat are right to emphasise the importance of delivery of AMP8 plans. We are confident in the efficiency of our totex plan and challenging performance commitment levels, and we welcome that Ofwat has recognised this in our “outstanding” plan status.

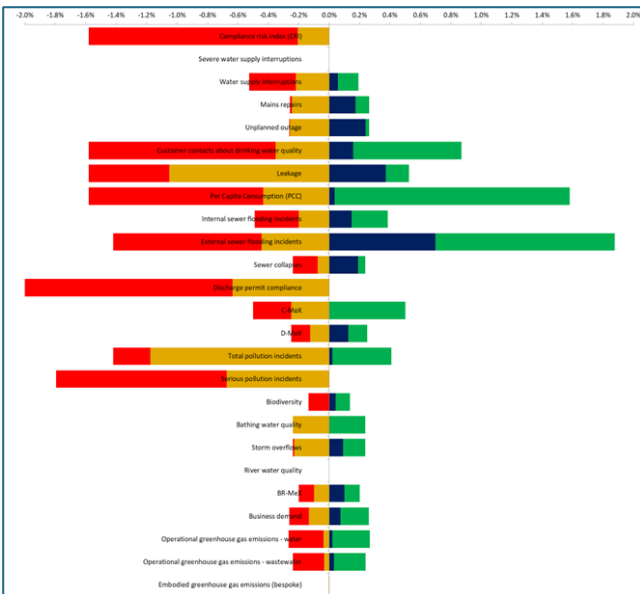
Ofwat presented a balanced risk to investor returns in its Determination analysis; with broadly symmetrical operational (cost and outcome) and financing risks and we welcome the recognition that a balanced risk and reward framework is critical for the sector. In our case, Ofwat showed a range of 0.8% to 9.4% which reflects +/- 4.3% against the cost of equity.

Our assessment of the balance within the determination is different and our assessment shows that the framework presented by Ofwat would result in a position heavily skewed by ODIs, which form 6.6% of our total downside risk of 10.2%.

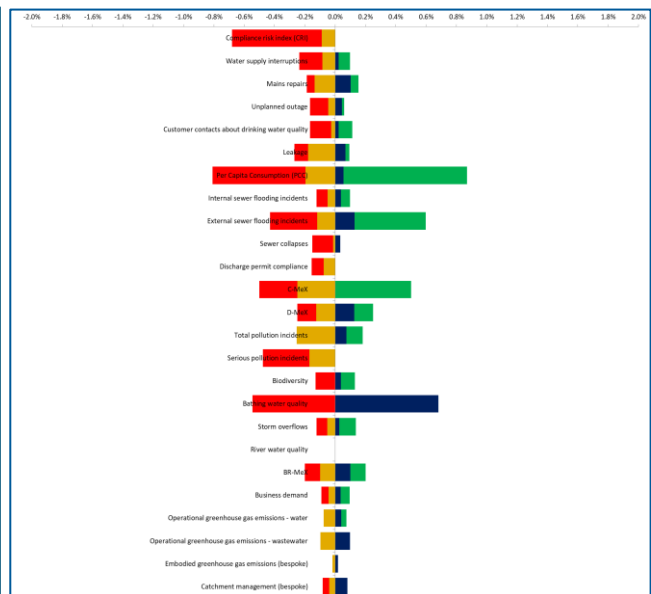
We provide representations that would broadly restore balance to the RoRE range at 0% to 8.8% around the DD cost of equity of 4.8%.



- Our **totex and PCD representations** will also resolve some of our risk and return balance challenge.
- The **cost sharing rates, uncertainty mechanism proposals and indexing** of labour and energy costs in the DD are welcome contributors to the risk and return balance and we make minor suggestions to improve this further.
- We adjust **ODI targets and incentive rates** directly linked to our customer research on the topic. Incentive rates are important, but are not enough on their own to ensure balanced ODIs. We suggest a range of detailed service level and incentive design options are also necessary and have set considerations for these and our proposals in our ODI response but welcome engagement with Ofwat around this important area.



Draft Determination (our view)



Draft Determination (our response)

To illustrate the impact of the ODIs on our risk and return balance (and as shown in the diagram above), the downside skew in our view of the Determination is heavily impacted by pollution incidents. Of our £830m maximum P10 ODI penalty for AMP8 based on the DD, £236m of this relates to pollution incidents alone. The differential between Ofwat's view of ODI RoRE and ours is risk; for pollutions, there is no risk (additive model) assumed by Ofwat at all by 2030 in the RoRE range, and only 7 incidents extra in a poorly performing year compared to the target at the start of the period. We do not believe this to be realistic, yet all performance metrics have similar assumptions. Risk will naturally increase, and outperformance opportunities reduce, at better levels of service. Current industry totex and ODI performance illustrates this point clearly. We ask Ofwat to revise their position in respect of this risk and return gap arising from ODIs, to ensure financeability and investability of the Plan can be maintained.

ODIs create a risk and return gap in the DD, one that puts notional company financeability, equity investability and dividends at risk. From a customer perspective, there is a risk that the cost of equity and debt are driven up in the long-term, and bills are higher than they otherwise would be for the investment out to 2050 that everyone wants to see delivered.

Totex and Price Control Deliverables

Our plan was assessed as outstanding based on the stretching proposals on cost and performance, plus our approach to address affordability and bill profiling.

There is a significant challenge on enhancement costs in our plan – we believe our plan was efficient and the funding gap of c£350m is unwarranted. Most of this gap is on the water service where the enhancement modelling appears less sophisticated than for wastewater.

Our base costs overall are efficient, and based on 2023/24 APR we believe we will continue to be better than the Upper Quartile level of efficiency. We remove elements of cost (“symmetrical cost adjustment claims”) Ofwat have allowed that were not part of our plan, because we either do not have the need (resilience), or customers did not support funding this as an additional cost (net zero), or we are confident in our long-term asset management modelling (mains replacement). We remove both the cost and related PCL and PCD changes made by Ofwat.

We support the principle of a PCD framework and agree with Ofwat's objectives of bringing more certainty to customers on the delivery of outputs, making sure customers only pay for what is delivered. With the size of the investment programme for PR24, customers need protections to ensure companies deliver against their commitments. We are pleased to see Ofwat has invited representations on the draft PCD framework. Our view is that simplification and flexibility is needed to enable companies to deliver efficiently and innovatively. As it currently stands the administrative burden would be unnecessarily excessive and we recommend Ofwat take a simpler portfolio approach whilst also removing unnecessary conditions and timing mechanisms which could lead to excessive and inappropriate penalties and increase risk further.

In our plan we shared a proposal to use our WaterShare + customer advisory panel to assess changes to our delivery performance and our investment programme with a mechanism to keep track of new and changed obligations with an annual scorecard. This would result in a recommendation from the panel on a net 'true up' at the end of the AMP which would form our case for our PR24 reconciliation adjustment in 2030. This proposal has the benefit of supporting the July 2024 ministerial announcement on the need to make the interests of customers a primary objective of companies Articles of Association as well as delivering on the commitment to ringfence unspent allowances and return these to customers.

Intergenerational equity and Deferred revenue

We welcome Ofwat's recognition in the DD that we had set out RCV run off rates appropriately in line with this principle. The RCV run off reflects capital charges – an allowance in revenues to finance replacement of existing assets. This rate comes down naturally as assets reach the end of their lives and are replaced, in our plan a reduction from 4.9% at PR19 to 4.6%.

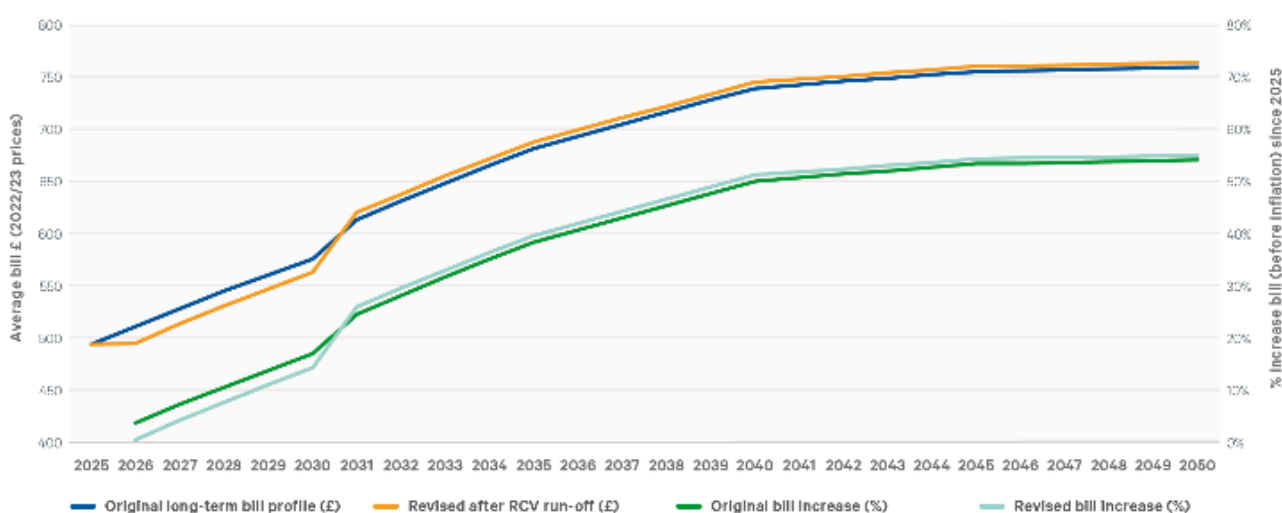
However, Ofwat reduced RCV run off for eight companies in order to defer revenue into the future. For SWB, our reduction was one of the largest with £125m reduction in revenues, equivalent to reducing rates from 4.6% to 4.1% in order to reduce customer bills in the short term. However, this defers revenue to increase future bills, as well as removing financial headroom needed to ensure efficient funding of the capital programme.

Making an adjustment because of notional company financial ratios that reduces the headroom available for equity returns for a few companies is in itself a challenging assumption given investors have a choice of companies and sectors in which to invest.

We share with Ofwat the desire to minimise the impact on customer bills of the investment programme. Our plan had already taken steps to manage affordability and ensure that we could retain our commitment to no customers in water poverty. We considered intergenerational equity in our plan, and offered to do this by spreading the customer share of additional costs during AMP7 over a longer period. We welcome Ofwat including this in our draft determination and were pleased to see consultation with other companies to give them the opportunity to take up the same option.

Deferring revenue from AMP8 to 2030-2050 will cost customers £60m over the period, an additional £7 per annum average household bill increase from 2030. This is because of three factors – the value stays in the RCV and is financed through the WACC, the £125m of revenue deferred from AMP8 is then recovered faster over the next 20 years, and the shortfall of revenue in the DD triggered Ofwat assuming a £200m equity injection from shareholders which increased AMP8 bills by £4m. Based on our Long Term Delivery Strategy, bills are likely to increase further in 2030 as we meet the investment in water and wastewater services the government wants to see.

Impact of RCV run-off change on long-term bill profile



Our customer research (AAT – Blue Marble Quantitative Report) shows that customers of all generations, both current and future bill payers, supported intergenerational equity – each generation of customers paying their own fair share over the life of the asset. Only around 20% supported back-end loaded bill impacts that put pressure on younger and future bill payers.

We think this is compelling evidence that Ofwat should not defer the revenue needed to finance the investment programme from AMP8 into the future – that is not a financeable, investable or sustainable proposition and comes at an additional cost to customers they do not support.

This affects SWW more than other companies due to the high RCV per customer. We had already proposed a fair balance for consumers in our plan by recovering PR19 totex additional expenditure through the RCV rather than an element in revenues (PAYG).

The Determination had a number of material errors to reconciliation adjustments, and also in the revenue profiling (in particular for the Bristol Water area). We welcome the acknowledgement of these through the query process (we adjust for both "positive" and "negative" impacts on our determination).

Our response to the draft determination suggests bill increases of 26% by 2030 in the South West and Bournemouth areas. The increase and bill level remain consistent with our plan research that saw 74% acceptability. The affordability and progressive charge measures in response to this continue to be part of our delivery plan for customers, and outstanding plan status provided us with an opportunity to take this further.

The Bristol area bill increase of 7% continues to be broadly stable over time, the increase reflecting the revenue we deferred from AMP7 with Ofwat’s support during the cost of living crisis.

Cost of capital, financeability and investability

The cost of capital must reflect the risks to shareholders (equity), including that the cost of debt is covered. We anticipate that the cost of capital may be higher by the time of final determination as a result of market factors and welcome the fact that Ofwat will consider this in September. We set out in this document our estimate that the WACC may be c4% rather than 3.72% once this data is available. We provide observations on the cost of capital methodology to support Ofwat's update ahead of the FD.

One point that does not have a material impact on the cost of equity but we believe is important for inclusion, is that Pennon should be included in the comparators Ofwat use for equity beta. As a pure play listed water company it is important that this comparator is included in the data Ofwat use for WACC calculations.

Depending on the final cost of debt, one aspect Ofwat will wish to review is the new to embedded debt ratio. If Ofwat's assessment is that some companies have a higher investment need than others, it would boost investability to reflect this in the cost of capital. Whilst this may be hard to do on a company specific basis, there are alternatives for example where in the range of new to embedded debt ratios the notional estimate should be set – should this also be "aimed up" for parameter uncertainty to be consistent with the cost of equity approach in the draft determination? We would welcome the opportunity to discuss this further with Ofwat.

Ofwat allow a higher cost of equity but then lower the RCV run-off to reduce customer bills. Inevitably this makes actual financeability more strained as Ofwat apply this on a company specific basis, despite this being based on notional financial ratios. As a direct result, shareholders are expected to provide equity because this bill increase is postponed to the future. The combined effect is a) not in line with the PR24 final methodology, and b) incompatible with the Finance Duty. It also does not reflect customer view on intergenerational equity.

This document assesses this logic step by step. We do not want to see customers paying more through an increasing cost of capital for higher risk incentives and reduced revenues that are misaligned with the natural rate at which capital charges would flow through to bills. We ask Ofwat to take the opportunity to look again at these issues and in particular at the perception of the risk that is arising from the regulatory framework.

Moody's recent sector note echoes the concerns that our in-depth analysis of the DD has identified. It warns of the need to downgrade its rating for the sector if the DD framework was confirmed as it currently stands. This action would increase the revenue / risk and return headroom required to maintain financeability. At that point the deliverability for customers and the environment becomes yet more challenging when our focus needs to be on delivering the investment we are asking customers to pay for.

The Draft Determination fails to deliver a fair balance of risk and return. This is caused by Ofwat taking unrealistic views on the risk that water companies and their investors face. Fundamentally, we had an outstanding plan, yet Ofwat replace many aspects of it with their own view. The ambitious service levels in our plan are stretched further, in some cases without adequate adjustments to base cost allowances. Outcome incentive rates are strengthened beyond current levels, which are already seeing companies across the industry underperform and overspend. This affects the returns investors require.

We look forward to engaging on the way forward for these important issues. We are confident that the gap we see in the draft determination can easily be closed, whilst retaining the full benefit of Ofwat's clear intention to deliver good outcomes for customers and enable companies to attract the necessary finance.

Our proposals

Our request in response to the draft determination is to make the WACC and cost of equity achievable in practice.

- We believe the WACC by the time of the FD, updated for market data, may be c4% rather than the 3.72% in the draft determination. We welcome Ofwat's clear approach to the cost of capital in the DD and our evidence is set out against this framework.
- Whilst we support the approach to the cost of capital, we ask Ofwat to ensure that the level of risk in the Determination, through ODIs, efficiency challenge and other mechanisms, is commensurate with that cost of capital methodology. As a result we ask Ofwat to:
 - restore our plan level of expenditure that will allow us to deliver on the priorities and plans agreed with customers.

- Reverse the adjustment to RCV run off and realign revenues to the natural rate of RCV run off.
- Review the bill profile for Bristol Water in particular to ensure this is appropriate ahead of the FD.
- Revisit the level of risk faced by reviewing ODI incentive rates and design. Key changes we request are:
 - Review the risk modelling assumptions to ensure the P10/P90 ranges are grounded in reality and to remove the assumptions around financing outperformance, which are then used to justify ODI downside skew.
 - To confirm that whilst the aggregate sharing mechanism has a place in the framework (to mitigate against extreme exogenous factors) it should not override ODI protections for individual performance commitments.
 - Review the incentive rate setting methodology to provide a more appropriate range on risk and returns; we propose an alternative and would welcome engagement in this area.
 - Amend specific performance commitments, i.e. remove the normaliser for pollution incidents, change bathing water quality to an industry common target and accept our bespoke ODI on catchment management. For C-MeX – restore the balance of this incentive by removing the cross-sector benchmark and revert back to a relative incentive approach.

For the WACC (and the allowed cost of equity) to support investability and financeability there are criteria investors have to believe:

- **Cost allowances reflect efficient costs** – we consider that these are £350m underestimated in the DD for enhancement costs
- **The RCV should be reflected in allowed revenues to support its financing** - £125m of RCV run off rate reductions are assumed in the Draft Determination to reduce short term customer bills which reduces allowed revenues
- **Allowed revenues should reflect the building blocks of cost and return** - £125m of RCV run off reductions to lower customer bills, plus enhancement allowance reduction and DD errors reduce revenue by £200m
- **Dividend yield and equity assumptions must be investible** – yet a shortfall in allowed revenues of £200m is one-third of the allowed returns. The RCV run off reduction then triggers an equity injection of £200m
- **Outcome incentives must be balanced and contain reasonable risk assumptions whilst PCD s must not result in inefficient delivery and risk unrecovered costs** – outcome incentives alone in the DD have a skew of 0.5% worth £60m (10% of allowed return). In our view the skew is over £500m – i.e. the entire return and the characterisation of risk is not credible as it is minimised.

We provide representation on each of the areas above as to where we believe changes need to arise to ensure a robust, resilient and financeable plan.

The importance of this is that the impact on expected returns and a notional company financing is otherwise material and the revenue gap alone will mean that returns are at risk for investors, even based on Ofwat's view on outcome incentives risk. Without these changes, the impact on the financeability of the notional (and in turn the actual) company is material and will undermine the delivery of the services and outcomes our customers have told us they wish to receive.

Summary of key messages

We set out below how our response aligns to what Ofwat states PR24 is trying to achieve in the draft determination.

Financing, risk and return key representation messages		
What Ofwat is trying to achieve	Our view	Our proposals
Align the interests of companies and investors to those of customers by setting the appropriate balance of risk and return	Ofwat have not achieved this in the draft determination. We see a skew on outcomes and totex, and we do not see an upside on financing that Ofwat use to balance this.	We present a credible view of risk, and we demonstrate both why Ofwat's do not meet the Finance Duty, and the solution to recalibrate risk and return
Incentivise companies to deliver stretching levels of efficiency and levels of service which improve over time	Our plan was recognised as stretching and efficient. We have maintained our plan, whilst carefully responding to Ofwat's specific challenges, in particular on service levels	We present evidence on totex allowances and ODIs in order to provide appropriate incentives. Our proposals are grounded in the compelling industry wide analysis we provided in our plan, and have updated for 2023/24 data.
Ensure that investor returns in 2025-30 fairly reflect the levels of service and cost efficiency that are delivered for customers	Cost allowances have been set below that of an efficient company, in particular for water enhancement.	We present evidence of the cost and service relationship – comparing industry performance trends to Ofwat target levels, and identifying where cost allowances or performance incentives do not reflect a fair set of assumptions.
Draft determinations allow efficient companies to be able to finance their functions and maintain adequate levels of financial resilience	This is not the case in the draft determination as Ofwat have reduced RCV run off rates below the level necessary to fund maintenance.	We propose a solution to avoid undermining the purpose of assuming lower notional gearing to fund the long term investment programme facing the water sector through equity as well as debt.
The risk and return package has been calibrated so that equity investors in an efficient company have a reasonable prospect of earning the base return under the notional capital structure	The risk and return package, and the notional capital structure Ofwat assumes, are both undermined by the analysis in the DD. We support many of the backstop protections included in the DD, but this does not replace properly calibrated incentives.	As in our original plan, we do not believe that the WACC can be set at a level to compensate for poorly calibrated incentives. Backstop protection, whilst welcome, must remain exactly that and not triggered by incentives poorly calibrated for the risks faced by an efficient company.

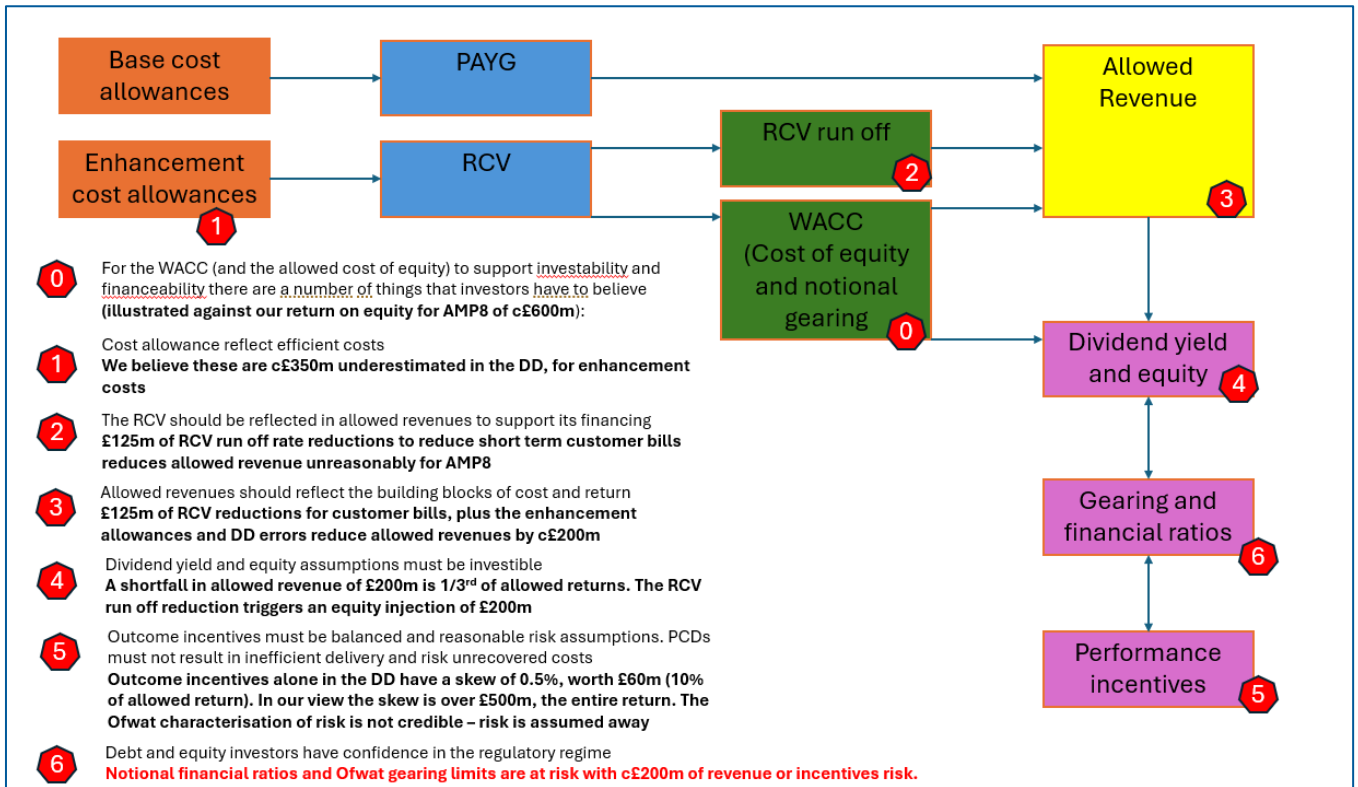
We also include our response to QAA points in this document. In summary:

- We welcome Ofwat's assessment that PAYG and RCV run off rates were supported by evidence that they reflected the natural rate of our expenditure and capital maintenance
- We have updated our executive remuneration and dividend policies
- We have revisited our own assumptions on the balance of risk and return e.g. running our evidence and ODI designs through Ofwat's assessment tools. We are confident that our assessment is well evidenced
- We have reviewed Ofwat's proposed uncertainty mechanisms and provide options for consideration as they cover the same areas of uncertainty as our original proposal
- We provide further information to explain our incentives research, but also show other ways that risk and return could be balanced. We welcome the opportunity our DD response gives to discuss the options.

Supporting Information

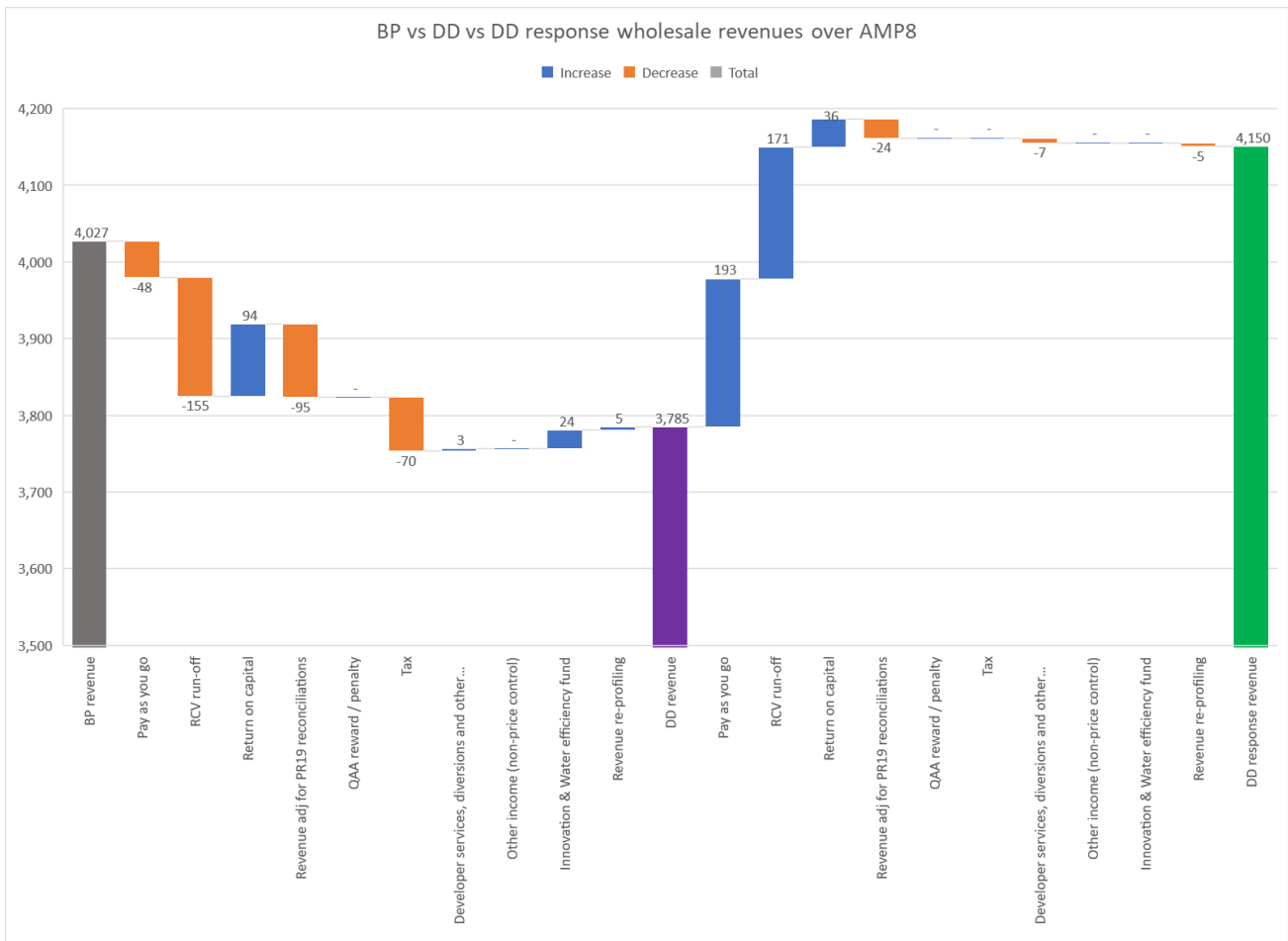
Overall summary of key issues

Our overall summary of the issues with the draft determination is set out below. We illustrate this as a flow between the building blocks that form price setting and the incentive framework, as it helps to illustrate both our logic flow as to how the issues we have with the DD are linked.



This explains the individual areas in the DD that we think should be amended. The importance of this is that the impact on expected returns and a notional company financing is severe. The revenue gap alone will mean that no returns are available to investors, even based on Ofwat’s view on outcome incentives risk. The diagram below helps then to translate our response across these topics into **why** it matters. We understand fully how many assumptions are involved in arriving at a balanced plan or determination.

Revenue summary



In summary, the revenues we need have changed little during the PR24 process:

- Ofwat reduced spend allowances in the draft determination, but allowed us more base revenue due to our efficiency. The DD response reflects our representations which increases PAYG by c£38m from our original plan. £22m of this relates to higher EA charges
- Ofwat reduced enhancement cost allowances and, combined with reducing RCV run off rates, this reduced revenue by c£150m. Both of these elements are reversed in our DD response
- Tax rates have reduced since our original plan, reducing revenue by £70m. Revenue adjustments from PR19 reduce revenues by c£120m
- Overall, revenues have increased since our plan because of a higher cost of capital and Ofwat's increase in the amount customers will contribute to the innovation and water efficiency funds, which now amount to c£4 per customer per annum.

Table 1: Revenue building blocks

Revenue building blocks (£m – 2022/23 prices)	2025/26	2026/27	2027/28	2028/29	2029/30	2025-30
PAYG (operating costs and IRE)	338.0	348.8	363.0	373.8	383.2	1,806.7
RCV run-off (including post 2020 additions)	251.7	258.7	265.3	271.5	276.0	1,323.1
Return on RCV	185.5	194.8	203.7	212.2	219.0	1,015.1
PR19 reconciliations	- 8.8	- 6.2	- 6.6	- 6.8	- 7.0	- 35.4
Tax	-	-	-	-	-	-
Grants and contributions recognised in revenue	4.6	4.5	5.6	6.3	6.7	27.6
Other income (non price control)	- 2.3	- 2.3	- 2.3	- 2.3	- 2.3	- 11.3
Innovation fund	4.8	4.8	4.8	4.8	4.8	24.1
Residential retail	52.9	54.7	56.4	57.2	57.7	278.9
Total appointee revenue	826.3	857.9	889.9	916.6	938.2	4,428.9
Key financial metrics						
Capital expenditure	554.9	561.1	539.8	558.2	456.8	2,670.9
Water	255.4	237.0	236.4	251.1	231.1	1,210.9
Wastewater	299.6	324.1	303.5	307.1	225.7	1,460.0
PAYG ratio	40%	40%	42%	42%	48%	42%
Regulated Capital Value (RCV)	5,286.3	5,545.7	5,776.2	6,018.1	6,155.5	
Allowed revenue by control (£ - 2022/23 prices)						
Water resources – South West	40.3	41.3	42.6	44.8	47.2	216.1
Water resources – Bristol	22.0	23.1	24.0	24.8	25.1	119.0
Water Network Plus – South West	273.7	282.0	291.8	302.3	306.2	1,456.0
Water Network Plus – Bristol	99.9	105.7	111.7	116.3	118.7	552.3
Water total	436.0	452.2	470.0	488.2	497.1	2,343.4
Wastewater Network Plus	295.3	307.4	312.7	321.1	331.9	1,568.4
Bioresources	42.2	43.7	50.7	50.2	51.4	238.2
Wastewater – total	337.5	351.0	363.5	371.3	383.3	1,806.6
Residential retail	52.9	54.7	56.4	57.2	57.7	278.9
Total allowed revenue	826.3	857.9	889.9	916.6	938.2	4,428.9

Customer bills

Our plan

Delivering our customers' priorities was at the heart of our plan. Our customer research showed customers supported our plan and our investment programme delivered changes they want to see. Based on this they accepted increases in bills over the period. Ofwat reduced bills by deferring increases into future AMPs. Our response restores bills to levels supported by customers and ensures we can deliver what customers expect.

The average bill increase in our plan was 17% (adjusted for 2024/25 charges since the plan was submitted). This was below the bill (£625) customers found acceptable for the level of service and enhancement investment plans in our customer research.

The draft determination and our response

The draft determination included much lower bill increases, averaging 13% across the areas we serve. We illustrate the different views, including the customer area bills that are not directly quoted in the DD.

Table 2: Bill comparisons

Bills – actual baseline for 24/25 vs. total by year (22/23 price base)								
	24/25	25/26	26/27	27/28	28/29	29/30	£ increase 25-30	% increase 25-30
SWB BP	492	559	576	580	587	600	£108	22%
SWB DD	492	537	541	544	552	566	£74	15%
SWB DDR	492	577	590	602	612	621	£129	26%
BRL BP	209	215	230	232	234	238	£29	14%
BRL DD	209	158	213	213	213	215	£6	3%
BRL DDR	209	206	215	221	226	233	£24	11%
SWW area BP	507	554	571	574	581	594	£87	18%
SWW area DDR	507	589	602	615	624	633	£125	25%
BW BP	137	153	157	160	162	163	£27	20%
BW DDR	138	162	166	170	174	176	£38	27%

In the Bournemouth area we maintain the differential between South West and Bournemouth area water bills at c.66%, which was the commitment at the time of merger in 2015.

The Bristol area bills include c.£12m of voluntary deferment of revenues (5% less K factor than determined in 2023/24 and not recovered in 2024/25). This was agreed by Ofwat as a measure to support customers with the cost of living crisis. Ofwat have confirmed through a DD query response that the RFI adjustment to reflect this was not included in the DD, and we have amended for this in our response. This is recovered over AMP8, and without this adjustment the bill increase would have been c6% in real terms rather than 11%.

Detailed building block information is set out in Annex D.

Customer perspectives on risk and return

We tested plans with our customers over two years, starting in September 2021 around the future direction of our plans and ending with affordability and acceptability testing (AAT) – using the Ofwat approach but also following this with final testing as we looked to make final changes to our plan in light of the results of the AAT testing.

Our research has shown that most customers have an affordable bill. Bills in both our Bournemouth and Bristol regions have been assessed as 100% affordable, with bills in our South West region only slightly behind at 96.1%.¹ Moreover, the majority of customers (99% across the South West and Bournemouth regions)² have no problems or rarely have problems paying their bill. This is a stable position from which to build on and achieve our ambitions. We plan to use a mixture of social tariffs and progressive charges, so future capacity is paid for by those who benefit from it, in order to keep bills affordable.

Therefore we are confident that customers support the levels of bills provided in our response. In the constrained timeframe for the DD we have not tested the higher bill driven by the increase in the WACC, but consider this a legitimate cost that cannot be avoided, and reflects movement in market conditions since September 2022.

In the draft determination, Ofwat postponed some of the customer bill increase for investment in this period to future periods, by reducing RCV run-off rates. We address how this is not consistent with the Finance Duty in the section on RCV run-off rates below. This action is also inconsistent with ensuring intergenerational equity.

- Customers support that each generation should pay their fair share over time. They do not support postponing bill changes for past or current generations to the future.
- Customers are unlikely to support the additional bill increase for the cost of raising equity that was triggered by this reprofiling of revenues to future periods. This adds to the total cost to customers.
- We set out the research we included in our business plan that identified customer support for intergenerational equity and bill levels in Annex B.
- We illustrate in the section on RCV run off the additional bill increase that arises over the long term (c£7 p.a. per household from 2030) – illustrating that this action in the DD was not in customer interests. because of the future impact on bills, based on the core pathway set out in our Long Term Delivery Strategy.
- We consider the DD to reflect intergenerational inequity by postponing the cost of investment to the future.

Key financials

Income statement

The income statement reflects revenue increases in response to investment, with increased enhancement expenditure resulting in additional operating profit. It reflects the DD WACC of 3.72% and our view of totex and RCV run off, which aligns to our business plan. PBT stays broadly stable after the initial application of a higher cost of capital. Dividends reduce due to the restriction of the base dividend yield to 2% from the c.3% and 1% p.a. real growth that had previously been applied.

¹ ICS South West Water Affordability survey results 2022/23 for SWW/BW, BRL is taken from the APR 2022/23

² ICS South West Water Affordability survey results 2022/23

Table 3: Income statement

Outturn prices	2025/26	2026/27	2027/28	2028/29	2029/30
Revenue	904.384	954.748	1,009.709	1,060.596	1,107.150
Operating costs	(380.354)	(402.186)	(428.211)	(450.044)	(472.962)
Other operating income	0.496	0.506	0.516	0.526	0.537
Depreciation	(126.504)	(136.080)	(146.084)	(156.172)	(165.559)
Operating profit	398.022	416.988	435.929	454.906	469.166
Other income	10.167	10.779	11.145	11.524	11.917
Interest expense	(127.771)	(140.635)	(151.593)	(162.238)	(170.690)
Other interest expense	(27.758)	(30.680)	(33.009)	(35.135)	(37.386)
Profit before tax and fair value movements	252.660	256.452	262.472	269.057	273.007
Fair value gains/(losses) on financial instruments	0.000	0.000	0.000	0.000	0.000
Profit before tax	252.660	256.452	262.472	269.057	273.007
UK Corporation tax	(2.057)	(2.388)	(2.598)	(2.815)	(3.051)
Deferred tax	(84.293)	(85.194)	(82.172)	(83.994)	(64.709)
Profit for the year	166.311	168.871	177.702	182.248	205.247
Dividends	(51.670)	(55.806)	(59.972)	(64.233)	(68.166)

Balancing risk and return

Introduction

Our plan

Our plan was based on a balance of risk and return – a package of measures that included carefully calibrated efficient cost assumptions, ODI incentives and financial levers (PR19 totex reconciliation to the RCV). It was a fair balance to allow investors to earn the cost of equity if we delivered our plan.

As Ofwat have recognised in awarding our business plan with the Outstanding status, we achieved a balance of risk and return. We did this without aiming up the cost of equity, although we set out that a higher WACC would be required if incentives were not calibrated correctly.

The draft determination

Overall, we are concerned that the DD does not deliver a balance of risk and return. Ofwat take unrealistic views on the risk that investors in water companies face. Improvements to service levels are targeted, without adequate adjustments to base cost allowances. Where base cost allowances are adjusted in return for further service improvements, this is not something that customers wished to see as part of our cost base. We reverse these service level adjustments and do not ask for the additional cost allowances in our response.

Outcome incentives are strengthened in the DD beyond current levels of industry performance, which are already seeing companies underperform and overspend in AMP7. To set even stronger incentives inevitably affects the returns investors require as it reflects higher levels of risk. Ofwat reduce revenue, offsetting the higher cost of equity in the DD, by reducing RCV run off rates solely to reduce customer bills. Instead, shareholders are expected to provide equity to close the resulting financing gap, because the necessary bill increase is postponed into the future. The combined effect is higher risk and inadequate returns which is both out of line with the PR24 final methodology and is incompatible with Ofwat's Finance Duty.

The revenue shortfall we face is based on a series of individual assumptions in the draft determination. Ofwat should not use notional financial headroom as a reason to postpone the financing cost of essential investment now, and leave customers paying more for this in the future. The notional company has gearing below the actual company, and is only paying out a 2% dividend yield on a 4.8% cost of equity. This assumption was to provide financial resilience, which Ofwat then remove through by reducing RCV run off.

Effectively, Ofwat ask investors to make an equity injection to subsidise a component of the higher allowed cost of equity.

This affects South West Water more than other companies due to the high RCV per customer. We had already proposed a fair balance for consumers in our plan by recovering PR24 totex additional expenditure through the RCV rather than an element in revenues (PAYG). Postponing revenues further through extending the RCV run off, as Ofwat have done, makes the position unfinanceable and is contrary to the long term interests of customers – and indeed their views received through research.

Ofwat have strengthened ODIs and incentive rates in the DD from the original methodology. The original research methodology was not based on sound research and analysis, and we retain the view we have expressed consistently throughout PR24 that this would be the outcome. The incentive rates now therefore are based entirely on subjective regulatory judgement rather than having a sound evidential basis. This compares to our own approach which is compelling from a risk perspective, and grounded in customer priorities. We recognise that there are many ways of resolving this, and we present one approach consistent with our plan that delivers a balance of risk and return, but we remain open (as suggested in our plan) to discuss alternative options to ODI design.

Our response

For the purposes of the DD response we adopt Ofwat's DD WACC, but make observations on technical and methodology points for Ofwat to consider in the market rate update before the FD.

We see the need to re-calibrate the risks associated with the regulatory framework to ensure that the return remains aligned with the cost of capital proposed, and is achievable. We do not believe that the cost of equity could be set sufficiently high to compensate investors for the risk associated with the DD regulatory framework. The key challenge is with ODIs. These are poorly calibrated and there are significant risks with even a single ODI (e.g. pollution incidents at a risk up to £236m), and risks are such that they could potentially easily trigger the aggregate sharing mechanism cap. We can design incentive frameworks to try and balance this with outperformance opportunities elsewhere, but as we show in our outcomes document, we end up with a much wider level of risk in total. This illustrates that a comprehensive revisiting of the incentives framework is required.

Cost of capital

Our plan

For the purposes of our business plan used the Ofwat PR24 methodology Weighted Average Cost of Capital (WACC) of 3.29% (appointee real CPIH terms). We estimated that changes in the market data and new information during 2024 would result in an updated cost of capital (in July 2023 we estimated this at 3.74%).

We believe it will be appropriate for Ofwat to update this early estimate for changes in market data and new information during 2024. We estimated that the cost of capital based on July 2023 market data is 3.74%. We adopted the same methodological approach to this updated estimate. We also proposed a "risk adjusted" update of 3.97% that included a higher Total Market Return, included a higher notional beta (including the impact of using Pennon data), and removed the "outperformance wedge" deducted from iBoxx to arrive at the cost of new debt.

The draft determination

Our July 2023 estimate of 3.74% was very close to the DD estimate of 3.72%. Our risk adjusted estimate of 3.97% also sits within the range of different component assumptions that Ofwat discuss in the DD. Ofwat “aim up” on the cost of equity choice with the range identified to reflect uncertainty in the parameters, and also to reflect the need to attract and retain equity investors for the scale of uncertainty. Ofwat plan to update the cost of capital ahead of final determination.

We welcome this approach, including the removal of the new debt discount to the iBoxx index. Current market evidence suggests a c0.3% premium to iBoxx which Ofwat should consider for the FD.

The DD also provides us with protection from a lower WACC in the FD, as a result of our ‘Outstanding’ status. The 0.3% uplift to the cost of equity for outstanding status is not part of our analysis in this document – this only applies at PR29 and is subject to the conditions set out in the draft determination being delivered by PR29, conditions that we accept. We therefore do not show the 0.3% uplift below or as part of our RoRE analysis.

Our response

We provide our full consideration of the cost of capital in Annex A. Our cost of capital summary is set out in the table below:

Table 4: Cost of capital

CPIH – real	PR19 (Ofwat)	Ofwat PR24 methodology	Ofwat draft determination / our DD response	Our range	Our view of potential FD based on latest market data and evidence
Gearing	60%	55%	55%	55%	55%
Total market return	6.5%	6.00% – 6.92% (mid- point 6.46%)	6.29% – 6.87% (mid-point 6.58%)	6.45% - 7.45%	6.96%
Risk free rate	-1.39%	0.47%	1.43%	1.66% - 1.92%	1.92%
Notional equity beta	0.71	0.58 – 0.64	0.57 – 0.63	0.63 – 0.73	0.64
Return on equity	4.19%	3.67% – 4.60% (4.14% mid-point)	4.19% – 4.88% (4.80% mid- point)	4.77% - 5.97%	5.17%
Cost of embedded debt	2.42%	2.34%	2.46%	2.46% - 2.65%	2.65%
Cost of new debt	0.53%	3.28%	3.36%	3.58% - 3.85%	3.58%
New to embedded debt ratio	20%	17%	26%	26%	26%
Issuance and liquidity	0.1%	0.10%	0.15%	0.15%	0.15%
Return on debt	2.14%	2.60%	2.84%	2.90% – 3.11%	3.04%
Appointee WACC	2.96%	3.29%	3.72%		4.00%
Retail margin deduction	0.04%	0.06%	0.06%		0.06%
Wholesale WACC	2.92%	3.23%	3.66%		3.94%

Overall, we think there is a good case for a higher cost of capital than included in the draft determination. This will depend on the market rate evidence at the time. Our forward look suggests that an appointee WACC of c4% would be consistent with the market evidence. We use 3.72% in our DD response as Ofwat will be able to review the evidence nearer to the FD. The estimate of 4% is very similar to the 3.97% risk adjusted estimate we estimated in our business plan.

On the cost of equity, we note there are much higher estimates currently of the cost of equity investors may require given the regulatory framework. We prefer to maintain the CAPM approach broadly, but we set out evidence in Annex A in support of our updated estimate of the cost of capital. As Ofwat have “aimed up” for parameter uncertainty in the draft determination, we recognise that this provides some recognition of the range of potential outcomes of the component parts.

We believe there is a relatively narrow range for the cost of debt. There are three areas to consider:

- In the time available for the DD response, we have not updated estimates of the cost of embedded debt for 2023/24 APR data that is now available. Given the increase in cost of recent issuances in the water sector, we believe there is therefore a potential for an updated embedded cost of debt to be higher than in the DD. We have maintained as an upper estimate the forecast that Oxera helped us prepare for our original plan
- On the cost of new debt recent sector issuances have been higher than the benchmark iBoxx index. This includes our recent £400m ETMZ issuance at 6.375% nominal, compared to the c5.6% (3.51% including 0.15% issuance and liquidity allowance and 2% CPIH) in the DD. We would anticipate Ofwat reviewing the evidence ahead of the DD
- Given the level of investment and therefore new debt requirements varies significantly by company and the potential for new obligations to increase this still further during AMP8, we believe Ofwat should consider “aiming up” on the new to embedded debt ratio as part of ensuring both financeability and investability.

Our view of the cost of capital assumes that incentives, cost allowances and regulatory mechanisms are appropriately balanced. This is consistent with the PR19 CMA findings and the UKRN cost of capital guidance.

Return on Regulated Equity (RoRE)

Our plan

We considered RoRE risk from the perspective of the current challenges the industry faced in terms of delivering cost and outcome incentives. The PR24 methodology implied greater risk, particularly for outcome incentives.

We set out in our plan a range of assumptions and mechanisms that needed to be considered in order for investors to expect to be able to earn allowed returns on practice, if an efficient company (such as South West Water over time) delivers its plan.

We set out how the RoRE framework, if we follow precisely the PR24 methodology, would exhibit a material asymmetry for ODI incentives. We have worked with Oxera to develop compelling analysis and evidence in these areas. Our overall notional RORE risk range in our plan was 0% to 8.6%, around our central forecast for a market updated cost of capital of 4.6%.

- We estimated the total totex risk range at +1% to -1.2%. This reflected a) the stretching efficiency assumptions we have assumed in our plan to ensure that customers only pay for efficient services b) the uncertainty that exists within the cost of storm overflow enhancement upgrades; and c) economic uncertainty affecting supply chain costs, in particular labour, power and global materials and construction supply chains. We have mitigated these risks with our proposed uncertainty mechanisms – there would have been a wider totex risk range of +1.6% to -2.8% without these proposals.

- Our analysis for ODIs showed a RORE risk range of +1.7% to -2%. Our ODI design and uncertainty mechanisms avoid the need to take the same steps that the CMA did at PR19 of "aiming up" of the cost of capital. Both the CMA, UKRN guidance and the PR24 methodology prefer solving the incentives asymmetry at source. We presented compelling evidence in our plan in support of this – it is better to have balanced incentives rather than higher returns. We do not agree with a regulatory framework that implies we are likely to fail a range of targets even where we are performing well overall as a business. This approach is not sustainable for the water sector in the long-term.

The draft determination

Ofwat do not appear to have recognised the strength of the analysis we set out in our business plan. It was a notional, industry picture, based on the past performance trends of the cost benchmark companies.

The table below compares the RoRE calculations in our plan compared to the DD, our view of the DD, and our response to the DD:

Table 5: RoRE comparisons

RoRE risk and return estimates	SBB PR24 plan	SBB Ofwat DD	SBB view of Ofwat DD	SBB view of DD response
Financing upside	0.7%	0.9%	0.6%	0.7%
Customer measures of experience upside	0.6%	0.9%	0.2%	0.7%
Outcomes upside	1.7%	0.9%	2.1%	1.6%
Totex upside	1.0%	1.6%	1.0%	1.0%
Base RoRE = cost of equity	4.6%	5.1%	4.8%	4.8%
Totex downside	-1.2%	-1.6%	-2.2%	-1.6%
Outcomes downside	-2.0%	-1.4%	-6.6%	-1.8%
Customer measures of experience downside	-0.7%	-0.9%	-0.7%	-0.7%
Financing downside	-0.7%	-0.4%	-0.7%	-0.7%
RoRE range (10% to 90%)	0% to 8.6%	0.8% to 9.4%	-5.4% to 8.8%	0% to 8.8%
RoRE spread (below / above the base RoRE)	-4.6% / +4.0%	-4.3% / +4.3%	-10.2% / +4.0%	-4.8% / +4.0%

- Our analysis confirms that there is a skew to returns from totex risk and outcomes risk. We do not agree there is a positive skew on financing risk. This does not therefore offset outcomes risk skew, which in itself is an issue, as the outcomes risk arises from a specific series of Ofwat assumptions, rather than financing risk which can have an ongoing difference between an actual and notional company allowance.
- It assumes financing outperformance that does not exist, given the difference between notional and actual company financing caused by Ofwat's removal of notional equity financing headroom in the draft determination. In a notional framework the logic is challenging to show anything other than a balanced out and underperformance on financing. Although Ofwat show a DD balance overall, this is unrealistic in several ways.
- The totex assumptions in the draft determination are based on inappropriate application of efficiency assessment. We find it implausible that PCD timing differences would amount to a symmetrical +/- 0.3% of RoRE. We recognise some additional totex downside because of statutory programme changes and swaps we are absorbing in the draft determination, to stick as closely as possible to our plan. We are absorbing these through uncertainty mechanisms until PR29, so reflect this in the RoRE range. We also have removed the elements of totex that would have caused us less flexibility given specific funding allowances, such as for net zero. Customers preferred us to absorb these costs and that was reflected in the efficiency position in our plan. In response on PCDs we remove the positive and negative impact of timing differences, as we suggest using the Delayed Delivery Cashflow Mechanism as backstop protection so there is no impact on a notional company.
- Ofwat have not designed C-MeX appropriately because the link to UKCSI average performance before qualifying for outperformance is inappropriate for a sector without market choice. Ofwat's own analysis shows that companies would substantially have been faced with a penalty only incentive, based on past performance.
- Ofwat have strengthened outcome incentives in the draft determination. However, the assumptions of risk are implausible and cannot be considered realistic. We question how Ofwat can strengthen incentives and performance levels since the methodology, and yet show a narrower range of risk.
- Ofwat's original incentive methodology failed to deliver usable results, and we provided compelling and sufficient evidence in our plan for our simpler RCV allocation based approach in our plan that cannot cause the same incentives mis-calibration and also retains customer insight into its application. This continues with the draft determination, with Ofwat stating explicitly that water quality contact rates are too high and will be revisited for the FD. We suggest something more fundamental is required and we have the evidence and analytical framework to start this process.

Ofwat stated in its QAA assessment for South West Water:

"The company provided a plan (RoRE range +4.0% to -4.5%) that it considered is not balanced. It did not provide sufficient and convincing evidence that its assumptions reflect a reasonable range for an efficient company. For example, it has provided assumptions for totex at a disaggregated level, but has not provided sufficient and convincing evidence why the majority of these assumptions, before its proposed uncertainty mechanisms, are asymmetric to the downside. It also has conflicting statements of whether its plan is balanced or requires further calibration. We assessed this does not have a material impact because we revisit the overall balance of risk and return as part of our determinations."

We welcome the outstanding status awarded by Ofwat which recognise the totex assumptions in our plan were efficient. The statements we made in our plan were a series of options in order to improve the RoRE imbalance – the RoRE range being a reasonable balance overall. We provide in the DD a similar balance, with a small downside which we believe is appropriate. It is manageable with our proposals including the WaterShare+ mechanism to reduce the additive risk of totex, PCD and outcome risk assumptions, although outcome risk cannot be managed as Ofwat set out in the draft determination.

We set out below for outcomes, totex and uncertainty mechanisms how the assumptions we made in our plan and response compare to the draft determination. We believe this is sufficient to demonstrate why Ofwat do not make a sufficient case that the DD is a fair balance of risk and return. For outcomes in particular the assumptions are not realistic. We set out sufficient information in our plan and in this response therefore to accept our approach to the balance of risk as a whole.

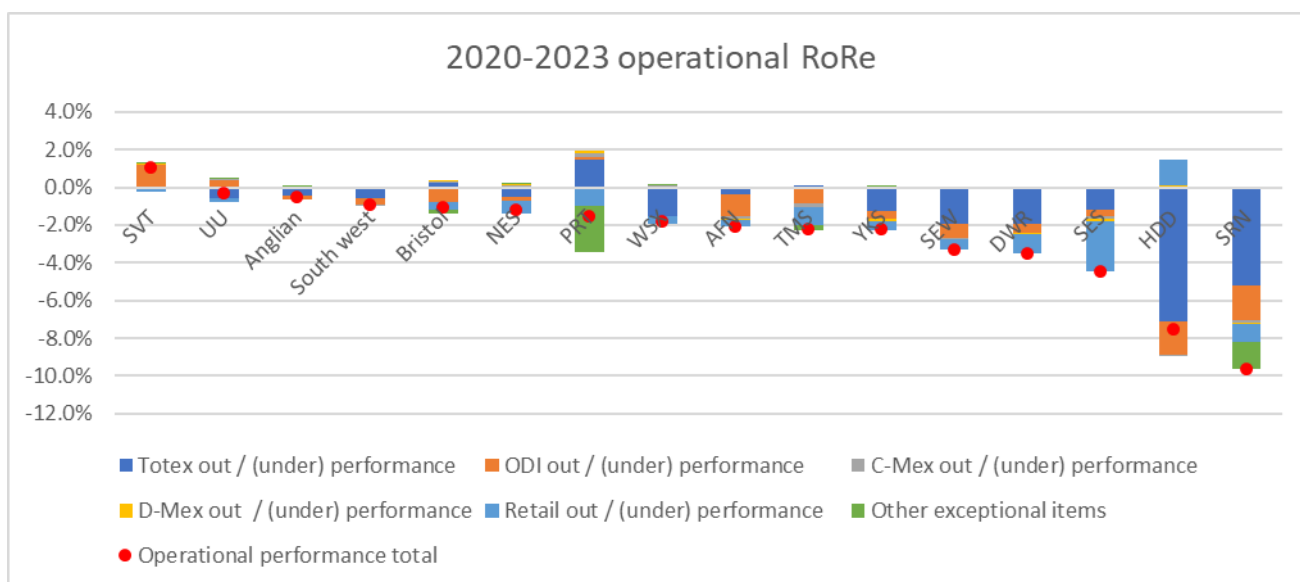
Given the nature of the Ofwat assumptions, we would encourage Ofwat to engage ahead of the Final Determination. We set out alternative options in our plan (such as considering more dynamic incentives). In our response we do not repeat our alternative suggestions as we have to respond to the specific DD from Ofwat with our single alternative proposal. However, there is not just one solution and it is with Ofwat to decide the process and evidence ahead of final determination. We have been limited with the short 7 week response window to complete the full update of our plan analysis e.g. to reflect 2023/24 APR data. We could complete further analysis, but this would not change our proposals or the fundamental gap we have identified in the DD.

Our response

Our current view of the RoRE range for our DD response is that we will broadly retain the plan range of 0% to 8.6%, but show the benefit of the higher cost of equity (0.2%) than we used in our plan RoRE. The response range is 0% to 8.8%, which shows a small net downside on outcomes of 0.2%, but this is within the boundaries of symmetry and reflects penalty only incentives.

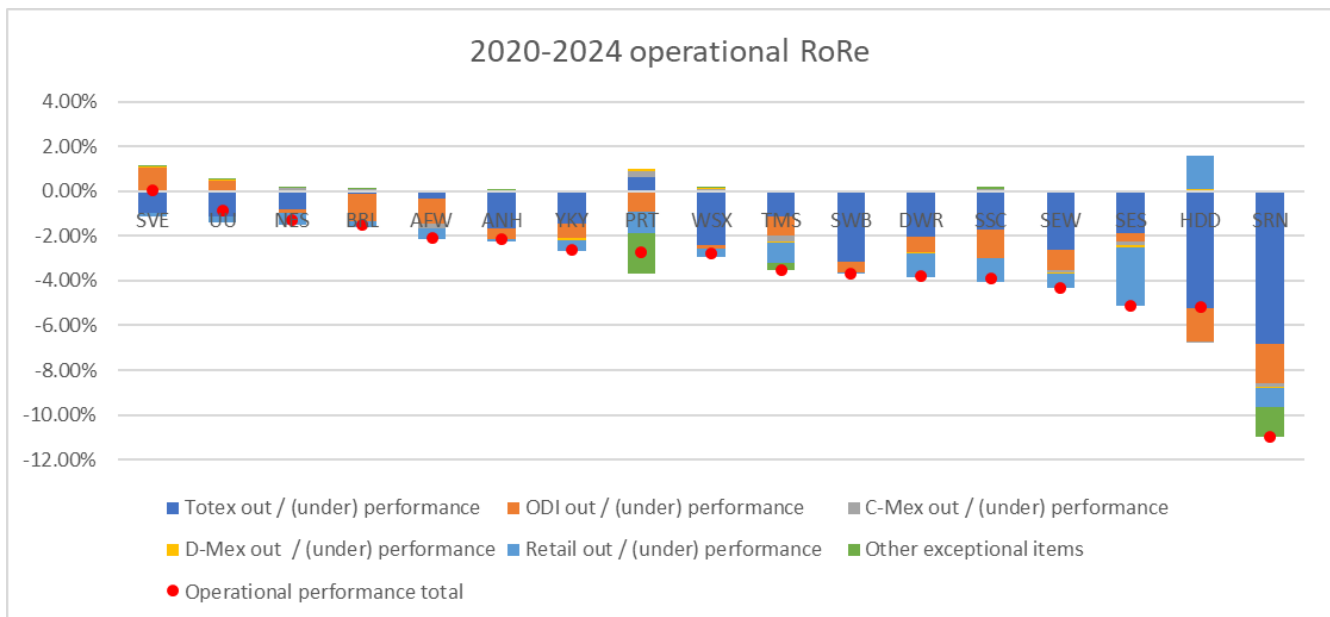
We have considered RORE risk from the perspective of the normal business and industry uncertainties against which we deliver our key business priorities. Wherever possible we have considered this from the perspective of the notional company, i.e. what the evidence is of the general risk facing the industry.

This is challenging in the current context. We included in our original plan this assessment of operational RoRe and its components.



2023/24 data however shows a significant acceleration of downside operational risk, with no companies showing operational outperformance. For 10 companies the underperformance exceeds the cost of equity. Ofwat can only assume that stronger incentives will result in a balanced position of PR24 by underestimating the level of risk. This is because the evidence generally a) looks selectively at past operational periods, rather than more recent trends (or dismisses more recent data as linked to Covid), and b) for the future assumes that risk reduces as service levels improve and investments take place. Whilst this may well be true to some extent, in particular for ODIs it still reduces the opportunity for outperformance compared to the risk of underperformance.

The 2020-2024 position shows only one company with net operational outperformance, which includes for Severn Trent a unique bespoke ODI outperformance position that would not be repeated in AMP8. Five companies are delivering negative returns to investors.



We summarise our view of the DD and our response below, showing the impact in terms of RoRE, but also compared to allowed equity. We have rounded these numbers for ease of illustration, with the calculations shown in Annex C and in table ADD18.

Table 6: RoRE comparisons

	Appointee			SWW Water	SWW Wastewater	Bristol
RoRE risk and return estimates	SBB view of Ofwat DD (updated)	SBB current view of DD response	£m p.a. (Totex before cost sharing) DD / DD response	£m p.a. (Totex before cost sharing) DD / DD response	£m p.a. (Totex before cost sharing) DD / DD response	£m p.a. (Totex before cost sharing) DD / DD response
Financing upside	0.6%	0.7%	£15m / £17m	£6m / £7m	£8m / £8m	£2m / £2m
Customer measures of experience upside	0.2%	0.7%	£5m / £17m	£2m / £7m	£2m / £8m	£0.5m / £2m
Outcomes upside	2.1%	1.6%	£55m / £40m	£25m / £9m	£22m / £27m	£8m / £3.5m
Totex upside	1.0%	1.0%	£50m / £50m	£22m / £19m	£19m / £20m	£9m / £11m
Base RoRE = cost of equity	4.8%	4.8%	£120m	£48m	£57m	£15m
Totex downside	-2.2%	-1.6%	£110m / £80m	£61m / £29m	£68m / £28m	£35m / £22m
Outcomes downside	-6.6%	-1.8%	£165m / £45m	£52m / £17m	£85m / £21m	£28m / £7m
Customer measures of experience downside	-0.7%	-0.7%	£17m / £17m	£7m / £7m	£8m / £8m	£2m / £2m
Financing downside	-0.7%	-0.7%	£17m / £17m	£7m / £7m	£8m / £8m	£2m / £2m
RoRE range (10% to 90%)	-5.4% to 8.8%	0% to 8.8%	+£100m to -£254m DD	+£42m to -£87m DD	+£42m to -£126m DD	+£15m to -£43m DD
RoRE spread (below / above the base RoRE)	-10.2% / +4.0%	-4.8% / +4.0%	+£100m to -£119m (DD response)	+£33m to -£46m (DD response)	+£53m to -£53m (DD response)	+£13m to -£21m (DD response)

We show both the RoRE total and the split by control in £m, to illustrate the level of financial risk against Ofwat's notional financing assumptions including the expectations on equity from investors. In the diagram:

- Although financing is done at appointee level, with one single WACC, the split shown is an allocation based on RCV/notional equity
- Customer measures of experience are relative industry measures at retail / appointee level. Bristol is measured separately but with the same industry risk. This split is shown by RCV
- Outcome opportunity and risk are most unbalanced on wastewater, but the response rebalances this through bathing water, and reducing pollution risk through changes to targets and incentive rates
- Bristol outcome and cost risk remains more adverse than SWB in our DD response, due to the base cost position and more stretch on mains repairs, plus low level of leakage. It is appropriate to look at the appointee position and our analysis reflects that cost modelling inevitably means some upside and downside on cost. However, at appointee level (wholesale and retail) our costs reflect an efficient notional company and therefore we can consider our specific cost risks as notional relevant to South West Water
- Initial analysis of the totex risk and response suggests totex risk is weighted towards Bristol due to the base cost efficiency gap and less enhancement representations. This base modelling position was expected, and the representations benefit the company as a whole
- Although Ofwat only look at RoRE at appointee level, both South West Water water and wastewater have a RoRE downside that is less than the Base RoRE. Bristol is adverse, because of its lower RCV per customers and relative base cost risk.

Operational risk for outcomes is skewed to the downside, as Ofwat have strengthened incentives and assumed more stretch on industry performance from base costs. The supporting modelling is unrealistic e.g. the pollution ODI downside is equivalent of 7 additional incidents for South West Water (a 2030 target which reduces for all by 30% by 2030, with an overlapping risk of how the EA categorise incidents).

Ofwat has strengthened the amount of RoRE that is at risk on the customer measures of experience since their PR24 methodology was submitted. On C-MeX the Ofwat approach links the incentive to the UK Customer Service Index measure of all sector customer satisfaction (Upper quartile for maximum reward, and median for breakeven). Based on the latest July 2024 UKCSI publication, no companies would earn a C-MEX reward and all would be in penalty. We have reflected this in revised RoRE ranges. This reduces upside and increases downside potential, although we believe the downside risk for P10 companies across the metrics is narrower than Ofwat set out in the DD, which offsets our view of downside risk.

We believe cost risk is also skewed because of the efficiency impacts of PCDs, far more than the 0.3% Ofwat assumes. Our plan risk was narrowed because we proposed PCD flexibility to support the efficiencies in our plan.

Ofwat believe the aggregate sharing mechanism on outcomes and cost means their assumptions are reasonable. On outcomes alone, this could be triggered c50% of the time, based on our analysis.

Outcomes risk and RoRE

We set out below the key messages on our outcomes risk message, comparing Ofwat’s PR24 DD objectives with our assessment and proposals.

Outcomes key representation messages		
What Ofwat is trying to achieve	Our view	Our proposals
A more streamlined framework (no reporting exclusions, comparative PCLs and fewer bespoke metrics)	<p>We understand the intention to have a more streamlined framework. In practice the standardised framework appears more complex.</p> <p>We agree with the approach but it comes with risk that requires regulatory protection.</p>	We present balanced proposals on ODI levels, design and protections in response to the DD. We maintain our two bespoke ODI proposals as originally designed.
Achievable yet stretching targets that ensure customers do not pay twice for performance improvements;	<p>We comment on the achievability of targets by exception. This is based on our extensive evidence, including of “What Base Buys”. Ofwat recognised in our plan that we put careful consideration on what was fair for customers to pay for – a principle we agree with where there is clear evidence to support it. However, it is also important to recognise that there is a service-cost relationship and strong evidence that there is an increasing trend of additional cost and underperformance of existing targets, where they were set by Ofwat at PR19 without recognising this link. Targets should not persist based on unachievable assumptions, if they prove to be such in practice.</p>	<p>We present our What Base Buys evidence in support of our ODI design, and also totex cost risk where there is a clear service cost relationship identified.</p> <p>Our framework reflected what is important to our customers, simplified the approach to ODI rate setting (whilst being consistent with Ofwat's approach), reflected a balanced and symmetrical risk and return range, and included ambitious performance targets.</p> <p>Our framework was supported by robust third-party evidence (ICS for top-down incentives and Oxera for 'what base buys')</p>
More powerful yet simple rewards and penalties that align the interests of companies and investors better with consumers and the environment	<p>We note that Ofwat have included more powerful penalties, but with few opportunities to outperform, this provides little opportunity for rewards. This does not serve the interests of consumers and the environment – the penalties are too large because Ofwat’s view of the risks</p>	<p>We present a better balance that achieves these objectives than in the draft determination.</p> <p>Ofwat must re-evaluate the importance of customer preferences in top-down approaches to setting incentives (our approach had a stronger link to customer preferences)</p>

Outcomes key representation messages		
What Ofwat is trying to achieve	Our view	Our proposals
	the sector faces, even when performing well, are unrealistic.	
Robust yet sensible risk protections	<p>The risk protections are unrealistic – they do not reflect recent experience and uncertainty, such as the impact of climate change.</p> <p>We support the aggregate sharing mechanism, but it should not be seen as sufficient for properly calibrated incentives – it is just a backstop not an incentive framework.</p>	<p>We present, using Ofwat’s own tool, a realistic estimate of risk and appropriate risk protections.</p> <p>Ofwat must review its risk modelling assumptions (Ofwat's view of ODI risk – P10/P90 ranges – is not realistic, but is why Ofwat rejects our ODI framework in the DD).</p>
<p>Customer experience measures</p> <p>Create strong financial incentives to increase focus on customer experience and drive improvements</p> <p>Make sure all customer voices are appropriately represented; and</p> <p>Provide confidence to customers and the industry</p>	<p>We support the incentive proposals, other than the design of C-MEX which does not provide a balance of risk and return. Comparing to UKCSI, market sectors where there is a choice of supplier, does not provide a fair balance of risk and return. Dynamic incentives such as C-MeX will drive standards forward and the higher reward/penalty much be sufficient to avoid the complication that the UKCSI link brings.</p>	<p>We propose removing the UKCSI link from the design of C-MeX so it reflects the symmetrical approach Ofwat present as in the RoRE DD analysis.</p> <p>Ofwat should remove the cross-sector benchmark and revert back to a relative incentive approach (comparing a company's C-MeX score with other water companies), which would ensure there is consistency in how incentives for C-MeX, D-MeX and BR-MeX are calculated.</p>

Ofwat assume a relatively low outcomes ODI upside and downside which is lower than the potential that the PR24 methodology indicated. This is despite further strengthening the outcome incentive rates in many areas since the methodology, and requiring further stretch from base expenditure. Our modelling suggests a P10:P90 percentile RoRE range of +2.4% to -6.6%, compared to the balanced incentive proposals (with different service levels, lower outcome incentives and different ODI definitions and designs). The main reason why Ofwat achieve this result is the DD assumes that ODI risk does not increase as service levels reduce. The modelling does not consider that company targets after 2022-23 continue to get tougher. The other challenge with this assumption is that there is no recognition that 2022-23 and 2023-24 underperformance across the industry on ODIs is part of a trend, driven by incorrectly calibrated assumptions on risk at PR19, now rolled forward into PR24

Our assessment of the outcomes risk from the Ofwat ODI definition and incentive rates prior to making our proposals was -5.9% to +3.9%, which was not symmetrical. The Ofwat changes in targets and changes in incentive have reduced the outperformance potential by 1.5% and increased the underperformance risk by 0.5%. Therefore, the Ofwat framework is more imbalanced between risk and return on outcome incentives than the original methodology. It is likely when we review this further that we would require similar changes to ODI incentive rates, performance levels and designs as we originally proposed in our plan in order to deliver a balanced RoRE range. The main factors that drive this RoRE downside risk of -6.6% (based on our view of the DD) compared to Ofwat's 0.9% are:

Table 7: Top ODI downside metrics

ODI P10 downside (RoRE)	Our view of DD (p.a.)	Ofwat view of DD (SWB additive output due to lack of Monte Carlo transparency by metric)	Our response (p.a.)
Pollution incidents	-1.2% £29m	0.00%	-0.25% £6m
Leakage	-1.1% £26m	-0.10%	-0.18% £5m
Serious pollution incidents	-0.7% £17m	-0.01%	-0.17% £4m
External sewer flooding	-0.4% £11m	0.00%	-0.12% £3m
PCC	-0.4% £11m	-0.14%	-0.22% £5m
Other	-2.8% £130m	-0.67%	-0.93% £21m
Total	-6.6% £166m	-0.92%	-1.8% £44m

The Ofwat view of DD outcomes risk clearly cannot be correct – unless Ofwat really believe there is zero pollution P10 risk. This is because the end service level (P50) is below the historical data on P10 level of risk, which Ofwat then assume away by the end of the period. As we explain below this is because the assumptions are not credible and do not stand up to scrutiny

Oxera have helped us analyse the ODI assessment and we provide more details of their analysis in Annex C.

The difference in P10 risk for each metric is not plausible. Ofwat's ODI risk range only assumes 7 pollution incidents extra in a wet year. The potential penalties are over 4x higher than at PR19, and there is a risk the EA change classification rules. 2023 was a wet weather year but not extreme. The impact of wet weather in 2023 on additional pollution incidents amounted to 98 for SWB, and even for the company with the lowest number of pollution incidents it was 39.

Ofwat's values for delivery incentives are poorly evidenced, with results varying markedly from the regulatory precedent and our own customer research results. They are derived or tested against any sense of economic value. For water quality contacts, Ofwat's incentive rates are 771% higher than our business plan rates for SWB and 814% higher than our rates for BRL. For pollution incidents, Ofwat's incentive rates are 265% higher than our proposed rates. For storm overflows, Ofwat's incentive rates are 246% higher than our business plan rates.

Examples of the implications of Ofwat's unit rates (which apply to increments beyond the target level) are:

- £6,800 penalty per customer contact for water quality (so, for example if a customer phones to report cloudy water) – this compares to c. £750 per contact in our business plan. On the basis of Ofwat's incentive rates, we would receive a penalty of £64m (SWB and BRL combined) based on our average AMP7 performance.

- £366,000 per pollution incident (including the “category 3” incidents which have a “minor or minimal” impact on the environment). This compares to £175,000 in our plan. This is in addition to any fines received from the Environment Agency, which has recently been given powers to apply unlimited levels of fines. On the basis of Ofwat’s incentive rates, we would receive a penalty of £236m for our average AMP7 performance (the aggregate sharing mechanism would need to apply for just this single performance commitment based on the strength of these incentives).
- £800 per storm overflow spill, which compares to £228 per spill in our plan. On the basis of Ofwat’s incentive rates, we would receive a penalty of £30m for our average AMP7 performance.

Our customers have played a pivotal role in ensuring we have the right balance that reflects their views and priorities. On water quality contacts, our customer preferences ranked this ‘low’, whereas Ofwat has ranked this as a ‘high’ customer preference. The resulting ‘strong’ Ofwat rates are then designed to incentivise companies to reduce customer contacts. But this is a perverse incentive when considering the DWI guidance, which wants companies to encourage customers to contact us about water quality issues.

For storm overflows and total pollution incidents, our customer preferences ranked these as ‘medium’ and ‘low’, respectively. Ofwat initially ranked these as ‘medium’ for the customer preferences. But at the draft determination Ofwat has adjusted the preferences to ‘high’ for both metrics, in order to accommodate the Government Strategic Priorities. This implies that the adjustments for these priorities are not aligned with customer preferences. Such judgements require plausible risk testing, including cost benefit analysis against an economic cost of delivery such penalties.

Ofwat have had the evidence from our incentive rates and industry risk modelling in the DD. We do not believe it has been considered appropriately and this difference in understanding of risk, and the risk modelling in the DD, means Ofwat’s QAA comments that reject our analysis cannot be on the basis of a reasonable assessment for an efficient, normally performing, company. It cannot be consistent with either the Finance duty or Securing functions for customers and the environment duty. Such incentive frameworks also cannot be resilient to events.

Ofwat accepts that its ODI design results in a downside skew in ODI risk that Ofwat can only justify with reference to companies achieving outperformance via other RoRE levers, such as financing/ debt outperformance

There are three key areas which contribute to the higher risk

- Stronger incentives – Incentives rates have increased in the DD compared to Ofwat’s methodology. The link to customer research continues to be tenuous. We will be including further third-party support for our approach to the setting top-down incentive rates and consequently to support the strength of our incentive rates
- More stretching PCLs – for some key metrics such as storm overflows and pollution incidents
- Removal of ODI protections (collars and deadbands), which limit risk exposure and make some allowance for factors outside of our control

Ofwat’s view of the level of risk is materially below ours. This is because its draft determination risk modelling is flawed. We will be highlighting to Ofwat errors in its risk modelling and therefore propose ODI risk protections that were included in our business plan

- There is also a narrowing of scope for outperformance against ODIs in the DD. To reset this we must:
- Again ask Ofwat to set the bathing water quality targets on an industry common, rather than company-specific, basis

- Keep our bespoke ODI on catchment management, which is delivery that we need to make and be incentivized against, to allow stakeholders to continue to receive the potential for us to deliver more than we are required to do, and hold us to account. The common biodiversity incentive does not overlap with this.

Through our DD response on outcomes, we include a proposal to rebalance the ODI framework to an acceptable risk and reward range.

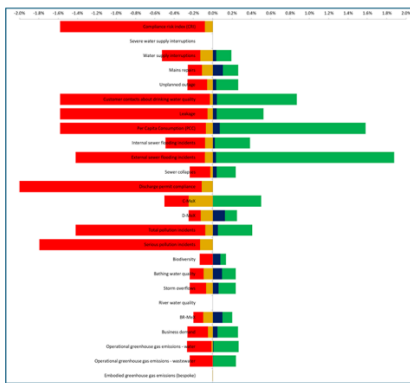
Ofwat’s draft determination results in a level of outcomes risk that is materially different to the balanced ODI risk profile that we proposed in our business plan with up to £166m of penalty pa. Ofwat’s view of risk is based on flawed ODI risk models.

In summary before considering aggregate sharing (which caps at c4% or £100m a year), the RoRe risk is:

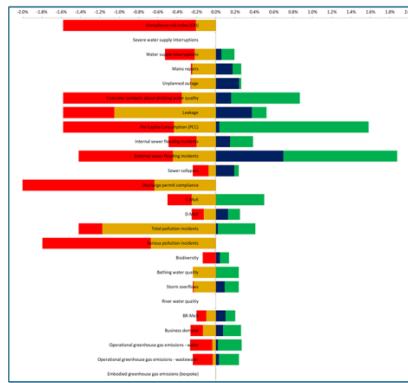
Table 8: P10/P90 ranges

P10/P90 range (excluding MeXs)	Underperformance as a % of RORE	Underperformance £m p.a. (averaged)	Outperformance as a % of RORE	Outperformance £m p.a. (averaged)
Business Plan	-2.1%	−£43m	1.9%	£37m
Draft determinations (Ofwat’s view of risk)	-1.36%	−£32m	0.86%	£19m
Draft determinations (our view of risk)	-6.6%	−£166m	2.1%	£51m
Our recalibrated ODIs³	-1.8%	−£44m	1.6%	£40m

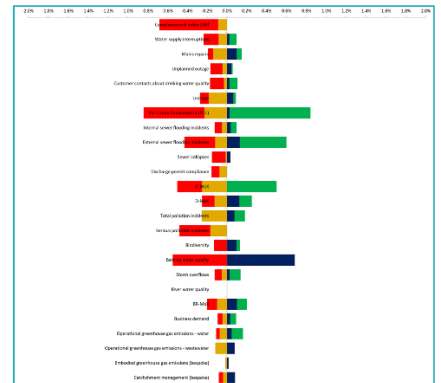
We illustrate this below:



Draft Determination (Ofwat's view of risk)



Draft Determination (our view of risk)



Our response to the DD

Our plan shows a calibrated level of risk, with the gold bars showing P10 downside and red bars showing P10 up to collared underperformance. The blue bars show P90 performance and green bars showed P90 up to capped outperformance.

³ This is referred to as the ‘full framework’ representation in the Outcomes representation

The DD shows Ofwat’s very narrow view of risk – it removes ODI protections and there exists a very wide range of potential ODI performance, but a very narrow range of risk P10 and P90 – this reflects the highly implausible view of risk. When we apply our analysis, you see much wider upside and downside, but a very significant skew to the downside.

To illustrate this further:

- Ofwat’s position is that it has set achievable yet stretching targets and that these targets push companies to improve performance beyond PR19 levels and that these forecasts reflect relevant allowances to improve performance (even though base allowances have had haircuts). We were praised for our ambition on internal and external sewer flooding and water supply interruptions
- In Ofwat's QAA assessment our approach to ODIs was highlighted as not meeting Ofwat's expectations, but that this was not considered material (to the overall QAA categorisation). The key factor was insufficient evidence to support our incentive rates, as well as evidence to support our approach to balancing the RoRE risk
- Our incentive rates were rejected and the indicative (pre-DD) Ofwat incentive rates were uplifted (see table)
- Ofwat rejected the vast majority of the ‘protections’ we introduced to mitigate the risk of ODI underperformance penalties e.g. CRI deadband reduced to 1.0 and the discharge permit compliance deadband (at 99%) was removed entirely. This is not only inconsistent with the evidence of past industry performance; it does not allow for balance incentives. This particularly affects WoC including BRL, as a single incident will create very large risk. This is something Ofwat recognised in the methodology but has not applied at the draft determination.

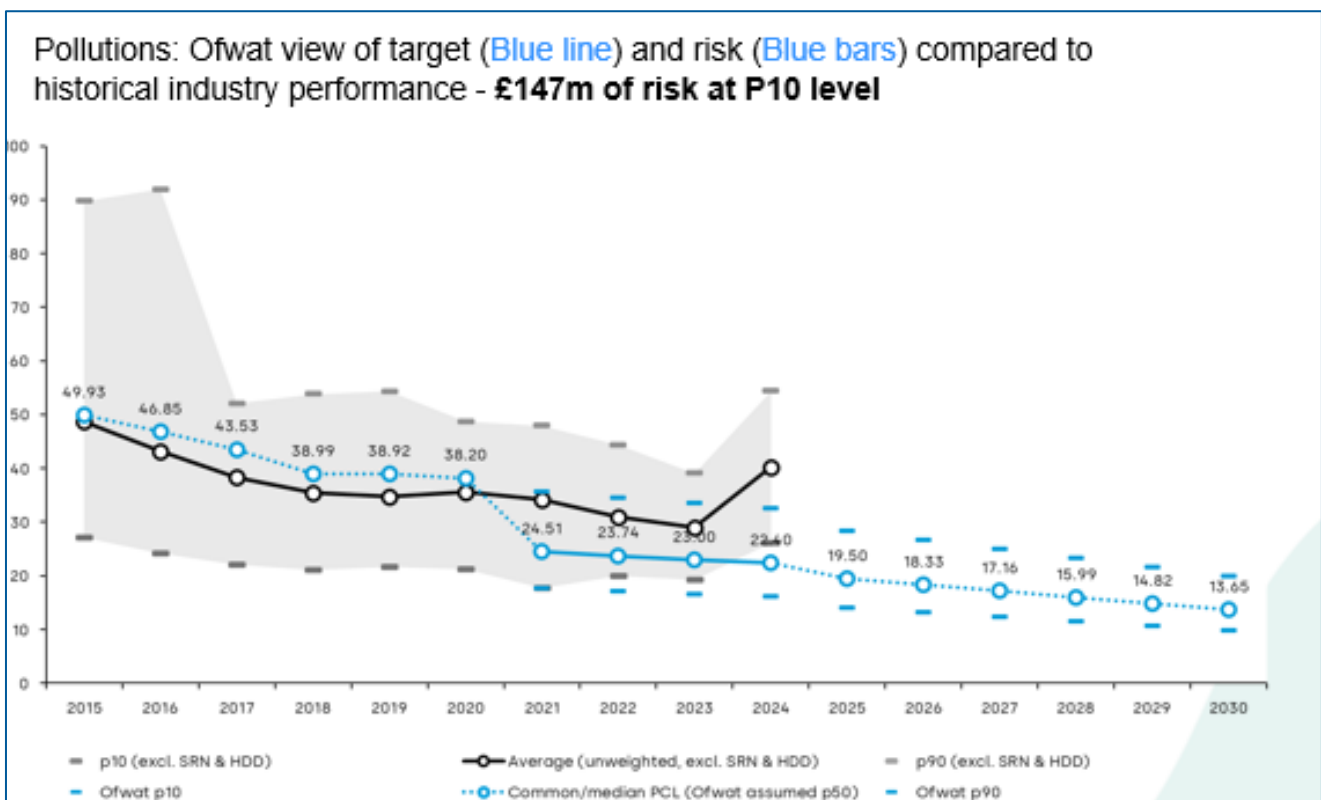
Table 9: Incentive rate comparison

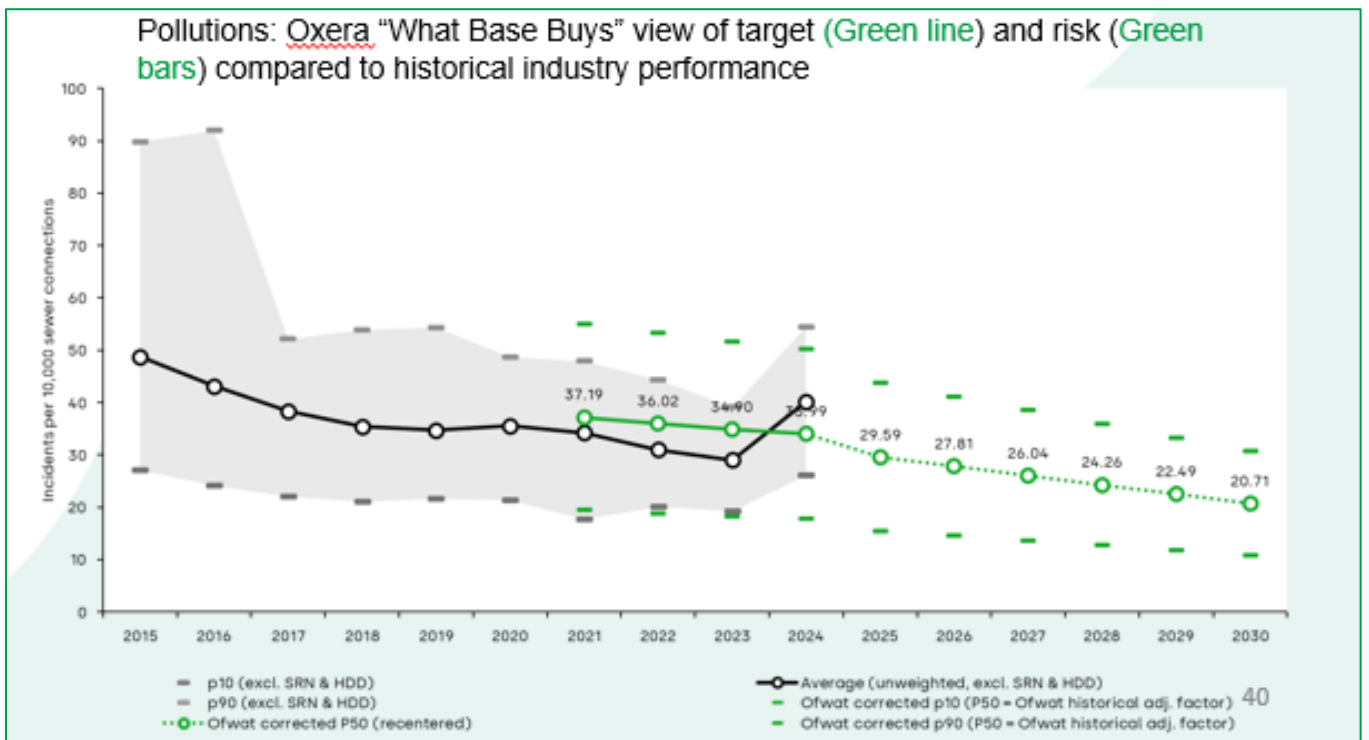
PC	Ofwat indicative (pre-DD) incentives		Reason for uplift	Ofwat DD incentive			
	SWB rate	BRL rate		SWB rate	SWB rate (% change)	BRL rate	BRL rate (% change)
Pollution Incidents	0.518	N/A	Override customer preference to align to govt strategic priorities	0.638	23%		
Storm Overflows	0.868	N/A		1.059	22%		
Leakage	0.365	0.365	Disaggregated rate calculation for the demand PCs	0.909	149%	0.848	132%
Mains Repairs	0.162	0.061	Removed adjustments based on performance trends	0.140	-14%	0.045	-26%
Unplanned Outage	1.111	0.649		2.823	154%	0.950	46%
Sewer Collapses	0.498	N/A		1.482	198%		

We have worked with Oxera to illustrate the inappropriateness of Ofwat’s DD assumptions on both performance stretch, the lack of a relationship between service and cost, and the ODI design risk. The report [Oxera, August 2024, Outcome delivery incentive risk analysis: Exploring the balance of risk at PR24] accompanies our submission.

Our observations based on this analysis are set out below:

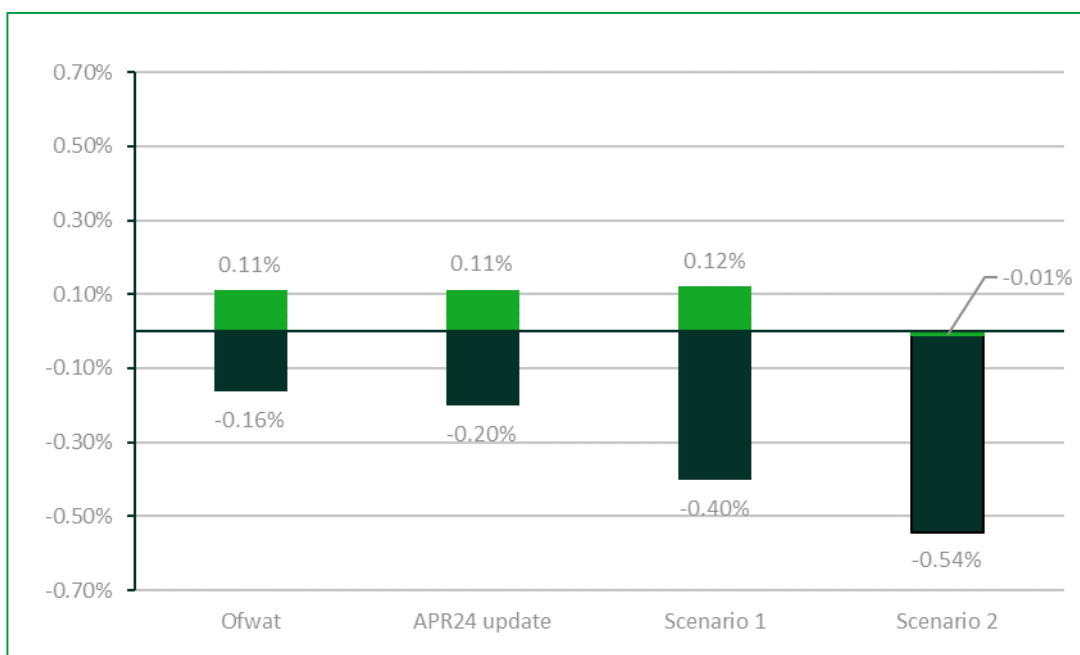
- ODI risk is the main area of imbalance in the draft determination and requires incentive re-design as well as adoption of our incentive rates
- We have updated key parts of our What Base Buys analysis for 2023/24 data, including identifying the base cost benchmark upper quartile companies from the DD base cost efficiency modelling. Ofwat’s own risk analysis to identify where the assumptions are not realistic for the industry, because Ofwat assume that risk reduces as service improves
- Where we are accepting Ofwat target challenges for most areas of further stretch, having reviewed the draft determination, our evidence suggests this should require additional base cost allowances to reflect the service-cost relationship for some performance metrics
- As an example – in the first graph below for pollution incidents – the industry historical trend and range of risk is shown. The blue lines reflect Ofwat’s target and blue bars RoRE risk assumptions
- The bottom graph reflects Oxera’s analysis (green lines and bars), using our industry modelling, but in Ofwat’s risk assessment tool for the DD for ODIs rather than through the tool we developed and presented in our plan. This implies a higher target (which we would not reflect, preferring to stick to our plan). This justifies:
 - That industry base costs are likely to increase with lower targets than this green line trend;
 - ODI protections are needed (e.g. deadbands) are needed because of weather risk and uncertainty (e.g. climate change); and/or
 - Ofwat need to calibrate their incentive rates down in order to reduce risk.
- Our RoRE range for ODIs and totex reflects our assessment and proposals to the DD, supported by this extensive efficient cost benchmarking looking at performance and risk trends.





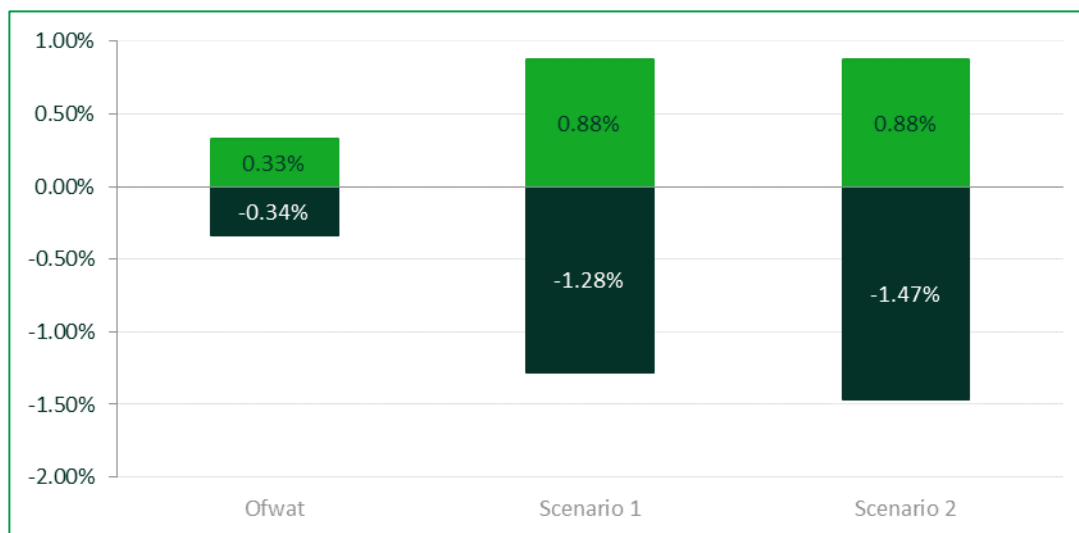
Oxera compare Ofwat’s risk range for pollution as an illustration with two other scenarios.

- Ofwat’s view shows risk ranges are fairly symmetrical and narrow. Oxera update in the Ofwat ODI range spreadsheets for 2023/24 APR data.
- Oxera scenario 1: using data from AMP8 including 2023/24 and including SWB data which Ofwat had excluded, this shows increased negative skew and risk ranges that surpass Ofwat -0.6% RoRE target for several companies
- Oxera scenario 2: as scenario 1, but also accounting for the fact that the median forecast is 21.85% above the PCL would see all companies (bar HDD) underperform even in the reasonable (P90) best case scenario



This suggests a much larger -0.54% downside risk for pollution incidents compared to the -0.16% Ofwat suggest (although we could not see this clearly in the additive model).

Ofwat's Monte Carlo risk model tests Ofwat's range and probability intervals – the 0.6% RoRE value that Ofwat ascribes to pollution is 0.34% in the Monte Carlo model, although this exaggerates the contribution to the range Ofwat show in the DD – this is not transparent in the model



Based on the two scenarios of 2023/24 APR data and consistent use of data, this suggests a pollution risk that alone matches the -1.4% downside in the Ofwat DD. This is one metric and therefore across all the metrics however we analyse the DD the level of outcome risk appears extreme. The Oxera report (*Exploring the balance of risk at PR24*) covers Pollutions and Water Supply Interruptions in detail as examples. We can also provide their supporting calculation files if helpful.

We note the recommendations of Grant Thornton to Ofwat (*A review of Ofwat's ODIs – 19 February 2024*):

- Ofwat could set ODIs with consistent levels of equity at risk. The only limitation on this is Ofwat's view that incentive rates should be consistent, although Ofwat divert from this by strengthening large and weakening small company incentive rates. In overview this undermines the concept and our original top down risk allocation approach should therefore be reconsidered
- Grant Thornton note the trade off where equity risk falls outside of a range. We prefer a more comprehensive approach, because of the portfolio risk driven by the judgemental rather than evidenced based approach to incentive rates, where some companies will have a higher or lower equity risk driven by a) historical enhancement investment, b) local factors (e.g. pollution exacerbated by choice of scaling factor), c) exogenous risk and d) the conceptual risk construction by Ofwat (does risk really reduce with improved service levels?)
- They also highlight the importance that performance commitment levels used to set the incentive rates must be stretching but achievable. We demonstrate this is not the case, and even if it were, the risk to equity is significant
- Grant Thornton also note that Ofwat consider the skew in expected returns. This is specific to outcomes, and even Ofwat's own construction for South West Water has a skew in the DD of +0.8% to -1.3%
- We are surprised that Ofwat did not ask Grant Thornton to specifically review our comprehensive approach to answering some of these questions, given the approach featured in the PR24 consultation explicitly and we provided the original top down approach concept.⁴

⁴ [BRL: A simple approach to ODI setting](#)

There are some clear practical differences in opinion in terms of the construction of outcomes risk between ourselves and Ofwat. We set out the starting point for risk for the industry. Ofwat set out in section 9 of the *“Delivering outcomes for customers and the environment”* their risk modelling approach.

Ofwat use both an additive and Monte-Carlo approach (although we note Ofwat has dismissed Monte-Carlo as not transparent and subject to assumptions, including in our QAA assessment for our own and Oxera’s outcomes Monte-Carlo simulation). Our own assessment was that the normal distribution assumptions made in Monte-Carlo produced a very narrow range of risk, although still negatively skewed based on Ofwat’s assumptions, because of weak correlation in base cost benchmark company and performance trends. We preferred an additive approach, as the assumption of normality was difficult to justify when extrapolating forward improvements in performance from base expenditure in industry common PCL metrics, and company specific ones such as leakage were affected by enhancement expenditure.

Ofwat seem to have misunderstood our analysis in the QAA assessment *“The company has not provided compelling evidence to support its proposals for lower incentive rates due to overexposure on risk of return. The reduction in size of incentives risks providing insufficient incentive for companies to improve performance. South West Water proposed different ODI rates for all common performance commitments for both the South West area and Bristol area. The company set out that the indicative rates represent a risk on return on regulatory equity (RoRE) greater than +1-3% when taking an additive approach. This is not consistent with our guidance in the PR24 methodology, where we explained that the $\pm 1-3%$ is the expected return for an efficient company with a mix of outand underperformance across the different PCs and with risk protections such as caps and collars applied. The additive approach applied by South West Water is unrealistic and overestimates the risk.”*

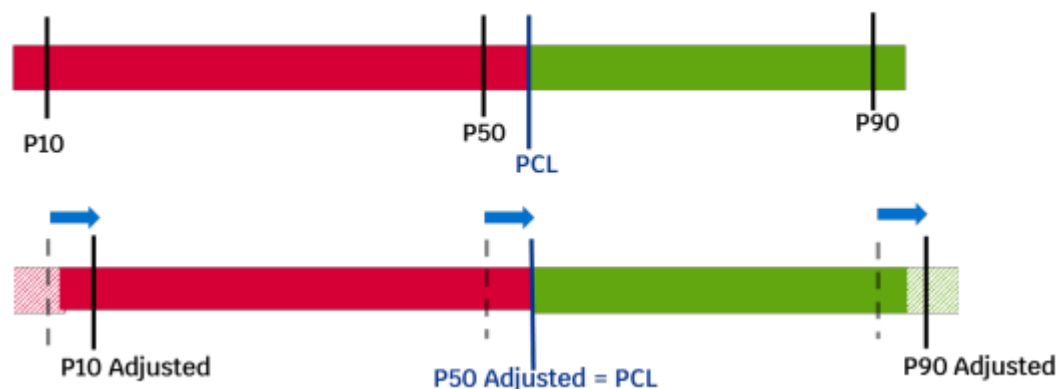
The plan itself stretched performance based on consistent set of analysis which was used to assess risk, and was based on considering median and benchmark company performance. The additive approach and ODI designs considered areas of out and underperformance across different PCs. And Ofwat observe an additive approach as being valid (and similar to the Monte Carlo approach in the DD). Ofwat recognise that a Monte Carlo approach risks under- or overstating the negative skew in historical performance data for individual performance commitments through assuming a normal distribution of performance.

Ofwat’s additive approach uses five-year P10 and P90 ranges to avoid the risk of overstating skew. We disagree that this approach will produce valid ranges of risk as it assumes a static scenario, where risk does not increase as service levels improve. The trends in industry performance and in our What Base Buys analysis (illustrated for pollution earlier) demonstrate this clearly.

This Ofwat diagram illustrates the risk – effectively Ofwat assume that the performance level of P50 is the central estimate and adjust a range of risk accordingly. Ofwat describe this as an “anchor point”. Industry wide data is used even where the target is company specific (a contributor to portfolio risk across metrics by company), the existence for which requires an additive approach to be used (or a non-normal distribution in Monte Carlo simulation). It is then hardly surprising that with a normal distribution there is a narrow range of risk – there are two issues:

- The risk from improving performance (including the unfunded cost of achieving outperformance, which generally will be higher for incremental improvements e.g. leakage) cannot be delivered. This is one argument Ofwat have made for symmetrical and strengthened outperformance incentive rates, which then increases downside risk further
- If the performance is stretching towards improvement, but there are exogenous factors increasing risk (e.g. climate change and rainfall / droughts etc), then risk is unrealistic.

Figure 11: Illustration of how we adjust historical performance to account for performance commitment level "stretch"



If this assumption is incorrect (and performance in AMP7 clearly suggests it is wrong, then Ofwat’s assessment of RoRE risk, PCLs and incentive rates collapses. It is already skewed to the downside for SWB based on the draft determination, which is already a criteria that does not align to the allowed cost of equity.

Ofwat helpfully provide this example, which for the additive approach effectively means the risk of hitting a PCL (rather than a historical achieved level of performance, which can be below a P50 where it is an existing AMP7 target companies are not achieving in addition – the question of whether this was too stretching at PR19 is not considered by Ofwat). Assuming P10 is P50 suggests that risk disappears.

Table 35: Percentile combination for a five-year view of P10 performance for Water Supply Interruptions

	Year 1	Year 2	Year 3	Year 4	Year 5
Performance Percentile	P10	P10	P40	P50	P50

The wording from Ofwat below is telling “This approach is simple to follow but relies on assumptions about the frequency of performance percentiles. While this approach gives a more realistic representation of the frequency of a P10/P90 level of performance in a 5-year period than the simple additive approach, we may over- or under-state the size of risk.”

We agree it is simple to follow. We are not sure how this can over-state the risk, unless Ofwat were setting PCLs at levels below historical performance. As this is not the case, this must clearly under-state the risk. The definition of risk here is a net impact that should be balanced by opportunity to outperform, which is a necessary condition for balanced incentives in this framework. It risks undermining the principles of economic regulation behind Ofwat’s duties, something we have had concerns about since PR19⁵.

The risk can only not be understated if you assume that outperformance opportunities are the same as when service levels were higher. And then incentive rates are strengthened to try and achieve balance, which therefore make this under-statement of risk become magnified and self-fulfilling, particularly without any concept of the marginal cost and marginal benefit of such incentives.

⁵ Blank (ofwat.gov.uk)

As another example, for External Sewer Flooding Ofwat states that '(t)he level of stretch of the PCLs prior to PR19 is not representative of future PCLs. The difference between performance and the PCL is consistently greater than at PR19 and including this data would skew the performance range and would not represent realistic future performance range'.

The question remains – it depends how you view risk and what assumptions are reasonable to make. This is a judgement, but not one that can be applied just from a presumption that stronger incentives in themselves protect customers and the environment and improve performance. Or one that assumes that upside risk with stronger incentives are sufficient to balance downside risk for investors. A thorough examination, at previous reviews on a company basis, is required.

Ofwat stated in the QAA assessment for South West Water on Outcome incentives:

The company has not provided compelling evidence to support its proposals for lower incentive rates due to overexposure on risk of return. The reduction in size of incentives risks providing insufficient incentive for companies to improve performance. South West Water proposed different ODI rates for all common performance commitments for both the South West area and Bristol area.

We disagree that this can be the case. Ofwat's original methodology did not provide appropriate incentive rates that are linked to economic value or customer views. In the DD move further away from customer preferences by strengthening particular rates based on regulatory judgement. We have presented significant evidence, both in terms of the basis of the incentive rates, and the supporting risk evidence that supports it. It is consistent with the evidence used to propose stretching service levels, and this is customer and stakeholder preference for how water companies should be incentivised.

ICS Consulting have produced a supporting report which identifies the basis of valuation we used. Oxera have used Ofwat's own risk framework to compare the DD risk approach with our own comprehensive methodology. The results are clear -

The company set out that the indicative rates represent a risk on return on regulatory equity (RoRE) greater than +1-3% when taking an additive approach. This is not consistent with our guidance in the PR24 methodology, where we explained that the $\pm 1-3\%$ is the expected return for an efficient company with a mix of out- and underperformance across the different PCs and with risk protections such as caps and collars applied. The additive approach applied by South West Water is unrealistic and overestimates the risk. There is limited evidence provided regarding the rationale to target a 2% ODI return. This number is derived from customer research, which asked customers about preferred bill volatility to identify a target RoRE range. The company does not acknowledge, in interpretation of the results, the inherent complexity of the topic, with trade-offs difficult for customers to understand. The company used the target 2% RoRE to allocate 0.21% RoRE per PC across both water and wastewater. The result is proposed rates that are 37 – 78% lower than our indicative ODI rates.

The methodology has been tested and developed over time. It is incorrect to describe this as purely additive – the conclusion of the additive approach being appropriate was in the light of the Oxera analysis that looked at cross-correlations and identified that it was differential enhancement investment that resulted in correlation between different service areas (ref: What Base Buys). As with Ofwat's analysis, we found that Monte-Carlo simulation produced implausibly narrow views of risk, as sector wide there was a range of different performing companies on different metrics.

Ofwat have previously taken the view (e.g. at the CMA at PR19) to not support the use of Monte-Carlo simulation for risk testing. We presented both additive and stochastic approaches to risk ranges, and reached an objective and evidenced based conclusion on the additive approach. This conclusion was solely reached on the basis that Ofwat would make company specific adjustment to PCLs on the basis of enhancement expenditure, which differs from the PR19 approach. We agree that the incentive rates are lower than Ofwat's approach. We believe it is, for instance, inappropriate to penalise a company to the value of £7,000 per customer contact on discoloured water, when companies should be incentivised to want customers to contact them.⁶

Ofwat have not considered the economic consequences of incentives and therefore our customer research (a top down methodology that is evidence rather than subjective based) is necessary given the failure of Ofwat's original research methodology to identify an economic set of incentives (something we identified early in PR24 was inevitably not going to work, including the analysis Bristol Water provided that variation in company WTP valuations for service levels correlated to different bill and service levels, and could be expected to vary by area due to differential customer preferences. Higher incentive rates were likely to be obtained for rewards where there was a higher economic cost (ie better service levels), but this did not equate to a symmetrical penalty being applied to adverse service levels. This leads to the conclusion that RCV allocation to set simpler incentive rates, alongside better ways to target incentives such as through dynamic incentives may be a more targeted approach than attempting to standardise incentive rates per incident (which is not something Ofwat's methodology ultimately achieves. The question of why risk varies by company, and why better performing companies have a higher incentive risk (this is because their asset base is larger, which can increase rather than reduce risk) if past investment e.g. because of geography results in more assets per customer. That is what our RCV allocation approach was resolving. Asset intensity varies by different service areas in the water sector, based on geographical and historical investment choices which should not be forgotten by regulators in setting forward looking incentives. That does not reflect customer views, or an economic approach to incentives.

Ofwat's logic and perspective is one that the CMA did not accept from Ofwat at PR19, including the failure to recognise a service-cost relationship at PR19. We present in this response the consequences in terms of industry totex and service level underperformance over 2020-2024.

The lower incentive rates proposed by South West Water risk under-incentivising the company to make performance improvements, which would have a negative impact on customers and the environment.

The assumption made by Ofwat that only strong incentives will make a company invest in the right options for performance improvements, and that the absence of ever strong incentives in the face of poorly calibrated incentives is one that is of real concern to the water industry, its stakeholders and investors. We are consistent in our view throughout PR24 that there may be better ways of aligning the performance of companies, customers, investors and wider society. At what point does the risk to the long term investability of the water sector meant that Ofwat will reconsider its presumption in terms of the power of regulatory incentives?

Totex risk

Ofwat's DD totex risk range appears balanced and includes totex risk/ opportunity of +/- 1.6% from 1% wholesale costs, 0.3% PCD timing and 0.3% retail costs. The Ofwat assessment of risk is very simplistic – taking 8.5% totex variation as an upside or downside. Our own assessment adjusts this risk for industry risks from the Ofwat DD mechanisms, alongside updating our own detailed assessment for our plan. The range of +1% to -2.2% for our view of the DD is very similar to the totex risk we saw in our plan, before proposing more flexibility through uncertainty mechanisms and PCDs in our plan to produce a more balanced cost risk of +1.0% to -1.6%. The main difference for downside risk from our plan is our acceptance of Ofwat's 1% p.a. frontier shift compared to the 0.5% p.a. in our plan.

⁶ We are aware that Ofwat has, since the publication of the draft determination, written to companies regarding the high unit rate to highlight that *“while ensuring high water quality standards is very important, we need to balance this against the risk of any adverse incentives and financial risk.”*

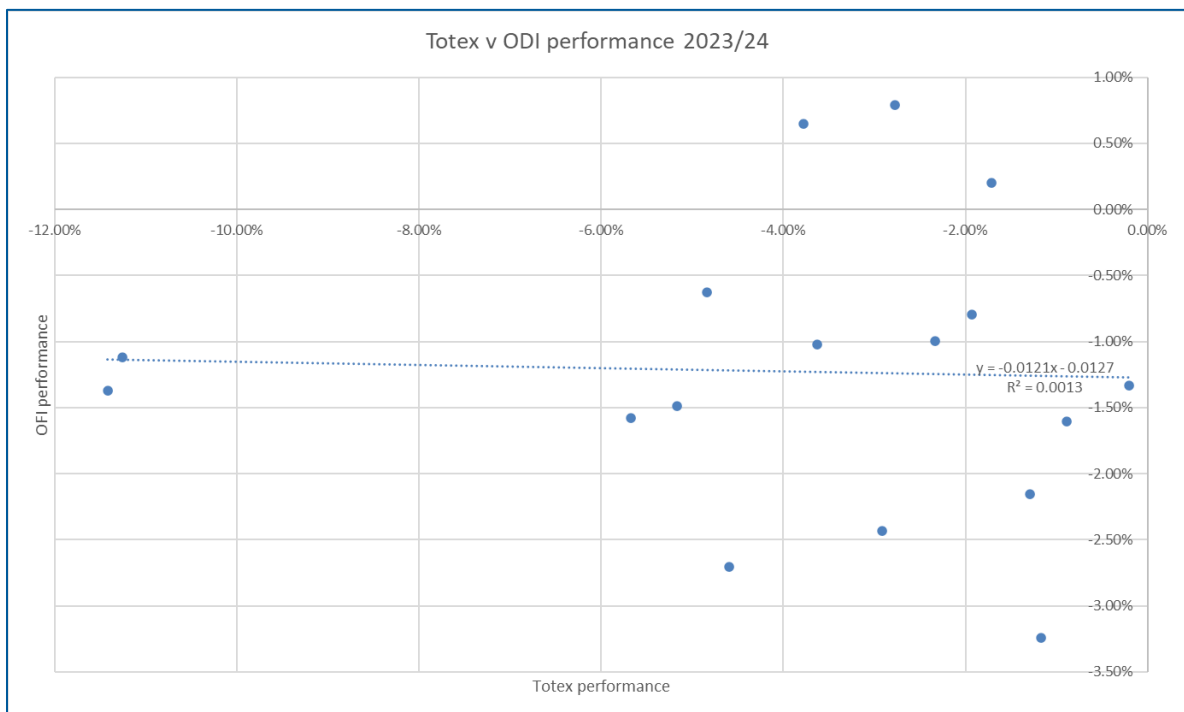
We propose more flexibility in our DD response for DDs and uncertainty mechanisms in order to produce a balanced view of totex risk.

The main impacts we see in the DD for totex risk derive from:

- Inappropriate efficiency challenges on enhancement expenditure (including using shallow dive assumptions based on unrelated expenditure, particularly on the water service)
- Risk from PCDs amounting to £20m p.a. from inflexibility and the administrative burden associated with the monitoring framework. We use Ofwat’s 6% complex and large project allowance rate as an estimate of the inefficiency from this – as effectively Ofwat are asking for many programmes and schemes for a wide range of enhancement expenditure to have the same level of costing, outcome measurement and reconciliation that is only efficient for a large project such as a new reservoir
- Ofwat’s view of frontier shift is at the top end of the relevant research for the industry. Although we adopt this assumption as a stretch target, it does have the potential to unbalance totex risk
- We welcome Ofwat’s approach to Real Price Effects, which covers the risk areas we proposed in our plan. We consider this a reasonably balanced package of paired assumptions based on the evidence Ofwat included in the draft determination. We set out in the cost and efficiency response document our thoughts on the mechanics of the energy mechanism.

We have considered totex and PCD risk separately, but they are connected in terms of our view of the DD. We cover PCDs in more detail below.

Our analysis of 2023-24 APRs suggests that Ofwat’s 8.5% totex risk is understated. We believe the position up to 2022-23 included the Covid-related delays to enhancement programmes, and does not reflect the additional service-cost relationship as service levels (in particular leakage increase over 2020-2024). Energy costs reduced in impact over 2023/24 so this is a more representative period. The wholesale totex overspend in 2023/24 was 31% and 2020-24 was 12.6%. We believe that the service-cost relationship shows this trend is likely to continue, particularly as Ofwat extrapolate base costs and service performance based on historic performance without including a trend variable in the model as we recommended, when setting benchmark companies.



There remains no correlation between ODI and totex performance – generally all companies are overspending compared to PR19 significantly and underperforming on ODIs. Without outperformance on bespoke ODIs then there is near universal underperformance. Whilst Ofwat have considered a wide -8.5% totex range for over and underspend, this does not stress test the forward looking challenges facing the efficient company. We present our assessment of this in Annex C.

Link between totex and ODI risk (service-cost relationship)

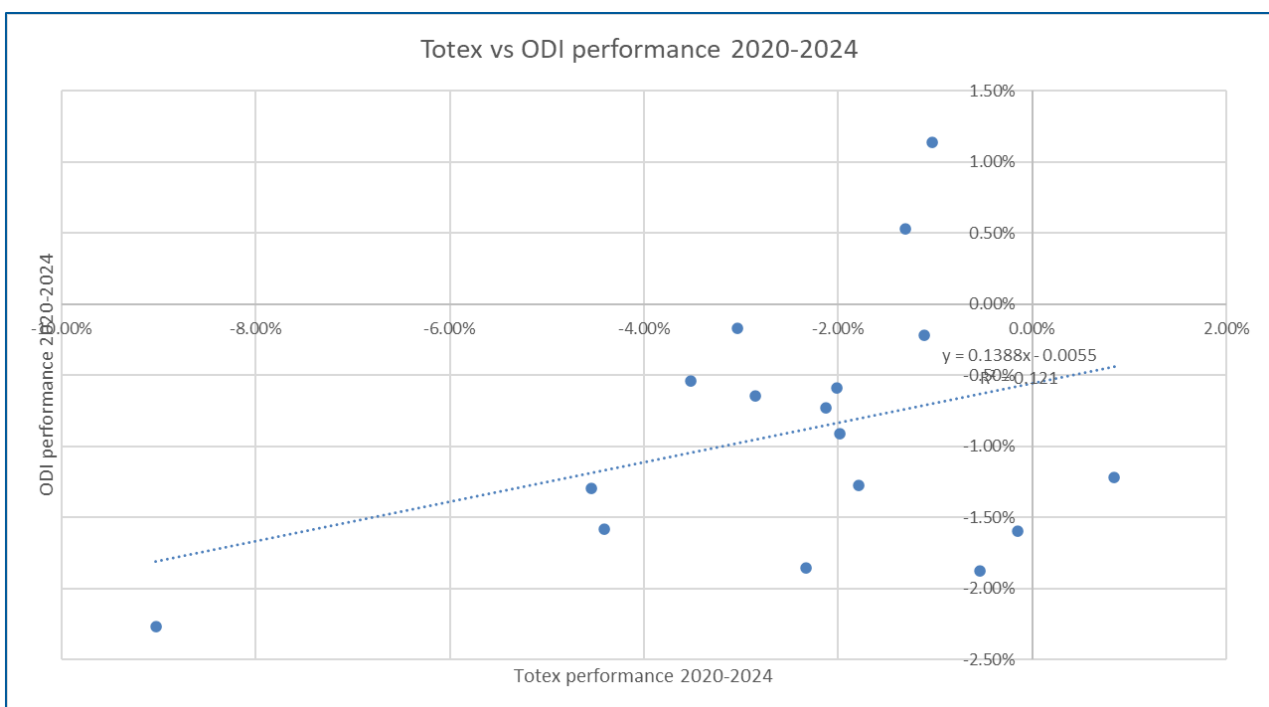
A key point of discussion at PR19 was the relationship between service and cost. This was discussed at the CMA and generally the evidence at the time did not support a clear conclusion, other than for leakage (where the cost of maintaining lower levels is not a matter of inefficiency and should not be captured within efficiency modelling because it is within management control for a particular level of leakage). This should not be contentious and is reflected in an approach to a leakage cost adjustment for companies beyond upper quartile performance on leakage. Although Ofwat did not accept this claim (for Bristol Water) at the DD, we have included it in our response with the updated calculation for 2023-24, taking into account the maintenance leakage information that was used for Bristol Water at PR19 but is now available in APRs. We have clarified to Ofwat that this is the approach we had taken, and no further efficiency adjustment is required, as the CMA found.

We have considered the service-cost relationship further for two reasons

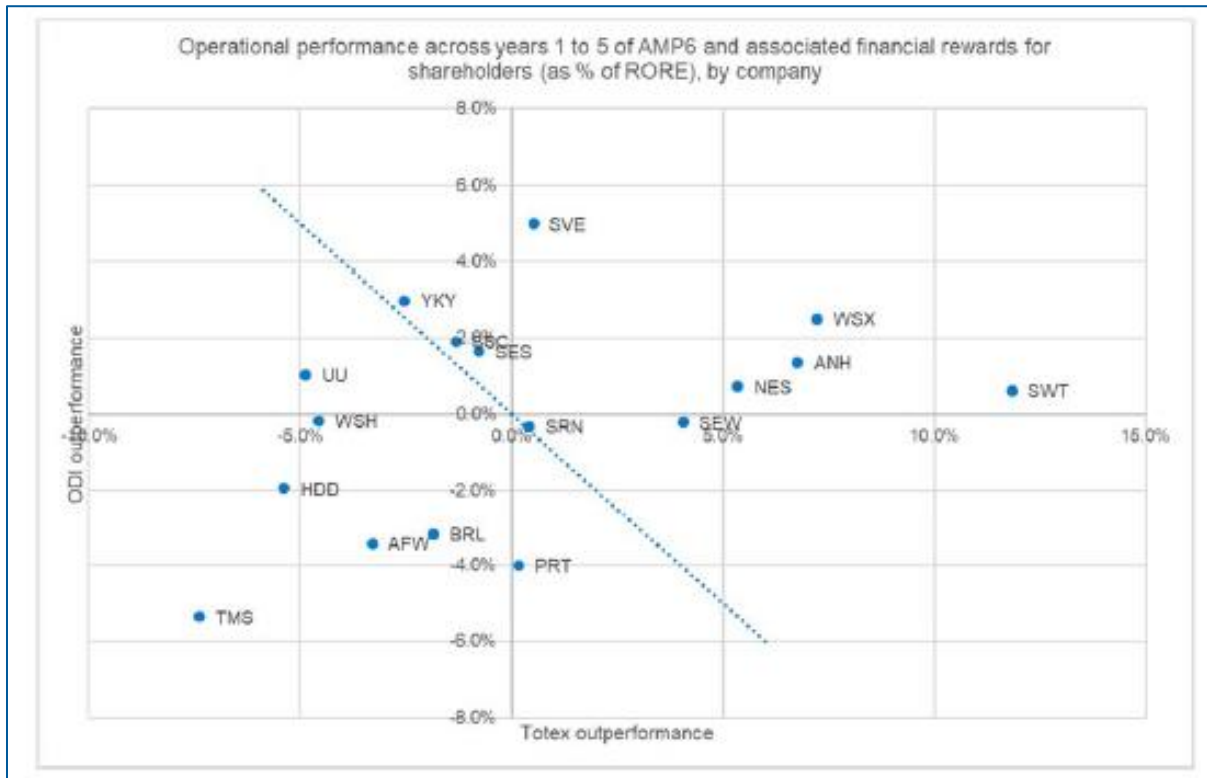
- 1) It describes the outcome of the PR19 framework and whether the contention about stretching service levels has an impact on outcome and totex risk
- 2) It helps to frame whether Ofwat's risk assumptions in RoRE are plausible and a fair balance of risk and return.

It is harder to make definitive conclusions from this position on the service-cost relationship – this is not necessary. We can in any case make cost allowances or incentive design amendments informed by service-cost relationship evidence. We prefer to make incentive design amendments unless (as with leakage) there is a compelling set of evidence on cost allowances. However, even if the evidence is less strong, it is still informative on the choices Ofwat make on cost allowances, such as the strength of the cost benchmark. It is better to consider this in the round than to make subject judgements that there should be some challenge and strengthen benchmarks if it “feels” weak. We also take the view that cost models with time trends can help to reduce risk of a service-cost relationship being ignored – a positive or negative trend in cost allowances with totex sharing rates can be part of a fair balance of totex risk and return assumptions.

For 2020-2024 there is a weak positive correlation between totex and ODI performance. The stronger relationship is there no single company with positive totex and ODI performance. Stretching ODI incentives further, not based on economic value of marginal cost and marginal benefit as at PR19 (hence the strengthen incentive rates) will increase the risk further.



It is interesting to compare this relationship to the case Bristol Water made to the CMA at PR19, which resulted in the CMA taking into account the service-cost relationship for leakage, moderating ODI incentive rates and introducing deadbands, caps and collars (e.g. mains repairs) to reflect exogenous factors such as the weather. We think this is a useful comparison that when combined with the risk assumptions Ofwat make at the DD should be of concern. ODI performance is generally negative, although there are better protections for extreme downside in AMP7 than in AMP6. Totex outperformance however has deteriorated.



We also recall the statements that were made to Ofwat five years ago at PR19 draft determination stage as part of the Bristol Water submission:

“The level at which these incentives are set, as well as whether doing so is in principle appropriate and supported by the Drinking Water Inspectorate, appears beyond what might be either feasible or reasonable.”
Professor Jeni Colbourne MBE

“If the evolving landscape for water companies is genuinely to restore public legitimacy and trust in water companies then relying on incentives to make companies work harder might end up being too limiting. And the unintended risk could be to push some water companies too close to the edge.”
Dr Scott Reid, ICS Consulting

Unfortunately, the statements at PR19 appear to be borne out by the ex-post evidence, and at PR24 Ofwat make this unacceptable position worse. This is inconsistent with Ofwat’s duties to both secure functions and finance.

We set out in Annex C our observations from our WBB analysis on the service-cost relationship. Our preference remains resetting outcomes incentives rather than resetting cost allowances, with the exception of leakage where the relationship is clear.

PCDs

We put our views on PCD risk in the context of what Ofwat is aiming to achieve with PCDs in the PR24 DDs. We support Ofwat’s intention behind PCDs. We believe however the level of complexity involved will create inefficient and inflexibility. We welcome that Ofwat have adopted many aspects of the PCD proposals set out in our business plan.

PCD key representation messages		
What Ofwat is trying to achieve	Our view	Our proposals
Encourage On-Time Delivery: PCDs are designed to incentivise water companies to deliver enhancement projects on time. If companies fail to meet the PCD requirements, they must return more than the allowed cost of the enhancement to customers, reflecting any foregone benefits.	We agree with the proposal, but believe the time incentives will be too complex to work in practice.	We propose using the Delayed Delivery Cashflow mechanism for significant delays to enhancement expenditure. Companies can make a case at PR29 based on the overall timing of delivery. Ofwat can then consider the application of time incentives in the round.
Customer Protection: PCDs ensure that customers are compensated in cases where companies do not deliver the expected outputs. This includes returning funds to customers if the enhancements are not delivered as planned.	We agree with the concept. But where companies deliver different outcomes or outputs, and this reflects customer and stakeholder needs, PCDs should allow for this.	We propose using WaterShare+ as an aggregate PCD and uncertainty measure mechanism. This public scrutiny will allow us to make a case as to how our delivery has protected customers at PR29.
Regulatory Oversight and Assurance: PCDs provide an additional layer of assurance that enhancement investments will be delivered as planned, protecting customers from potential underperformance.	The complexity of PCDs will create totex risk. The complexity is akin to that which would be required for a major delivery project. There is therefore a clear regulatory assumption, even for small schemes that an allowance for PCD monitoring of 6% of wholesale totex would be required	We do not believe customers will be willing to support a significant layer of regulatory approval and assurance. Instead, this should be done once across delivery as part of a case for a net adjustment at PR29. The requirements could be amended in-period within the PCD framework at PR29 on a risk based approach by Ofwat in dialogue with companies.

Our proposal is:

- To reduce the inflexibility of PCDs. We believe Ofwat do not intend PCDs to become “handcuffs” that constrain innovation in the water sector. We have assessed carefully PCD by PCD where the wording of the PCD does not match the broad intention to allow flexibility and swaps
- We believe time incentives will be overly complex if done fairly. Customers will not understand rewards for on-time delivery and late delivery is impacted by Ofwat attempting some simplification through standard delivery profiles. The Delayed Delivery Cashflow Mechanism provides some protection

- We do not ask customers to pay for the symmetrical cost adjustment claims that link to base PCDs in our DD response. Therefore, these PCDs will not need to apply, as they are linked to funding that was not in our business plan and therefore not supported by our customers, or asset maintenance modelling
- We are also concerned about the administrative burden of reporting. We assume an impact of inflexibility, administrative burden and retrospective penalties, as well as time incentives, in our view of RoRE based on the draft determination. Our draft determination response removes any PCD RoRE risk/opportunity in line with our original plan
- We propose replacing Ofwat's scrutiny with customer and stakeholder scrutiny through the WaterShare+ framework. This is the first stage of the wider sector reform we believe will be needed post PR24. We are concerned that PR24 PCDs will become an anchor we must drag while trying to adapt the water sector to ever increasing expectations.

We do not propose removing the PCD framework. We ask to make a case at PR29 for a net adjustment. The benefits of PCDs, including customer protection where direct output delivery is less clear to monitor through sector regulators. Lead pipes as an example of a discrete programme where PCDs are beneficial – the DWI monitor delivery on a risk-based approach but they do not and should not monitor economic delivery of outputs given their role is focused on water quality and acceptability to consumers. Where PCDs become problematic is the multiple drivers of WINEP and WRMP where definition of outputs and activities must change.

We should avoid PCDs that lock in a particular way of working without any way of justifying that a better approach has been taken. This is not Ofwat's intention, but is a function of the improvement in sophistication of wastewater enhancement efficiency modelling, something Ofwat should be commended for tackling as a challenging area of economic regulation.

The challenge is one-sided adjustments based on inflexible scheme substitution. Sometimes drivers change and a different mix of schemes are required. This cannot just be allocated to poor company business planning – it is often better to delay to reach agreement for a better outcome (particularly environmental) than plough on relentlessly with a defined solution.

There are significant inefficiencies in the proposed delivery monitoring framework.

- PCDs create totex risk – our preference is to retain well constructed PCDs, but to allow this to be reviewed in the round at PR29. This removes the inefficiency we estimate from the likely regulatory burden and inflexibility of the Delivery Monitoring Framework
- We recognise some complexity is necessary, and this is linked to the 40% cost sharing rate for enhancement expenditure, and the allowance for Real Price Effects, both of which we support.
- There is a need for greater certainty that non-delivery in AMP8 can be recovered in AMP9 where there is a good reason to delay. We think this can be dealt with through net adjustments at PR29, alongside more flexibility to look across individual PCDs.
- The time incentive framework allows some outperformance for early delivery, and penalties for late delivery. Some PCDs with time incentives assume a standard industry delivery profile, rather than a real one. This appears to penalise efficient on-time delivery, before spend is assumed in revenues. We recognise that Ofwat provides a small reward for on-time delivery. We take the view that time incentives are unnecessary. These can be covered by the Delayed Delivery Cashflow Mechanism. We have considered alternative methods to calibrate time incentives, but take the view that even the proposed mechanism will be too complex in practice.
- A greater potential for project and output swaps is required. We think that the net effect, with WaterShare+ scrutiny, should be possible in the PCD design. We would prefer to make a case for a net adjustment at PR29.

We have assessed three types of risk with PCDs that should be reflected in the totex range:

- Enhancement to base reallocation – In our business plan we applied a 15% efficiency to the BP allowances in enhancement to take into account the benefit to base expenditure of this investment. The PCD rules that relate to demonstrating that outcomes from enhancement do not result in any delivery through base expenditure double count this cost allowance approach to enhancement. This condition should be removed (note this condition only applies to mains renewal and storm overflows PCDs)
- Inflexibility - we applied 12% to the DD allowances for each relevant PCD. This is due to our plan efficiency on enhancement schemes we assumed as programme level flexibility. This in part reflects the lost innovation and efficiency opportunities, and even if these still exist, the extra complexity in calculating the financial consequences and monitoring delivery
- Admin burden – we applied 6% to the DD allowances for each relevant PCD except for storm overflows and phosphorus removal. This 6% allowance reflects that PCDs are asking for a degree of monitoring and cost allocation that is normally only associated with major schemes, such as Thames Tideway or SRO projects. Applying this to the level of individual mains or storm overflow schemes therefore comes with an administrative burden not currently reflected in price limits, rather than managing delivery at programme levels. This 6% allowance reflects the assumptions Ofwat make for programme delivery for major schemes, and is therefore a notional assumption.

The degree to which these adjustments affect individual PCDs is summarised in Annex C. We assume that our proposals for PCDs, which allow for a flexible case to be made at PR29 remove these cost burdens, restoring the spirit of the DD that PCD non-delivery should not be reflected in a totex RoRE range. This reflects the position we reached in our own business plan PCD proposals.

Financing risk

We have reviewed the calculations behind the upward skew (+0.9% to -0.4%), which is the only way Ofwat produce an overall balanced RoRE range. We note that the financing shown in the supporting calculation spreadsheet for RoRE we were sent in a query response has this as a hard coded number. The bottom up calculation based on our plan shows +0.7% to -0.7%. This calculation we agree with and reflects our business plan. As in our plan RoRE calculation and in the PR24 methodology this is based on calculation of notional debt issuance and inflation risk.

We understand that the DD financing is derived from:

- The notional company will be able to issue new debt at a lower yield than the average of iBoxx A and BBB. However, in the DD Ofwat assumes the cost of new debt will be equal to the average of iBoxx A and BBB. It is therefore inconsistent to model this as creating an upward skew to equity returns. If anything, this could now be argued to skew towards financing underperformance
- Ofwat cannot on the one hand argue that no account in the notional company should be taken of company actual financing, and then in the next section argue that using actual company data provides the potential for notional company upside. The notional company is not a fictitious concept – it has to be relevant to the actual company. In any case, recent issuances suggest a premium even for Baa1 rated companies to iBoxx
- That positive shocks to inflation Ofwat model will tend to be larger for positive than negative shocks, on average creating additional returns on the portion of the RCV financed by fixed-rate debt. However, this represents a transfer of value from bondholders to equity holders, not from customers to the company. It is therefore incorrect to portray this as a change in the balance of risk in favour of the notional company, and inconsistent to offset this against the downside skew to company returns from operational incentives.

It is also inconsistent with the assumption that Ofwat make that the TMR is invariant to interest rates – in this scenario then the positive shock to inflation would change the real cost of equity. The RoRE range should be based on the risk to company financing from changes in actual inflation or interest costs, for the notional company.

We disagree that the CPIH / RPI wedge variance should be used to justify an upwards skew in financing opportunity compared to risk. Ofwat assume a CPIH index linked market which in itself is controversial as in practice this market has not developed – there may be a higher premium for CPH index linked debt compared to RPI index linked debt. The notional company therefore is unlikely to find an upside just because of inflation with the variation in RPI wedge to CPH looking at historical data, precisely because RPI is life expired and that wedge is assumed to dissipate by 2031.

The Finance P10-P90 range should therefore be removed from the assessment of RoRE risk for the notional company, if it is done on the basis set out in the DD. Note this positive skew offsets the downside risk Ofwat show on outcomes, which therefore undermines the basis of the outcome incentives in the draft determination. We retain our estimate of +/- 0.7% financing risk from the original plan. We also note that the 0.5% incentive skew in the draft determination, which requires a 0.25% cost of equity uplift to compensate. However, this is on incorrect risk characterisation, and we retain the view that the asymmetry on ODI incentives should be resolved at source as we demonstrated in our original plan.

Uncertainty mechanisms

Our plan

In our plan we proposed a package of measures. Our aim is to get essential investment financed and delivered, in a way that minimises bill increases to customers.

We proposed the standard totex sharing rates, but believed this should still include higher customer shares for EA charges and business rates to reflect appropriate risk management allocation.

We did not include specific Notified Items in our plan, on the basis that any remaining uncertainty in statutory requirements from WINEP should be clarified before Final Determinations. We assumed the standard Direct Procurement for Customers Notified Item would apply due to its likely use for major new water resource developments such as Cheddar 2.

We proposed a specific uncertainty mechanism for Storm Overflows, reflecting the unusual cost uncertainty and the scale of the programme. To maintain efficiency incentives, we suggest this should be based re-assessing delivery efficiency at the end of AMP8, using the same models as Ofwat develop for PR24. This could replace the complexity that PCDs will add to PR24.

We also proposed to maintain our existing WaterShare+ mechanism. It is a unique approach, and puts social responsibility at the core of our business by sharing the benefits of prescribed outperformance by allowing customers to have a share and stake in the business, or a bill reduction. To date c.1 in 14 of South West area customers have taken up the share options. We are targeting uplifting this to 1 in 10.

At PR14 the original WaterShare framework included a scorecard that set out how performance was shared with customers across cost base, delivering outcomes and other factors such as legislative change. For PR24 we proposed to use WaterShare+ to track and be transparent about delivery against our obligations and new cost pressures that arise.

The financial lever proposals (PR19 reconciliation mechanisms into RCV) as part of our plan already provide some early benefit to customers. We propose to track PCDs through WaterShare and if there is a net benefit arising for customers, consider the impact on voluntary sharing.

The draft determination

The DD includes many of the uncertainty mechanism proposals, some that included proposals included in our plan, but also some new elements.

We welcome the following proposals:

- We agree with the proposals on indexing labour and energy costs. Whilst the indexes proposed could be debated further, we avoid responding on that level of detail as we see the package as a whole. We have not been able to complete that level of technical analysis in the shortened time available for the DD response
- We welcome Ofwat’s approach to cost sharing rates, including on different elements of bioresources (standard 50%, IED 25%), and on the differential rates between enhancement (40%) and base expenditure (50%).
- We support the enhanced 10% cost sharing rate on business rates. We believe that this also remains appropriate for environment agency charges (25:25 as at PR19)
- We support the introduction of the Delayed Delivery Cashflow Mechanism (DDCM). Given the scale of enhancement investment, prompt delivery is of legitimate concern to the public and the supply chain and is an appropriate ‘backstop’ incentive that should not need to be used in practice
- We support Ofwat’s approach to providing ‘backstop’ protection for both customers and companies through the separate aggregate sharing mechanism for cost and outcomes performance. We agree that separate mechanisms are appropriate, rather than a combined approach (such as a more general ‘Returns Adjustment Mechanism’)
- We support the storm overflow and bioresources land bank notified items. We make specific comments on these mechanisms and also suggest a further notified item for PFAS is also required
- We broadly accept Ofwat’s proposal for a modest adjustment to outperformance / underperformance payments where there is a failure to provide timely and accurate supporting information and assurance, in circumstances where the requirements are clear and are unambiguous.

Our response

We summarise below our view of the various regulatory framework mechanisms and incentives in the draft determination, whether we see them increasing (red) or reducing risk (green), or whether there is an increase in risk that is less significant or can be mitigated (amber). It is useful to illustrate the scale of new and changed mechanisms in the draft determination, and the balance that reduce and increase risk. Ofwat will note that we generally support high level “backstop” protection mechanisms. Most of our representations focus on areas of excessive complexity that we believe will have unwanted consequences to cost efficiency or the long term ability to attract finance to the sector at an efficient cost to customers.

Regulatory mechanisms		
New mechanisms	Changed mechanisms	Existing mechanisms
Higher risk & proscription	Higher risk	Similar risk
<ul style="list-style-type: none"> ● PCD (non delivery / cap) – enhancement SIMPLIFY ● PCD (non delivery) – base adjust e.g. mains SIMPLIFY ● Timing (two way with skew) – some PCDs REJECT ● Delayed delivery cashflow mechanism ● ODI reporting penalty ● Developer services outside control ● EDM availability (storm overflow target) 	<ul style="list-style-type: none"> ● Common ODIs (no bespoke) REJECT ● Strengthened incentive rates REJECT ● Stretched performance levels REDUCE ● ODI definitions & Designs REDUCE ● Consequences of gearing >70% REJECT ● C-MeX link to UKCSI REJECT ● Scheme / performance funding gateways 	<ul style="list-style-type: none"> ● Labour indexation ● Revenue Forecasting Incentive ● Cost of new debt indexation ● Tax reconciliation ● DPC gateways
Lower risk	Lower risk	Lower risk
<ul style="list-style-type: none"> ● Third party reconciliation mechanism ● New stock exchange listing REMOVE ● Allowance for equity funding REMOVE ● Aggregate sharing mechanism – cost 	<ul style="list-style-type: none"> ● D-MeX made symmetrical ● Aggregate sharing mechanism – ODI ● Land Bank Notified Item ● Storm overflow Notified Item SIMPLIFY 	<ul style="list-style-type: none"> ● Cost sharing rates ● Energy indexation ● QAA & Outstanding status

We describe our comments on PCDs and Outcomes in the cost efficiency and outcomes representation documents respectively.

We do not support the potential introduction of a support for new stock exchange listings. The principle of notional financing means that such a mechanism should also reflect that existing listed companies have a cost of maintaining listings that is not currently recognised. This is because this is generally an ultimate controller cost, as the regulated entity will have reporting costs consistent with listing requirements under existing licence conditions.

Whilst we support the principle of Ofwat providing an allowance for notional equity funding, the allowance of 2% is insufficient where this is necessary. We cannot support the draft determination because of the use of notional financing headroom as a trigger for reducing RCV run off rates, deferring revenues into the future. As this triggered unnecessary notional equity financing in the draft determination (a cost of £3.8m to SBB customers), this approach is not in anyone's interests and is fundamentally inconsistent with Ofwat's statutory Finance Duty.

Notified items and bespoke uncertainty mechanisms

We included in our business plan no specific notified items, other than a bespoke uncertainty mechanism for storm overflows. The development of PCDs in the draft determination and the Ofwat proposal for a storm overflow notified items means that we start our DD response from the DD notified item proposal instead of our business plan proposal. We welcome that Ofwat have included this proposal and we make suggestions to improve it below.

We also welcome the proposal on bioresources land bank as a notified item. We make a specific proposal to add to this notified item, through a "pay on delivery" reverse PCD to cover specific risks from the Environment Agency in relation to appropriate measures for non-IED sites.

We have also identified the need for a Price Control Deliverable for PFAS, based on confirmation to us from the DWI that there is a potential legal obligation trigger during AMP8 which is currently uncertain.

Our preference remains for all Notified Items to be considered in the round at PR29. We retain our proposal from our original plan to develop our WaterShare+ proposal of how PCDs and the impact of Notified items should be adjusted as part of a case at PR29. This will reduce the inefficiencies and complexity associated with the proposed PCD delivery monitoring framework.

Since the draft determination we have explored carefully how we maintain our statutory programme enhancement programme. There have been additional requests for change from the Environment Agency and some Defra guidance is expected to follow submission of this response. As was the case for our original business plan, we have been proactive in discussing the situation with government and regulators, and welcome the engagement we have had with Ofwat as we have developed our response to the DD.

Some of the potential risks that we identified that may have been dealt with through bespoke uncertainty mechanisms have been resolved sufficiently to form part of standard totex risk and sharing mechanisms (alongside in the round flexibility on PCDs) to allow us to rely on the standard regulatory framework. The alternative we considered appropriate if this uncertainty had not been sufficiently resolved is for "PCD in reverse" pay on delivery trigger mechanisms, with adjustments considered in the round at PR29. We believe these are now not necessary following our engagement with regulators and government. However, if the situation changes ahead of Final Determination we consider that we could revisit the potential alternative "pay on delivery" approach if uncertainty emerges. The specific areas of uncertainty we believe have been resolved are:

- We have certainty on the continuous river water quality monitoring programme. We identified in our business plan that this was an area that may require revisiting ahead of DD. The EA have clarified with us the need to include 25% of the total river and estuarine location monitors in AMP8, not just the 25% of the river locations. The pilot estuarine monitor programme remains unchanged, but we have included the additional monitors. Our response to the DD has included the additional monitors at our same (efficient) unit rate, increasing our totex enhancement programme for this element. This has been rebalanced with other areas of our statutory investment programme that could be reprioritised. This resolves the uncertainty at the time of submitting our business plan.
- Emergency Overflow (EO) monitors were another area of uncertainty where guidance on expectations has been clarified since our business plan. We included 25% (£5m) of the programme in our original plan which has a 2035 deadline for the full programme. We have been advised that Defra are now expected to clarify that 50% of the programme should be delivered by 2030, and therefore we have included an additional £5m in our DD enhancement totex response. We believe this clarifies the uncertainty associated with these monitors sufficiently. A PCD (with flexibility for further reprioritisation) provides sufficient customer protection for any remaining uncertainty, given the relatively low materiality.
- We have included £4.2m p.a. increase in EA discharge permit costs that are now certain. We consider that there are risks for further changes in environmental regulation costs. A 25:25 cost sharing rate would be appropriate and has existed (for abstraction charges) at previous reviews.

Storm overflows

We agree with the principle of the storm overflow uncertainty mechanism that Ofwat have proposed. It was not fully clear whether the proposal only related to scheme swaps, but we think the intention was to include an uncertainty mechanism that worked alongside PCDs.

In line with Defra and Environment Agency expectations on changes in WINEP and WISER guidance since publication of our business plan, we have been working to consider whether additions or swaps to the original WINEP programme with our business plan can be achieved. We set out in our cost and efficiency document that we have largely achieved these changes through swaps so we avoid bill increases to customers. This is in line with our Long Term Delivery Strategy. Therefore, we do not believe we need specific uncertainty mechanism for what we believe our agreed WINEP changes.

We have also included in our response changes to inland bathing beach designations and bathing water sites within our overall programme. In principle this means that Ofwat would not include an uncertainty mechanism in the Final Determination.

However, we believe that more general notified item protection is required, and we note that Ofwat have not included any specific drafting for the uncertainty mechanism in the draft determination. We would prefer to have greater flexibility for further changes in the following areas to be included in a standard Notified Item, that includes the risk that further changes to our swaps and other programme elements are not covered.

- Improvements required to meet Urban Waste Water Treatment (England and Wales) Regulations 1994 (UWWTR) - Investigations that lead to storm overflow scheme requirements related to the UWWTR then the Environment Agency expects these to be completed as soon as possible, and no later than three years after the completion of the investigation.
- Future designation of Bathing Waters: Future designations of bathing waters after the point of the PR24 draft determination by Defra, where improvements are required in advance of PR29. Ofwat have recognised that there may be a need for new storm overflow schemes in the 2025-2030 due to future designations.
- Changes to obligations arising out of Storm Overflow Discharge Reduction Plans, where the Environment Agency requires them to be completed before 2030.
- Further changes to Government expectations on storm overflows, including but not limited to the Defra 2027 review of Storm Overflow Discharge Reduction Plans. Where companies identify additional schemes required under UWWTR requirements, to meet newly designated bathing waters, or due to revision of the SODRP, these will qualify for this notified item.
- Changes to Government requirements relating to Emergency overflows, beyond the monitoring proposals included in the PR24 Final Determination.

We agree with the Ofwat qualification for the Notified Item we propose above that, where the changes relate to swaps for existing obligations, rather than new obligations (specifically Emergency Overflows), then the adjustment will only apply if companies have delivered additional storm overflow schemes and storage in the 2025-30 period and have overspent the storm overflow storage scheme allowances. This will apply solely to grey/hybrid scheme allowances, giving companies the flexibility to choose nature-based solutions.

If Ofwat accept our proposals for PCD flexibility, and our proposal to include scrutiny of wider obligations through the WaterShare+ framework, we will be content not to include a specific Notified Item. Instead we would make a case at PR29 alongside other new obligations. We believe this flexibility will be more efficient and allow better response to stakeholder, customer, government and regulator changes. This does not reduce the incentive properties of the PCD framework, but will provide a more flexible and efficient application of the principles set out above, which Ofwat can scrutinise as part of PR29.

Bioresources

We welcome Ofwat's proposal to include a Bioresources Notified Item at PR24. We agree that no specific reference to IED is required. We think it should be amended, to clarify that the changes to Farming Rules for Water, that result in changes to licences, consents and authorisation to dispose of sludge to land. This would reflect the intention in section 3.4 of the draft determination Expenditure allowances document:

"We consider that a notified item is appropriate because spreading treated sewage sludge is the main outlet for bioresources operations, and the impact of changes could be material and new or changed legal requirements would not necessarily otherwise qualify for an interim determination because they might not apply directly to companies. We also acknowledge that bioresources activities might be affected by the Environmental Permitting Regulations (EPR) replacing the Sludge (Use in Agriculture) Regulations (SUiAR). These requirements are due to be defined within the Environment Agency's Sludge Strategy and its implementation date is yet to be confirmed. In the event of an interim determination, no account will be taken of any costs to the extent that they would have been, or would be, avoided by prudent management action"

We believe there is a separate uncertainty on bioresources Appropriate Measures "AM" that should be included as a "pay on delivery" PCD log up mechanism. The Environment Agency have confirmed to us that their permitting officers may apply AM for our sites that do not qualify for IED. Although the timing of these permits is not planned for AMP8, we have no guarantee that such permits will not be issued. We if this uncertainty remains as we currently have confirmed by the Environment Agency, this provides the same conditions of a change in permit as would apply to the sludge land disposal Notified Item in the draft determination.

One option therefore is to include a similar clause within the existing Notified Item, or as a separate standard Notified Item. However, we recognise these are different types of risk. It therefore may be more appropriate to better protect customers through an equivalent approach to a PCD. We have undertaken extensive cost estimation to identify the site level work that would be appropriate to meet an AM permit change with the Environment Agency. The total potential scale of these costs are up to £184m. Whilst these costs may change, we consider that a site level cap, with a trigger only if there is a permit change on site, and then 25% cost sharing also applied to lower costs below this cap level would better protect customer interests than a standard notified item, and would be consistent with the less uncertain IED site funding.

'Appropriate Measures' Uncertainty Mechanism

As part of our PR24 Bioresources Business Planning process we have undertaken a full review of the known and potential changes that would impact on the bioresources operation in AMP8 and beyond.

There is uncertainty related to the requirements and implications of the Environment Agency Biological Waste Treatment: Appropriate Measures for Permitted Facilities ('appropriate measures') legislation for sites that are not within the threshold of the Industrial Emissions Directive (IED).

SWB have 27 sludge treatment centres (STCs) across the region that operate on throughputs that are below the threshold stipulated by the Industrial Emissions Directive (IED). From discussions with the Environment Agency (EA) during our AMP8 planning, they have indicated that their direction of travel is to bring these standards into all sites over time but have no definitive timetable at this stage. We understand that this might be done on a phased basis through a review of current Waste Management Licences rather than a specific change in legislation.

SWBs bioresource asset base is an industrial outlier with the approach of a high number of low throughput sites and therefore 'appropriate measures' has a much greater impact on our business.

SWB have engaged our supply chain to support a more detailed assessment of the impacts of 'appropriate measures' on our asset base and the likely investment that would be required to enable the continued safe treatment and recycling of bioresources in compliance with the regulatory improvements, with enhanced environmental protection to land, water and air.

We have undertaken a detailed analysis of a subset of our bioresources asset base regarding the scope and cost of investment to meet the requirements of 'appropriate measures'. The subset is representative of the size, age and treatment technologies across the entire asset base, and we have used this detailed analysis to infer the 'appropriate measures' requirements across the full asset base.

For the detailed assessment of the subset of sites we utilised the findings from our recent asset condition, performance and management surveys, and then compared the existing assets and their performance to the new standards that will be required to meet the current understanding of the 'appropriate measures' requirements. Detailed line by line asset assessments have identified the scope of investment needed, in the following categories:

- New secondary containment
- Tank covering or replacement
- Improved site drainage systems
- New Impermeable surface areas
- New or improved odour control units
- Monitoring and Control
- Return Liquor sampling.

With our cost consultants, we have generated the totex costs of delivering these in line the overall SWB investment process utilised for the PR24 business plan. These costs include some regional (i.e. non-site specific) costs associated with the requirements (laboratory costs etc.) and these have been added pro-rata to the site costs based upon the annual throughput (TDS) of the site. The extrapolation process was based on the costs generated for particular technologies and throughput sizes and then applied across the asset base.

The following table shows the full list of sites and technologies and highlights the sites where we have conducted the detailed assessment and the sites with extrapolated costs. For anaerobic digestion and powdered lime sites, two sites of different sizes were used to help understand the relationship between cost and throughput/asset size. For dewatering and liquid lime sites, due to the relatively consistent site throughput, the extrapolation was based on a single site:

Table 10: Appropriate measures sites

Site	Treatment	Throughput tds/a	Survey cost (£)	Extrapolated cost (£m)
Hayle STC	Digestion	3382		£17,505,500
Countess Wear STC (AD)	Digestion	3160		£16,697,387
Nanstallon STC	Digestion	1707		£11,419,865
Marsh Mills STC	Digestion	1157	£9,417,625	£9,417,625
Lodge Hill STC	Digestion	389	£6,629,858	£6,629,858
Kilmington STC	Digestion	303		£6,316,789
Totnes STC	Digestion	264		£6,174,013
Lords Meadow STC	Digestion	240		£6,087,569
Radford STC	Liming (Liquid)	459		£3,071,052
Menagwins STC	Liming (Liquid)	1064		£3,302,031
Camels Head STC	Liming (Liquid)	605		£3,126,888
Falmouth STC	Liming (Liquid)	868		£3,227,129
Camborne STC	Liming (Liquid)	1426		£3,440,351
Par STC	Liming (Liquid)	955		£3,260,352
Newquay STC	Liming (Liquid)	1344	£3,408,873	£3,408,873
Launceston STC	Liming (Powder)	716	£6,625,532	£6,625,532
Cornborough STC	Liming (Powder)	797		£6,617,840
Countess Wear STC (QL)	Liming (Powder)	857		£6,612,087
Newham STC	Liming (Powder)	1197		£6,579,541
Tiverton STC	Liming (Powder)	1251		£6,574,402
Maer Lane STC	Liming (Powder)	2325	£6,625,532	£6,625,532
Ernesettle STC	Liming (Powder)	2585		£6,447,013
Ashford STC	Liming (Powder)	2717		£6,434,394
Buckland STC	Liming (Powder)	3928		£6,318,669
Central STC	Liming (Powder)	3997		£6,312,035
Brokenbury STC	Liming (Powder)	4873		£6,228,338
Bude STC	Raw Dewatering	120	£3,168,061	£3,168,061
Kingsbridge STC	Raw Dewatering	96		£3,158,951
Hill Barton STC	Raw Dewatering	286		£3,231,643
TOTAL				£183,865,616

The outcome of this gives the requirements and costs required for the full SWB bioresource asset base to be compliant with 'appropriate measures'. With a total CAPEX figure of **£184m** this is a significant sum and based on our understanding from the EA this would be most likely introduced in a phased approach.

Our proposed approach would be to have an uncertainty mechanism compartmentalised to individual sites which would provide for a capped cost should permitting be required, with a specific PCD linked ensuring that the throughput detailed has an 'Appropriate Measures' compliant permit. 25% cost sharing for actual expenditure below the allowance would protect customer interests for the individual sites.

Depending on Ofwat's overall view on our DD response, this would be included within our flexible PCD and new obligations WaterShare+ proposals

PFAS Notified Item

At PR24 we have an undertaking from the Drinking Water Inspectorate in relation to our PFAS strategy. This includes three works where sampling indicates that PFAS monitoring will continue. Further works may be added should sampling meet the relevant tiers identified by the DWI.

The undertaking includes:

"11. For all sources that fall into tier 3, design, develop and implement mitigation to reduce PFAS concentrations in drinking water to at least tier 1 concentrations, with a high priority.

Date: Ongoing for the duration of the undertaking

12. For all sources that fall into tier 2, companies should design a proactive and systematic risk reduction strategy implementing a prioritised mitigation methodology to progressively reduce PFAS concentrations in drinking water.

Date: Ongoing for the duration of the undertaking

13. For all sources that fall into tier 1, design a basic mitigation plan, which can be implemented should concentrations increase, or toxicological or other information change that requires mitigation be delivered.

Date: 31 March 2030"

It is therefore possible that a) the DWI will require scheme improvements during AMP8 for the three sites, at a cost of £34m; b) that further sites could emerge that would also require mitigation (which we believe should be outside of the scope of the Notified Item) or where actions under DWI obligation 11 above would be triggered, as these have a high priority rather than potentially being able to be mitigated sufficiently under PR29.

The DWI have also confirmed to us that any legislation and guidance changes that relate to PFAS would continue to be applied using their risk based approach to regulation, and would result in a change to the undertaking under section 18 of the Water Industry Act 1991. An enforcement order can be made if a water company does not comply with these undertakings.

Therefore, a standard Notified Item should apply to changes in the undertakings made by the DWI with respect to PFAS. Whilst we could rely on the standard licence Relevant Cause of Change approach, it is in customer interests to recognise that the existing undertaking identifies some sites that may trigger under clause 11, and these are not a specific change in obligation. Other sites and changes in legislation to amend the DWI tiers or thresholds would qualify, if material, as a change.

We therefore propose a standard Notified Item that a) covers additional expenditure, prudently incurred that result in changes to DWI undertakings in relation to high priority investment in the PR24 PFAS undertakings; and b) Changes in DWI legislation and guidance in relation to PFAS that result in high priority investment to reduce PFAS concentrations in drinking water during AMP8.

Given the nature of the investment and the likely timing, we would propose that any relevant adjustments because of the Notified Item are adjusted end of period at PR29.

In our case, we would include any PFAS adjustments as part of our proposed WaterShare+ approach.

Ofwat comment in QAA:

The company business plan did not clearly set out which mechanism proposals were bespoke for the purpose of this assessment. The notified item relating to statutory programmes lacks clear evidence that the uncertainty is material, although we can infer this. The relationship to statutory programmes can explain the risk being largely outside of prudent management control, although this is not specifically outlined. The proposal does not set out the notified item proposal trigger. The company's proposal for addressing uncertainty relating to statutory programmes contained insufficient information compared to our minimum expectations, even following the provision of a response to our queries. But these omissions have not had a material impact on our ability to carry out a determination as we are able to make our own judgements on bespoke uncertainty mechanism and notified items.

We do not include any bespoke notified items in our response to the DD. Our proposals are for standard Notified Items. The exception to this is bioresources alternative measures. Ofwat's comments in the QAA therefore do not apply – we do not propose a notified trigger as we proposed to wrap PCDs and notified items into end of period log up, scrutinised through the WaterShare+ framework as described below.

WaterShare+

In our business plan we recognised that the package of financial levers and uncertainty mechanisms could be more extensive than at previous price reviews, including (at that time) 18 different Price Control Deliverables. At PR14 the original WaterShare framework included a scorecard that set out how performance was shared between cost base, delivering outcomes, and other factors such as legislative changes.

Considering the draft determination, we believe there is still a clear role for our WaterShare+ proposals to achieve the benefit of:

- Customer and WaterShare+ customer advisory panel scrutiny of our performance
- Avoiding unwanted consequences of regulatory mechanisms, either because of bill impacts arising from individual mechanisms, without the opportunity to agree offsetting measures
- Greater flexibility for changes of programme between customers, stakeholders, regulators and the company, without undermining Ofwat's comparative based approach to economic regulation. Local changes can be agreed locally, with the company making a case for a net adjustment, if appropriate after agreed local fairness measures
- There is also the opportunity to agree the value associated with such adjustments, and the role of equity. This can be seen through the recent WaterShare+ benefits that have arisen as part of the mergers with Bristol and SES Water.

We therefore propose:

The WaterShare+ approach focused on the key industry concern at PR19 of financing outperformance, and shared the benefits of this with customers, with the unique choice between a bill reduction or a stake and a say in the business. We plan to maintain this element of our plan.

As at PR19, the movements in the net interest rates against the cost of new debt is within the PR24 regulatory framework, and therefore no sharing through WaterShare+ is required. We have considered again based on the regulatory mechanisms likely to be in place whether there are any new opportunities to ensure any additional net benefits, particularly from macro-economic changes, are fairly shared with customers.

The historical outperformance on the new debt allowance at PR04 and PR09 has already been shared. We will continue to review the net financing outperformance relating to embedded debt raised in previous regulatory periods. The amount that we may be able to share will inevitably depend on the assumptions on the cost of embedded debt and its refinancing at PR24. We will maintain the principle of sharing 100% of market 'unearned' gains with customers whilst still preserving the incentives for management to efficiently raise finance and investors to appropriately bear risk in this area, and forecast a return that would be consistent with returns to 2020.

Although financing outperformance sharing may not be possible, we may have merger savings from integrating Bristol Water and a fixed amount in the merger undertakings for SES Water).

We will continue with the option enabling customers to own a true equity stake and say in our business, a unique mechanism. In the South West area c.1 in 14 customers have taken up this option, and we are looking to increase this to 1 in 10 over the next 5 years. This is a challenging objective, because we are not allowed promote the option in the same way we would promote service offerings or water efficiency.

We will continue to apply our wider approach to truing up risks embedded in our WaterShare mechanism, to ensure that customers do not pay for uncertainty and risk in base prices ahead of a risk manifesting.

It is important that we have transparency on the potential impact of cost and uncertainty mechanisms, alongside our wider performance. Therefore, we intend to continue with the WaterShare+ Customer Advisory Panel that has scrutinised the development of our PR24 plan, and who already act as independent conveners of the WaterShare+ quarterly public meetings to scrutinise:

- Performance delivery (ODIs, customer experience measures and WaterShare+ share take-up)
- Customer measures of experience (e.g. C-MeX)
- The impact of accelerated and delayed investment, equivalent to Price Control Deliverables. Price Control Deliverable rules would apply as Ofwat have designed, but additional flexibility and the application of caps would be applied across all PCDs, subject to a case being made at PR29, and subject to the support of stakeholders and the Customer Advisory Panel
- The potential delivery and financial impact of cost delivery and cost sharing
- Other factors - the potential impact of the uncertainty mechanisms. This would be the specific notified items we set out in our DD response
- The benefit to customer bills from the financial lever choices we set out as part of our plan.

This proposal can only operated based on a fair balance of risk and return. The potential for shareholders to commit to the sharing of regulatory incentives, and the potential for further investment financing choices require:

- The notional financing equity / RCV run off issues we identify with the PR24 draft determination

Performance against each of these areas will be summarised as follows:

Table 11: Illustrative WaterShare+ framework

WaterShare+	Total	Customer	Shareholder	Impact on Return on Regulated Equity compared to PR24
Performance	Cumulative £m	Cumulative £m	Cumulative £m	Cumulative %
Outcome performance (net – sum of each metric)	Net ODI total	Outperformance total	Underperformance total	+/-x%
Customer measures of experience performance	Net customer measures of experience performance	Outperformance total	Underperformance total	+/-x%
Cost performance	Total expenditure variance	Customer share	Company share	+/-x%
Other factors (Price Control Deliverables)	Net total movement	Early / additional delivery	Late /reduced delivery	+/-x%
Other factors (new obligations and uncertainty mechanisms)	Total net impact	Customer share of changed requirements	Company share of changed requirements	+/-x%
Impact of financial lever choices at PR24	The reduced bill from the totex reconciliation mechanisms recovered through RCV and the impact of additional efficiency assumptions made in this plan	-£m	-£m	
Total	£m	£m	£m	+/- x%
Share				
Net costs carried forward	-£m	-£m	-£m	
WaterShare+ mechanism	>£20m	>£20m		
Bristol Water / SES merger benefit				
Amount already shared	(£m)	(£m)		
Total	£m	£m	£m	

WaterShare+ illustrative example of sharing mechanism

2027/28			
	TOTAL	CUSTOMER	SHAREHOLDER
WaterShare+			
PERFORMANCE	Cum. £m	Cum. £m	Cum. £m
Delivering outcomes	10	3	7
Cost efficiency	10	5	5
Other factors	(10)	(4)	(6)
Impact of financial lever choices at PR24	(5)	0	(5)
Total	5	4	1
SHARE			
<i>Net costs carried forward</i>	(10)	(4)	(6)
<i>WaterShare+ Bristol Water merger and other benefits</i>	20	20	
<i>Amount already shared</i>	(10)	(10)	
Total	0	6	(6)
Return on Regulated Equity			8.1%

This retains WaterShare+ and allows for the timing of the value of the bill reduction/share offer to also consider the net position on regulatory mechanisms. The transparency on outcome, output, cost performance and uncertainty mechanisms will form part of the discussions at the WaterShare+ public meetings. Describing what we are doing about performance and delivery, including affordability measures such as Progressive Charges, link to the trigger points we have identified in our Long Term Delivery Strategy. We will use the feedback from the public meetings and the scrutiny of the WaterShare+ Customer Advisory Panel to inform any use of the uncertainty mechanisms we propose.

This framework makes it clear whether or not that the uncertainty mechanisms, if they are used, are more than the reduction to the customer bill that has arisen from the efficiency assumptions (e.g. where we have not asked customers to pay for elements of our plan we will have to innovate to deliver, or incur increased costs) and the financial lever adjustments that go outside of the PR24 methodology.

Supporting financial resilience

Revenue Building blocks

Our plan

In our plan we set out an opening RCV and how this grew 4.5% p.a. in real terms because of our enhancement investment programme. On wholesale expenditure we set out our efficient cost, and the view that 0.5% of frontier shift on base cost, but no labour real price effects inflation was included in our plan.

On PAYG rates, we maintained intergenerational equity using a PAYG rate of 40.3% (down from 57.4% at PR19) that, as historically, includes both opex and infrastructure maintenance expenditure. Our infrastructure maintenance expenditure projections are aligned to AMP7 outcomes, and therefore we believe this provide sufficient evidence that this should continue to be included.

We set out RCV run off rates to reflect capital maintenance needs of our assets, ensuring that the costs are distributed fairly between the current and the future customers. The water service rate is 4.4%, wastewater 4.9% and bioresources 4.8%, based on the future profile of investment and depreciation. This is a reduction on the weighted 5.0% from PR19.

We have not adjusted RCV run off rates or PAYG rates for financeability purposes.

Both wholesale base and retail costs were expected to be efficient. For retail costs, we applied a 1% net margin on wholesale costs.

We confirmed that our financial ratios continue to be consistent with a strong investment grade rating of at least Baa1. We expect to comfortably maintain financial ratios at a level required for at least Baa1 rating, both on notional and actual company basis.

We confirm that we will obtain two credit ratings for the purpose of licence condition compliance by the 1 April 2025, consistent with the requirements of our licence. Gearing is forecast to be below the 61.7% 2022/23 actual at 61.1% at the start of AMP8 before increasing to 64.6% at the end with the increase in the capital programme. Our planning target for gearing was a range <65%, but potential scope to c67-70%, Adjusted cash interest cover (Ofwat measure) of >1.5x, and FFO/net debt >10%.

We planned to refinance c.60% of existing debt between 2025 and 2030, which is above our notional assumption of 34%. The plan did not require equity injection in order to maintain gearing at 55%, as the plan had only included a 2% minimum dividend yield, and we did not want customers to pay for the cost of raising new equity through water bills, which would be inconsistent with our innovative WaterShare+ customer share ownership proposition.

We asked Ofwat as a package of risk and return assumptions to include PR19 totex reconciliations in the opening AMP8 RCV, rather than as an element in revenues, which reduced bills for customers as it meant they would pay for this additional investment over the life of the asset it supported. The additional expenditure had included areas such as water resources and leakage, given the experience of the 2022 drought conditions, and additional investment on WaterFit to reduce storm overflows and pollution impacts in response to stakeholder and local community concerns.

The draft determination

The DD reduced enhancement expenditure by c£0.4m from our plan proposals, which also had the impact of increasing PAYG rates to c42%.

Ofwat accepted the basis of both our PAYG “natural” rate and the RCV run off rate in its QAA assessment. However the RCV run off rates were then reduced, on the basis of notional financing headroom (but on a company specific basis). This particularly impacts South West Water due to its high RCV per customer. This novel approach then triggers the need for c£189m of equity investment, at a cost of £3.8m to customers.

Ofwat included our proposal on PR19 totex reconciliations in our DD, and are consulting with other companies on whether they wish to adopt an equivalent proposal.

Our response

We set out our response to the financial resilience components below. The main focus on financial building blocks is the novel RCV run off approach Ofwat took in the DD. The other elements of financial levers are not contentious and link to our representations in other areas.

RCV run off

We describe below our assessment of what Ofwat did in the draft determination and why it should be reversed for the final determination. It is very concerning that this novel approach could be included in the draft determination without prior consultation. We believe it is a fundamental shift in economic regulation. It moves away from the principle that RCV run-off should reflect an allowance for capital charges and maintenance. Whilst it has been used for actual company financeability in the past where there has been lumpy capital maintenance expenditure affecting actual financial ratios, this was not part of the PR24 regulatory framework and was a policy we supported.

Our challenge is the reduction in RCV run off rates in the DD contradicts the whole premise of the lower notional gearing at 55% - this is a fictional company based on the draft determination that has a 4.8% cost of equity (rather than a 2% dividend yield), and is not having to raise equity therefore to finance an investment programme, let alone the cost of equity within the draft determination.

We supported the assumption on notional gearing at 55%, because we agreed for the need to retain equity and revenues for financial headroom. To remove the benefit of this means higher notional gearing should be assumed, at which point the financial ratios are insufficient for Baa1, a higher dividend yield of 4% rather than 2% becomes justified, and accelerated RCV run off may be required as a financeability solution. We recognise that Ofwat would disagree with this argument – that is the point of consistency we are making of why we disagree that RCV run off can be reduced due to positive notional company financing.

Ofwat state in section 2.2 of the Aligning risk and return appendix that some companies considered the link between notional gearing and the balance of risk, and this should be priced in through beta. Clearly though removing revenues from the notional company based on the balance of risk does increase the beta, particularly if accompanied by an assumption of equity raise for having done so.

Ofwat show on table 3 of the Aligning risk and return appendix that there is a scale of RCV increase from reconciliation adjustments, in support of notional gearing reducing from 60% to 55%. What is not mentioned is that this analysis does not consider reconciliation adjustment with our expenditure above PR19 allowances, which given a maximum of 50% of this cost being reflected in the RCV or PAYG rates, means gearing will have increased above the notional starting point for this additional expenditure. The other 50%+ has to be found from equity, before gearing can be considered to reduce to 55%, which also requires new equity. We only explore this because of the RCV run off lever use, not the principle of lower gearing at 55% as a notional assumption.

Ofwat are clear in section 4.2.4 of the Aligning risk and return appendix that the intervention on South West Water RCV run off rates is not for the reason of insufficient or unconvincing evidence of what these should be, such as insufficient evidence on asset lives and capital maintenance. As this is a firm DD conclusion we assume that Ofwat will not revisit it and therefore we only focus on the implementation as a financial lever to reduce customer bills.

Ofwat make a company specific adjustment based on notional ratios. This takes the appointed company away from a notional company, which at 55% gearing and 4.8% dividend yield therefore bears no relationship to the actual companies, because of the reduction in RCV run off rates. This is done just to reduce customer bills – this is something Ofwat has always been clear has never drive its financing (and cost allowance) framework. Yet the draft determination for the first time suggests this is the objective, but based on notional company financing.

The CMA at PR19 considered and supported the concept for Bristol Water that the notional company must be a relevant notional company to the appointee. This includes its fundamental characteristics (outside of management control). There can be a case for making adjustments to the notional company where there are short term financeability issues, but not where there are fundamental issues with regulatory incentives, or the construction of the notional company.

In our plan we supported the use of 55% gearing, and to avoid “aiming up” the WACC, but this required calibrated incentives. It also requires a relevant notional company. We set out the summary of the arguments of what we believe is a fundamental error in the draft determination. In our view, and in the view of investors and analysts who have questioned how revenues in the DD could decrease so much for an efficient company with increased base cost allowances and PAYG/RCV run off rates accepted, and a higher WACC:

- Ofwat increased the WACC / cost of equity by “aiming up”, rather than fully adjusting the parameters” – a mid point of 4.8% in the range 4.19% to 4.88%
- The PR24 notional company is not aligned with actual industry gearing, with a 55% assumption. This increases the WACC but not as much as it should, because Ofwat has retained the approach in the UKRN guidance that suggests the Total Market Return (TMR) for equities is fixed, and does not vary with interest rates
- Regulators reduced TMR when interest rates were falling, and this now makes the marginal cost of equity and debt too similar. Ofwat said they wouldn’t aim up in the PR24 methodology – the UKRN guidance / CMA PR19 agree this should only be where the notional company isn’t a relevant comparator to the actual, or where the regulatory incentives framework isn’t balanced and this (exceptionally) can’t be fixed. The CMA chose to do this as well as fixing the incentives misalignment for Bristol Water, because of the asymmetry in returns that meant that investors could not be expected to earn the allowed cost of equity. We need equity retention and to attract new equity for the long term
- We set out some aspects of the cost of equity that Ofwat could fix as parameters, and note in annex B that this aligns with market expectations, increasing directly because of regulatory risk in the DD including the RCV run off adjustment
- The notional and actual financial headroom is needed for the incentives framework, which we also fundamentally disagree reflects a fair balance of risk and return, both PCDs and outcomes, based on the PR24 draft determination
- Specifically on RCV run off rates, Ofwat accepted the SBB RCV run off rates in the QAA assessment.
- Ofwat tested companies notional financeability. If it looked healthy with the CoE uplift, (based on this notional company with low debt, which it should be with low gearing, a 4.8% cost of equity and only paying 2% in dividends), then on the basis of “intergenerational equity” / customer bills, Ofwat lowered RCV run off rates. We consider this to be unprecedented and is a novel to regulation that in any context should be questioned, but the context of the water sector and its investment and performance risks is misaligned to customer and investor needs
- For some companies, if notional financeability was too low, Ofwat increased RCV run off rates. The PR24 methodology suggested this would not happen
- The rationale for moving to lower gearing of 55% was to increase financial resilience for the large enhancement programme (as this will continue out to 2050. To then reduce financeability / customer bills with RCV run off rates now, which then makes financial resilience challenges and customer bill increases bigger in future AMPs is impossible for us to explain to investors. This is before you consider new obligations emerging for AMP8 and beyond, such as the challenges of PFAS.
- Because Ofwat wanted to keep notional gearing at 55% - 57.5%, its model assumes an equity injection to fund RCV growth, retaining the minimum 2% dividend yield. A 2% allowance is included in revenue (SWB £189m = £3.8m)
- So effectively Ofwat are asking investors to provide new equity for the higher cost of equity market rates suggests is the minimum they require. And this additional equity then restores the excess notional financial ratio headroom Ofwat used to justify the RCV run off rate cut. And customers pay higher bills for the cost of raising this notional equity.

- In the meantime, Ofwat are making the notional company irrelevant to the actual company. The actual company, without sufficient revenues for the investment programme, ends up with increased gearing. The actual companies thus move ever more away from the notional. They also get hit with dividend restrictions where this postponing of allowed revenues increases gearing above 70% (including potentially a reduction in the RCV). And investors' confidence in the water sector and in the strength of the UK economic regulation model is undermined
- Overall RCV run off rates are similar to those at PR19. They are based on depreciation run off and the life of post 2020 assets. Bioresources is lower at 6.18% due to life expired assets being replaced by enhancement investment. The water network plus is above the Ofwat methodology upper limit of 4.5% - the limit is arbitrary, and some are rates are below and others marginally above this rate. We prefer to take a consistent methodology to calculation from our asset registers.

Table 11: RCV run-off rates

RCV run-off rates Pre/post 2025	DD	Plan & DD response 2025-2030	DD response 2025-30	PR19
Water resources	2.45%/3.07%	2.73%/3.41%	2.86%	2.64%
Water network plus	4.20%/3.12%	4.67%/3.47%	4.48%	4.69%
Wastewater	4.55%/3.46%	5.07%/3.84%	4.78%	5.12%
Bioresources	7.09%/3.64%	7.90%/4.04%	6.18%	8.54%
BRL Water resources	2.32%/2.91%	2.58%/3.19%	2.62%	2.37%
BRL: Water network plus	4.89%/3.47%	5.45%/3.86%	5.04%	5.47%

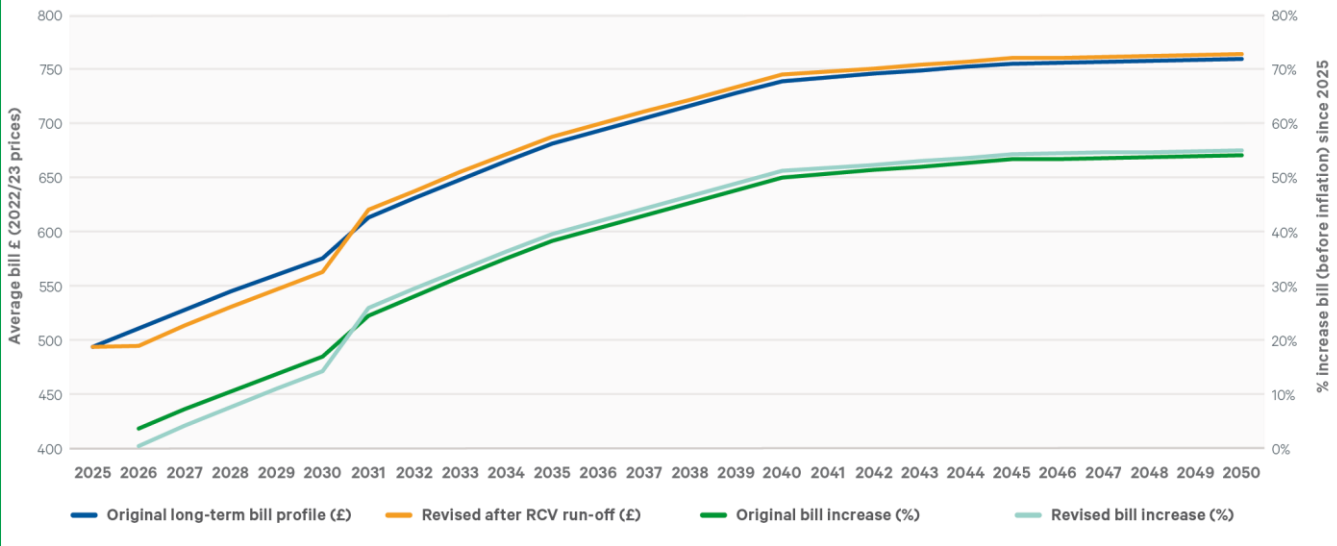
We illustrate the impact on intergenerational equity below. With the lower RCV run off rate revenues reduce by c£120m and bills by c£13 in 2030. However, there is a bigger step change up in bill from 2030 and until the RCV is run off by 2050 based on the revised profile. Customers ultimately pay c£60m in total more over 2025-50.

This is based on the DD WACC – if the investability or financeability is damaged because of the deferral of revenues and this increases the cost of debt or equity, this would be an additional cost on top of the long term bill profile shown above.

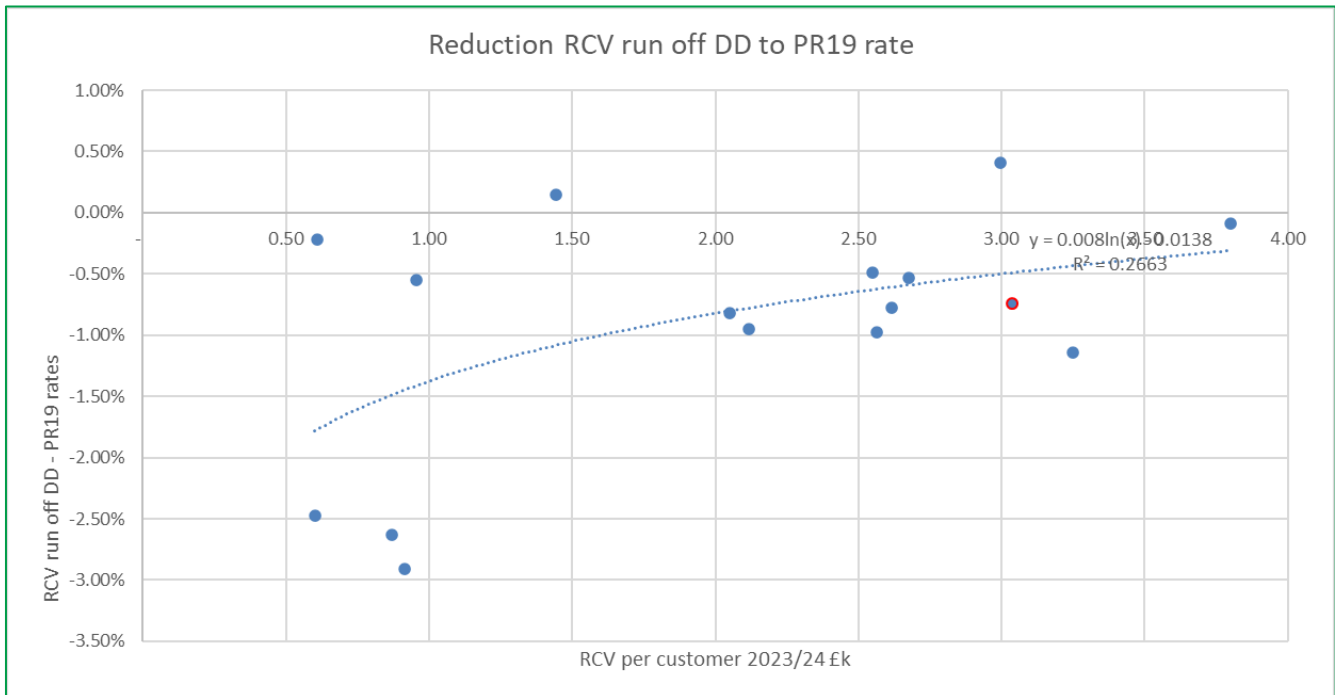
This uses the DD WACC, adjusts the run-off over the remaining life of the asset. The total net cost to customers is £60m - £56m additional return, plus £4m cost of the £200m equity raise the reprofiling triggers. This is the whole of the DD difference to our plan – the WACC increase more than offset by the RCV run off reduction.

DD blue line is 13% bill increase by 2030, Green plan line is 17% bill increase by 2030.

Impact of RCV run-off change on long-term bill profile



We also observe there is a correlation between the reduction in RCV run off rates in the DD vs PR19. For those with a higher RCV per customer there is a disproportionately large impact in terms of revenue and therefore actual company financeability (red dot is SBB). There is also a group of companies with low RCV per customer who are also adversely affected. Returning the SBB run off rate at 4.58% would be 0.31% lower than at PR19, which would be in line with typical RCV per customer intensity / RCV run off reduction from PR19.



Ofwat show in the DD a revenue impact of £109m (2.7% of allowed revenue). However, the impact of RCV run off compared to our plan is larger than this at c £126m once PR19 reconciliation recovery is taken into account. Given we calculate a £60m cost to customers over 25 years and the evidence that this is not in customers interests (before we consider the impact on the cost of capital from loss in confidence in the regulatory framework). The total gap on RCV run off to our plan is £150m (2022/23 prices) including the impact of enhancement expenditure representations.

We note with interest Ofwat’s comments in the Aligning Risk and return: Allowed return index (page 9): “We retain the notional gearing level of 55% stated in our ‘early view’. We consider there is a stronger role for equity in the notional capital structure than used in our recent determinations. A higher equity buffer than applied at PR19 will support investment and help ensure the notional capital structure is resilient to the challenges placed on the sector. It will also support resilience in the context of the revenue that is at risk as a result of service performance.”

We agree – although we would note that the equity buffer and revenue need to be allowed in the determination for this statement to carry weight.

PAYG

The PAYG rates for SWB and BRL are shown below. No adjustments have been made to the PAYG rates, reflecting this is natural rate, only covering opex costs and ongoing infrastructure maintenance as historically done.

The only rate that is higher than PR19 is BRL Water resources, which included resilience enhancement investment which is not repeated at PR24. The other PAYG rates are lower by 10 – 35% depending on the scale and nature of the enhancement investment programme. The degree of enhancement and non-infrastructure maintenance investment also impacts the annual profile. Raw water transfers enhancement reduce water resources at the end of AMP8, and bioresources investment is higher at the start of AMP8, based on the statutory programme requirements.

Table 12: PAYG rates

PAYG rates	Plan 2025-30	DD	DD response	PR19
Water resources	43.6%	52.8%	47.6%	78.3%
Water network plus	46.9%	53.7%	52.3%	58.8%
Wastewater	27.3%	27.2%	28.7%	51.9%
Bioresources	53.1%	53.4%	56.0%	75.7%
BRL Water resources	82.3%	84.0%	82.8%	79.5%
BRL Water network plus	49.1%	54.6%	49.3%	74.0%

Tax

Our tax strategy reflects the Pennon Group tax strategy. That means we:

- At all times consider the business’s corporate and social responsibility in relation to its tax affairs
- Operate appropriate tax risk governance processes to ensure that the policies are applied
- Comply with our legal requirements, file all appropriate return on time and make all tax payments by the due date
- Consider all taxes as part of ongoing business decisions
- Not enter into any artificial tax arrangements or take an aggressive stance in the interpretation of tax legislation
- Engage with HMRC in a proactive and transparent way and discuss our interpretation of tax laws in real-time, such interpretations following both the letter and spirit of the laws
- Not have any connections with tax havens unless it is necessary for the purposes of trading within those jurisdictions.

We have assumed a corporation tax rate at the current rate of 25% throughout the period. The allocation to tax pools is based on an analysis on the capital plan. The allocation to different tax pools is broadly stable over time.

Retail cost and margins

We adopt Ofwat's DD assumption of 1.2% retail margin for our response.

Financeability and investability

Our plan

We set out in our plan that our actual company was financeable based on our business plan. We tested this against a plausible range of downside scenarios.

The draft determination

Our Board assurance on financeability was accepted as part of the QAA assessment. We have therefore not analysed our actual company financeability. Our concerns in this section therefore focus on the impact of the DD on the financeability on the notional company. South West Water specific examples are included in that context and should not be taken as a statement on the actual company financing position.

Our response

We believe that Ofwat should have been consistent in supporting financeability and investability in the draft determination, and recognised that greater financial ratio headroom is needed for the FD due to the risks facing the sector. As we set out below this is self-fulfilling. The failure to take a balanced view of risk in the draft determination drives rating agencies to require greater actual company financial ratio headroom. This continuous the vicious circle of sector underperformance on cost and investment that increases risk – the sector risks being set up to fail and a regulatory reset is required.

We remain financially resilient, but it is clear that the reduction in revenues in the DD affect this significantly, and Ofwat have made an error in reducing notional financing headroom and removing the revenues from the higher WACC.

We note Moody and Fitch recent comments on the water sector, which includes specific comments that relate to the impact that the DD has on South West Water. There is a particular impact because of the high relative RCV per customer and the impact on actual financing and gearing of the reduction in revenues from the RCV run off. The imbalance in RoRE is also a specific factor that Ofwat's notional framework does not address – we cover in the ODI RoRE section above that the DD assumes a net 0.1% skew in outcome incentives across the industry, but this is 0.5% higher for South West Water – this affects the ratings and current cost of debt.

Moody's (14 August 2024) states clearly *“the draft determinations create a less supportive framework for the water companies and constrain their ability to earn the allowed return. The regulatory regime's stability and supportiveness, as well as companies' ability to earn a fair return, are key factors under our rating methodology for regulated water utilities. If the draft framework is confirmed at FD, business risk would increase for the sector and we would consider revising our score for either or both of these factors when assessing companies' credit quality. Against this background, companies would need to strengthen their credit ratios to maintain their current credit quality”*.

Similar statements were made at PR19, including an increase in the financial ratios required for Baa1 from 1.4x to 1.5x, other than where the CMA reversed the regulatory regime elements that caused this deterioration in the quality of the regulatory regime.

An illustration of the potential impact on financeability of the incentives framework can be seen through the sensitivity of AICR to potential cost shocks. For a company the size of South West Water 0.2x AICR equates c£20m p.a. revenues, ODI penalties or cost shocks. A 1.6% RoRE downside equates to c£40m p.a. The reduction in RCV run off is the equivalent of 0.25x actual AICR and 2% increase in gearing. Therefore, the financeability requires the criteria we set in the section above for the cost of equity to hold true. Whilst we agree with Ofwat's overall approach to financeability calculations in the DD, this still requires a properly calibrated incentives framework.

Financeability assessment

Ofwat set out the results of their stress testing of the draft determination in Table 9 of aligning risk and return. This is based on the notional financing headroom to maintain investment grade credit ratings. This shows c£350m of operating expenditure risk (effectively between AICR of 1.7x and 1.0x). However as Ofwat are now targeting dividend restrictions and cash lock up at Baa2- rather than Baa3-, the threshold for financeability assessment now must be set at Baa2. This is currently c1.3x but could rise to 1.4x or 1.5x because of Moody's potential downgrade of the water regulatory framework. This reduces the headroom to c£150m - £200m. With a dividend yield of 2% we use £200m. To restore £350m, Ofwat need to reverse the reduction in RCV run off to maintain financeability.

We note that South West Water now has an issuer credit rating from both Moody's and Fitch and therefore the licence dispensation due to expire on 31 March 2025 no longer applies.

Transparent and clear policies

Dividend Policy

Our Plan set out our dividend policy and we welcome Ofwat's recognition that our proposed dividend policy was in line with the licence conditions.

As a listed Group, taking a responsible, long term view is at the heart of the way we operate. We have demonstrated that over the past few years by reinvesting outperformance to invest in water resilience and the environment. We have also restricted dividends in the water company to ensure it remains financially secure and to ensure dividends are reflective of performance challenges.

We will continue to take a long term view to ensure we focus on being guardians of the long term health of the organisation as well as the customers and environment we serve.

We know that customers are as passionate as we are about ensuring we invest in our assets and continue to deliver improving services throughout our region. That is why our dividend policy ensures we link any payments both to the financial strength of the business as well as our performance against service for customers and the environment. As such, if we do not deliver on our performance commitments – whether that is in respect of environmental performance or when we deliver for the environment – this is taken into account in our dividend payments.

We have amended the wording of our policy to include customers and the environment, which previously was implicit rather than explicit. We also highlight that our approach focusses on the financial viability of the appointed business. Our approach to dividends will be aligned with Ofwat's Final Determination, with a yield reflective of the final position. Performance dividends will be paid annually in arrears, with a true up of performance on an ongoing basis.

As such, and as previously stated, the outturn dividend yield can be greater or less than the base dividend and depends on the following:

- Whether the company has delivered in the round on its commitments to customers and the environment
- The level of out and underperformance against the regulatory allowances including ODIs, totex and financing
- Whether obligations to pension schemes have been met
- The level of financial resilience to ensure the long term viability of the appointed business. Based on the factors already considered within the financial viability testing.

Taking these factors into account should ensure both that returns to shareholders are directly linked to service delivery and environmental performance; whilst the financial resilience of the appointed business – allowing it to service and fund the needs of customers, stakeholders and both past and present employees - is at the core of our approach.

Executive Pay Policy

Executive Pay Overview

Our executive remuneration strategy has always aimed to be transparent, aligned with the delivery of our business plan with stretching goals to deliver for customers, communities and the environment, and to encourage long term stewardship. Our values are reflected in the decisions we make, with best practise features of malus and clawback included, as well as a performance assessment framework to over-ride formulaic outcomes and to show we are listening. That is why for the last two years running, in recognition of the current external environment, no annual bonus was paid to the CEO. This compares to the rest of the sector, where c80% of CEOs received bonuses and 6 companies applied downward discretion to reduce bonus outturns.

Furthermore, over the course of the year, we engaged with Ofwat and wider stakeholders to understand how best to evolve our remuneration policy, including the long-term incentive arrangements. Following feedback and guidance from Ofwat, we have taken steps to ensure that bonus outcomes will not be funded by customers and opted not to introduce the Restricted Stock Model and thereby removing the feature that did not meet's Ofwat's minimum expectation. The expected approach for long term incentives will therefore remain in line with our current construct, with focus on performance against RORE (50%), environmental impact and customer measures (50%).

We will continue to reflect and evolve arrangements in line with best practice, and Ofwat's Board leadership, transparency and governance principles, and will continue to share remuneration outturns with the Watershare + advisory panel ensuring our customers have a stake and a say in approach. We will also plan to evolve the annual bonus arrangements for all employees in South West Water to the same four priority areas of our plan and in ensuring everyone is focused on delivering for customers and communities. Finally, we will continue to offer employees HMRC approved share schemes to enable them to become shareholders in our company and to have a stake and a say in the company and building alignment with our approach to customer engagement through WaterShare+.

South West Water Executive Pay Principles

- ✓ Simple and transparent – clear for all stakeholders to understand
- ✓ Aligned with strategy, delivering our business plan – clear alignment with stretching goals, and delivering for customers, communities and the environment
- ✓ Long-term stewardship – encourage management to have long-term mindset and act as long-term custodians
- ✓ Agile – able to respond to evolving priorities of the business, customers and the regulator
- ✓ Overall performance – scope to consider overall performance and apply judgement where necessary
- ✓ Safeguards against payments for failure – appropriate use of underpins, and malus and clawback provisions
- ✓ Fairness – fair levels of pay commensurate with performance of business, and skills and experience of employees
- ✓ Aligned with best practice – reflects evolving trends for listed companies and corporate governance guidelines.

Policy Highlights FY25/26

- Expanding the remit of the independent customer WaterShare Customer Advisory Panel to have a say on the outcomes of the South West Water Executive Annual Bonuses
- Ensuring 70% of annual bonus arrangements for South West Water executives to ensure they are remunerated for tackling the biggest issues head on, and the four priority areas in our plan covering water quality and resilience, storm overflows and pollution, Net Zero and environmental gains, affordability and delivering for customers. 30% will remain on financials
 - Aligning the annual bonus arrangements for all employees in South West Water to the same four priority areas and in ensuring the whole organisation is aligned to delivering for customers and communities

- Encouraging more of our employees to become shareholders in our company and to have a stake and a say in the company through HMRC approved share schemes and building alignment with our approach to customer engagement through WaterShare+.

Pennon Group Arrangements

Executive Directors of Pennon Group who are also Executive Directors of South West Water Ltd have a portion of their remuneration funded by the Group's water businesses (70%) with 30% reflecting their responsibilities to the Group's other business interests. This ensures that customers do not fund activities that they don't directly benefit from.

As a FTSE-listed company, executive pay at Pennon is subject to a different governance regime to South West Water and other privately owned companies in the sector. Listed companies are also subject to a more comprehensive set of best practice guidance. The Remuneration Committee of Pennon had been minded to implement a restricted stock plan for Pennon executives, which would reduce their overall maximum incentive pay. In direct response to Ofwat feedback we have opted to not pursue the Restricted Stock Model. Therefore, shareholder approval for this change was not sought at the 2024 AGM.

The expected approach for long term incentives will therefore remain in line with our current construct, with focus on performance against RORE (50%), environmental impact and customer measures (50%). In line with previous commitments, incentives will continue to be funded at the Group level and will therefore not be funded by customers. In line with best practice, malus and clawback provisions would apply to all incentive arrangements operated for senior executives.

Overall governance

All schemes are approved and governed by the Remuneration Committee, using well established discretion frameworks, to consider the overall experience of stakeholders, customers, financial resilience, reputational issues and safety. In addition, Executive Directors are expected to comply with the Group's shareholding policy, to ensure alignment of personal and professional interests and reflects a significant personal investment in the long-term stewardship of the Group. The full Remuneration Policy and outcomes are disclosed within the Annual Report and Accounts and the Annual Performance Reports. As a listed company the operation of our pay arrangements is subject to annual approval by our shareholders, with shareholders additionally asked to approve the Remuneration Policy at least once every three years.

DPC

Major projects framework

We agree with Ofwat's categorisation of projects that are progressing through the RAPID gated process and have been identified as discrete projects above £200m, under DPC for the purpose of PR24.

The first Approved Revenue Direction payment anticipated to a Competitively Appointed Provider to deliver strategic water resource schemes under DPC is anticipated between 2030-2035. These three projects are jointly identified with Wessex Water - with Cheddar 2 Source and Transfer likely to proceed ahead of Poole Water Recycling and Transfer and Mendips Quarry.

We cover the detailed cost allowances and contingent allowances in our cost and efficiency representation document. We welcome the updated approach for "preparing for competitive delivery" and the £9m minimum allowance and 0.55% of the project's whole life cost. We welcome Ofwat's central overview via RAPID and the way this experience has been applied in supporting setting up these projects to succeed with the development cost funding.

We consider that Ofwat has taken a balanced view on contingent funding having considered the options set out in the Major Projects development and delivery document.

We agree with 40:40 cost sharing rates on baseline and 25:25 on contingent funding. We will consider the portfolio approach to our three joint projects, and ultimately this will link to whether a joint or lead company approach is taken to these projects, which we do not need to conclude on currently.

We are comfortable with the proposed incentives framework. We welcome the proposal for a 4% success fee of the whole life project total expenditure. We see the success fee as providing a “pay on delivery” allowance for potential financing and commercial costs not within the scope of development funding, and allowing flexibility without the need for Ofwat scrutiny for what are costs of commercial negotiation.

We note Ofwat’s comments on our DPC assessment in the QAA. We agree with the conclusion that only the SRO projects are potentially suitable for DPC designation at PR24.

DPC Notified item

We assume in our plan that the eventual construction of Cheddar 2 Reservoir or other SRO schemes will be undertaken through DPC and therefore our plan expenditure does not include the AMP8 construction costs which will, under DPC, form part of the potential Allowed Revenue Direction (ARD) payments to the competitive appointed provider (CAP) that would commence when water is delivered from the asset, expected in 2033. We therefore assume that the standard licence condition that enables such ARD will be in place, or equivalent arrangements as identified through the RAPID gateway process. Should the construction expenditure in AMP8 ultimately not proceed through DPC arrangements then the standard Notified Item arrangements for such DPC projects are assumed to apply.

Annexes

A: Cost of capital analysis

Context

The PR24 DD WACC estimate is being taken in a very different environment to the equivalent at PR19. In a conclusive end to the era of accommodative monetary policy, interest rates have increased materially, impacting various inputs into the estimation of the WACC. We welcome that Ofwat has considered some of the changes to the environment since we submitted our plan. Updated market evidence has been recognised. Further risk protections have been included in the regulatory framework, such as the aggregate sharing mechanism proposal. Ofwat recognised the scale of investment and parameter uncertainty in “aiming up” in the cost of equity.

Whilst we welcome this updated approach, we do not think the DD as a whole improves investability in the water sector. The DD as a whole included a number of measures we focus in throughout our response which do not meet market expectations, and appear inconsistent with the Finance Duty. The reduction in RCV run off rates specifically to reduce bills, the complexity of the PCD framework and the scale of ODI risk are key areas. The former was not signalled in the PR24 methodology, and the latter two were covered extensively with specific proposals in our original risk and return plan.

It is not just water networks which have growing capital requirements. Infrastructure investors have many competing opportunities (projects, companies and geographies) for deploying capital. This is driven by countries all over the world seeking rapid progress towards a decarbonised future—enabled, in many instances, by infrastructure investments. The financing costs faced by the water sector will reflect the competition for capital from other investment opportunities in these market conditions.

A key conclusion of our evidence continues to be that equity returns relative to debt is insufficient. Unless Ofwat acts on this, this would represent a key financing challenge for the AMP8 period and onwards, as the required financing would not be in place to drive sector-wide investment plans. We present some simple changes within Ofwat’s DD analysis which can rectify this.

Beyond making the methodological changes we have identified, it would also be appropriate for Ofwat to update its estimation, to a more recent cut-off ahead of the DD publication. We provide an updated cost of capital based on July 2024 market data, before considering 2023/24 APR data. We welcome Ofwat’s intention to reflect September market data in the Final Determination.

How we developed our plans

Our approach

In developing our plans, we considered carefully the lessons we have learned from the PR19 process and AMP7 price control. In view of the step change in sector-wide investment plans, we consider the balance of risk and return facing the company, investors, and customers to be the ‘golden thread’ of the upcoming AMP8 period.

Specifically, we believe the balance of risk and return to be the key perspective ahead of the various components of the price control—as such, improvements to the regulatory design should first be made at source, rather than by adjusting or ‘aiming up’ select parameters, including the WACC.

Our decision in the BPs to adopt Ofwat’s PR24 FM WACC for our modelling is consistent with this. However, we have developed evidence to show that methodological changes to Ofwat’s estimation approach are necessary. This evidence overall concludes that the CoE under the PR24 FM WACC is set too low, without sufficient headroom over the CoD.

We continue to consider risk and return as a package—including our use of financing levers that balanced bills, cost risk, outcome risk, uncertainty mechanisms and investment. We have considered this carefully in the bill profile we present in the DD response.

The cost of capital with the financial levers will be an important part of our decision making framework. Ofwat has not asked us to comment on financial resilience in the DD response. We remain comfortable that we will remain financially resilient with a properly calibrated incentives framework. Ofwat will have noted Moody's and Fitch comments on the DD. We believe confidence in the regulatory framework can be resolved through the proposals we make elsewhere in this response, in particular on RCV run off. Ofwat will note that the high RCV per customer for SBB means this had a particular impact. Moody's and Fitch current ratings for South West Water included a strong investment grade credit rating of Baa1/BBB+, but had a negative watch because of a) incentive framework risks, b) general negative view of the DD regulatory mechanisms and c) the removal of the financial headroom for RCV run off.

One way would be to increase the dividend yield from the 2% we assumed in our plan, so that it reflected the cost of equity and provided shareholders with greater dividend protection to cost risks. We could also reverse our use of financial levers to mitigate customer bills with PR19 totex additional expenditure reflected in partly in revenues than fully in the RCV. However, we do not think these measures are in customer interests. Instead reversing the RCV run off reductions in the DD and other elements of the DD methodology in order to maintain confidence in the regulatory framework and achieve the greater investability Ofwat state as an objective for PR24.

Changes since our business plan submission

It would be appropriate for Ofwat to update its WACC estimation to a more recent cut-off around the DD publication, in order to consider latest market indicators. Since our business plan submissions, we have worked with our advisors to estimate the WACC following both Ofwat's PR24 FM and to also consider methodological improvements which would lead to a more suitable WACC estimate.

It is quite clear that investor expectations on the cost of capital and CoE in particular have increased since our business plan submission.

- Market to Asset Ratios are close to or below 1 for the three listed water companies. Recent equity raises and market transactions have also indicated little or no RCV premium (as Ofwat recognise in the DD). Further deterioration in share prices in response to the DD provides some indication of the issues the sector now faces to restore investability
- The seriousness of these circumstances was summarised well in the recent publication from Barclays Equity Research (5 August 2024 – Breaking the Water Cycle – no longer so positive). This set out the view:
 - That MARs will show a discount to RCV valuation as a result of the determination
 - Equity market expectations are now for a 6.1% real cost of equity compared to the 4.8% in the DD
 - Baseline returns are too low, including an all-time low equity beta
 - The sector underperformed totex by 4.1% RoRE in 2023/24 2.1% across AMP7), ODIs by -1.2% RORE 2023/24 (-0.7% AMP7), partially offset by financing +2.1% RORE 2023/24 (1.9% AMP7).
- An additional concern to equity investors is the repeated pressure from Ofwat and the announcement of further changes to guidance and licences on dividends in the DD. This ultimately further increases the required return on investors, particularly if the revenues associated with the higher WACC are reprofiled to after AMP8 by amending RCV run off rates.
- If it increasingly becomes the case that companies will not be able to pay dividends even with a dividend policy that adjusts for the incentives impact of performance and the financial consequences outside of the regulatory framework such as fines, and they are financially resilient, the availability of investment because of the lack of confidence in the UK infrastructure regulation and the water sector regulation in particular will worsen still further. Such restrictions are inconsistent with CAPM and the historical beta values.

Overall summary

- Our bills and financial ratios in PR24 plan were based on bills and financial ratios driven by the Ofwat estimate based on data as at September 2022—a real appointee cost of capital of 3.29%, CoD of 2.6% and CoE of 4.14%
- We included a market rate update in our plan, which we only used for RoRE risk ranges, which adjusted for higher risk free rate, higher share of new to embedded debt and a higher cost of new debt—a WACC of 3.74%, CoD 3.07% and CoE 4.56%
- Our July 2023 estimate of 3.74% was very close to the DD estimate of 3.72% (CoD 2.84%, CoE 4.80%), albeit with a different split of cost of debt and equity. Our risk adjusted estimate of 3.97% also sits within the range of different component assumptions that Ofwat discuss in the DD. Ofwat “aim up” on the cost of equity choice with the range identified to reflect uncertainty in the parameters and also to reflect the need to attract and retain equity investors for the scale of uncertainty. Ofwat plan to update the cost of capital ahead of final determination

Overall, we think there is a case for a higher cost of capital than included in the draft determination. This will depend on the market rate evidence at the time. Our forward look suggests that an appointee WACC of c4% would be consistent with the market evidence. We use 3.72% in our DD response as Ofwat will be able to review the evidence nearer to the FD. The estimate of 4% is very similar to the 3.97% risk adjusted estimate we estimated in our business plan.

On the cost of equity, we note there are much higher estimates currently of the cost of equity investors may require given the regulatory framework. As Ofwat have “aimed up” for parameter uncertainty in the draft determination, we recognise that this provides some recognition of the range of potential outcomes of the component parts.

We believe there is a relatively narrow range for the cost of debt. There are two areas to consider:

- In the time available for the DD response, we have not updated estimates of the cost of embedded debt for 2023/24 APR data that is now available. Given the increase in cost of recent issuances in the water sector, we believe there is therefore a potential for an updated embedded cost of debt to be higher than in the DD. We have maintained as an upper estimate the forecast that Oxera helped us prepare for our original plan
- On the cost of new debt recent sector issuances have been higher than the benchmark iBoxx index. This includes our recent £400m ETM issuance at 6.375% nominal, compared to the c5.6% (3.51% including 0.15% issuance and liquidity allowance and 2% CPIH) in the DD. We would anticipate Ofwat reviewing the evidence ahead of the DD.

Since our plan:

- Risk free rates remain high – 1.6% in early July, but c2-2.5% based on the peaks over spring and early summer.
- There is more debate about whether the Total Market Return element for the CoE should stay fixed at a long term rate (as the UKRN guidance to regulators suggests) or should at least in part vary with the risk. Ofgem assumed 6.75% in their recent RIIO-3 sector specific guidance, compared to the 6.58% in the draft determination. A recent report from Frontier Economics (Additional Considerations for the PR24 Cost of Equity Allowed Return on Equity, April 2024) provides evidence and an approach to TMR that finds a relationship between Total Market Returns (TMR) and Index Linked Gilt (ILG) yields. This analysis suggested a TMR of c7.5% nominal. We think this provides an upper bound on TMR at PR24, but at this level would align more closely to investor expectations. At these higher levels we think this could duplicate the parameter uncertainty “aiming up” Ofwat reflect in the cost of capital.

Table A1.1: Revenue building blocks

CPIH – real	PR19 (Ofwat)	Ofwat PR24 methodology	Ofwat draft determination / our DD response	Our range	Our view of potential FD based on latest market data and evidence
Gearing	60%	55%	55%	55%	55%
Total market return	6.5%	6.00% – 6.92% (mid- point 6.46%)	6.29% – 6.87% (mid-point 6.58%)	6.45% - 7.45%	6.96%
Risk free rate	-1.39%	0.47%	1.43%	1.66% - 1.92%	1.92%
Notional equity beta	0.71	0.59 – 0.64	0.57 – 0.63	0.63 – 0.73	0.64
Return on equity	4.19%	3.67% – 4.60% (4.14% mid-point)	4.19% – 4.88% (4.80% mid- point)	4.77% - 5.97%	5.17%
Cost of embedded debt	2.42%	2.34%	2.46%	2.46% - 2.65%	2.65%
Cost of new debt	0.53%	3.28%	3.36%	3.58% - 3.85%	3.58%
New to embedded debt ratio	20%	17%	26%	26%	26%
Issuance and liquidity	0.1%	0.10%	0.15%	0.15%	0.15%
Return on debt	2.14%	2.60%	2.84%	2.90% – 3.11%	3.04%
Appointee WACC	2.96%	3.29%	3.72%	3.7% - 4.3%	4.00%
Retail margin deduction	0.04%	0.06%	0.06%		0.06%
Wholesale WACC	2.92%	3.23%	3.66%		3.94%

Cost of equity

We have updated the cut-off date of Ofwat’s analysis to 5 July 2024 in order to reflect the most recent market movements in our numbers.

Risk-free rate (RfR)

Table A1.2: Risk -free rate

RfR	Calculation	Ofwat DDs	Our estimate	Comments
BoE gilt yields, 20y, RPI-real	A	1.10%	1.24%	The Ofwat rate is a one-month average over March 2024, our estimate is spot as of the cut-off date.
RPI-CPIH wedge	B	0.34%	0.31%	Average of 20y ‘official forecast’ from OBR data and 20y inflation swaps.
RfR estimate, CPIH-real	$C=(1+A)*(1+B)-1$	1.43%	1.56%	
Convenience premium	D		0.09%	5y average convenience premium based on AAA corporate bond indices and 20y gilts
RfR estimate, CPIH-real	$E=C+D$	1.43%	1.66%	

Spot 20y gilt yields: We agree with the use of 20-year gilts as the starting point for calculating the RfR in line with Ofwat and the methodology outlined by the CMA in the PR19 re-determination. However, we believe that looking at the spot value of the gilts is more informative of the current market conditions than the trailing average used by Ofwat. We observe that gilt yields have been higher as of our cut-off date 5 July 2024 relative to Ofwat’s averaging period March 2024, which appears to have been a relatively low period in recent trends.

RPI-CPIH wedge estimation: We estimate the RPI-CPIH wedge using the average of the **20-year official OBR forecasts** and the **20-year RPI and CPI swaps**. Estimation details are set out below.

20-year official forecast: We have used the most recent and longest available OBR inflation forecast up to 2028 and assumed RPI and CPI to be equal to their long term target in 2029. As RPI and CPI will converge potentially in February 2030, we take a weighted average for the RPI estimate in 2030 - we use 3.0% RPI until February 2030 and 2.0% RPI during March-December 2030. This yields an RPI estimate of 2.17% for 2030. From 2031 onwards, both RPI and CPI are 2.0%. By construction, the official forecast approach assumes that the RPI inflation rate implied by ILGs will equal the CPI inflation rate from 2031 onwards, setting the wedge to zero.

Table A1.3: RPI-CPI wedge

20y official forecast approach based on OBR data	RPI inflation	CPI inflation	RPI-CPI wedge
2024	3.14%	2.19%	0.93%
2025	2.05%	1.48%	0.56%
2026	2.50%	1.63%	0.86%
2027	2.95%	1.92%	1.01%
2028	2.89%	2.00%	0.88%
2029	3.00%	2.00%	0.98%
2030	2.17%	2.00%	0.16%
2031 – 2043	2.00%	2.00%	0.00%
Geometric average			0.27%

Summary of inflation wedge results: Looking at the 20-year horizon that matches the maturity of the gilts, we have estimated an RPI-CPI wedge of 0.31%. This is derived from the average of (i) the 20-year official forecast approach, and (ii) the 20-year spot difference in inflation swaps. This is in line with Ofwat’s methodology in the DDs.

Table A1.4: Inflation wedge

Inflation wedge	Official forecast	Inflation swaps	Average
10-year	0.54%	0.65%	0.59%
15-year	0.36%	0.48%	0.42%
20-year	0.27%	0.36%	0.31%

Convenience premium

We have calculated a five-year average convenience premium based on AAA-rated bond indices and 20-year gilts. The five-year period matches the length of the price control period. This reflects the methodology undertaken by the CMA at PR19. We understand Ofwat’s approach not to include these adjustments and it has a minor impact overall, but this is a consistent view and we believe it does provide an appropriate cross check.

Table A1.5: Convenience premium

Convenience premium	Calculation	Our estimate
Five-year average of AAA indices, nominal	A	2.60%
Five-year average of 20y gilts, nominal	B	2.41%
Average AAA indices, gilts	C=average of A and B	2.51%
Convenience premium estimate (5y)	D=C–B	0.09%

Forward premium

We have excluded the forward premium from the RfR estimated as above to be consistent with our estimation of cost of new debt (CoND). We do include it as a sensitivity however as this may be reflected in movement in market rates. As Ofwat will index the CoND to outturn iBoxx at the end of AMP8, we consider that the addition of a forward premium to CoND in that case is not required. However, we also provide RfR and CoND estimates including the forward premium here. We discuss the uncertainty of the cost of new debt and iBoxx index further below.

Beta

We have estimated asset betas based on the following methodology:

- Comparator set including United Utilities, Severn Trent and Pennon;
- Estimation of two, five and ten-year estimation windows;
- Regressing each company’s daily stock returns on the returns of the FTSE All-Share Index;
- Deriving asset betas by de-levering each company’s raw equity betas using the Harris-Pringle formula ($\beta_{asset} = \beta_{equity} * (1 - g) + \beta_{debt} * g$).
- Using a debt beta of 0.10 (i.e., the mid-point of the debt beta range identified by Ofwat) and a gearing defined as net debt/(net debt + market capitalisation). This methodology is aligned with that of Ofwat, which looks at the enterprise value of gearing to de-lever the raw equity betas. We estimate the level of gearing based on daily data for the market capitalisation value of equity and quarterly data for net debt, averaged over the estimation window.

The table below shows the equity and asset betas estimated as of the cut-off date of 5 July 2024.

Table A1.6: Equity betas

Equity and asset betas	Raw equity beta	Gearing level	Asset beta
Two-year betas			
United Utilities	0.71	54%	0.38
Severn Trent	0.67	50%	0.38
Pennon	0.93	60%	0.43
Average	0.77	55%	0.40
Five-year betas			
United Utilities	0.58	54%	0.32
Severn Trent	0.56	51%	0.32
Pennon	0.57	42%	0.37
Average	0.57	49%	0.34
Ten-year betas			
United Utilities	0.62	54%	0.34
Severn Trent	0.60	50%	0.35
Pennon	0.60	43%	0.38
Average	0.60	49%	0.36

We then re-levered the asset betas based on the notional level of gearing of 55% and a debt beta of 0.10, aligned with Ofwat’s methodology for PR24.

Table A1.7: Re-levered equity betas

Re-levered equity betas	Two-years	Five-years	Ten-years
United Utilities	0.73	0.59	0.63
Severn Trent	0.73	0.60	0.64
Pennon	0.83	0.71	0.73
Average	0.77	0.63	0.67

For its un-levered beta range for PR24, Ofwat relies on the two- and five-year trailing averages of the five- and ten-year betas and notes that this is ‘capturing 15 years’ worth of data and thus reflecting a more comprehensive range of systematic risk events which a notional water company might encounter.’ To also cover a long span of data and to not overweight short-term data, for this particular analysis, we have used ten-year betas to inform our beta range. This yields a re-levered equity beta range of **0.63–0.73**, with a mid-point of **0.67**.

As in our original plan, we believe that it is important to include Pennon as an appropriate comparator. We do not find Ofwat's reasons not to use Pennon as a legitimate comparator compelling, in particular the reference to the acquisition of SES. All Pennon acquisitions have been raised through equity and the SES RCV premium at c1.06x is consistent with CAPM assumptions. Looking ahead, there is no specific reason other than relative listing size (FTSE 100 vs 250 post Viridor) as to why the beta pattern for Pennon compared to UU and Severn Trent would amend – there are periods of similar and higher beta historically for a variety of reasons and it is incorrect to characterise UU and SVT as pure play as if they had no other non-regulated water commercial interests.

A merger with another water company should be considered a very useful reference point for beta within the regulatory framework within the principles of CAPM. However, we recognise that with aiming up there is a range of information, and we would recommend a point estimate slightly higher than the Ofwat 0.63 at 0.64, rather than at our mid-point of 0.67.

Total market return (TMR)

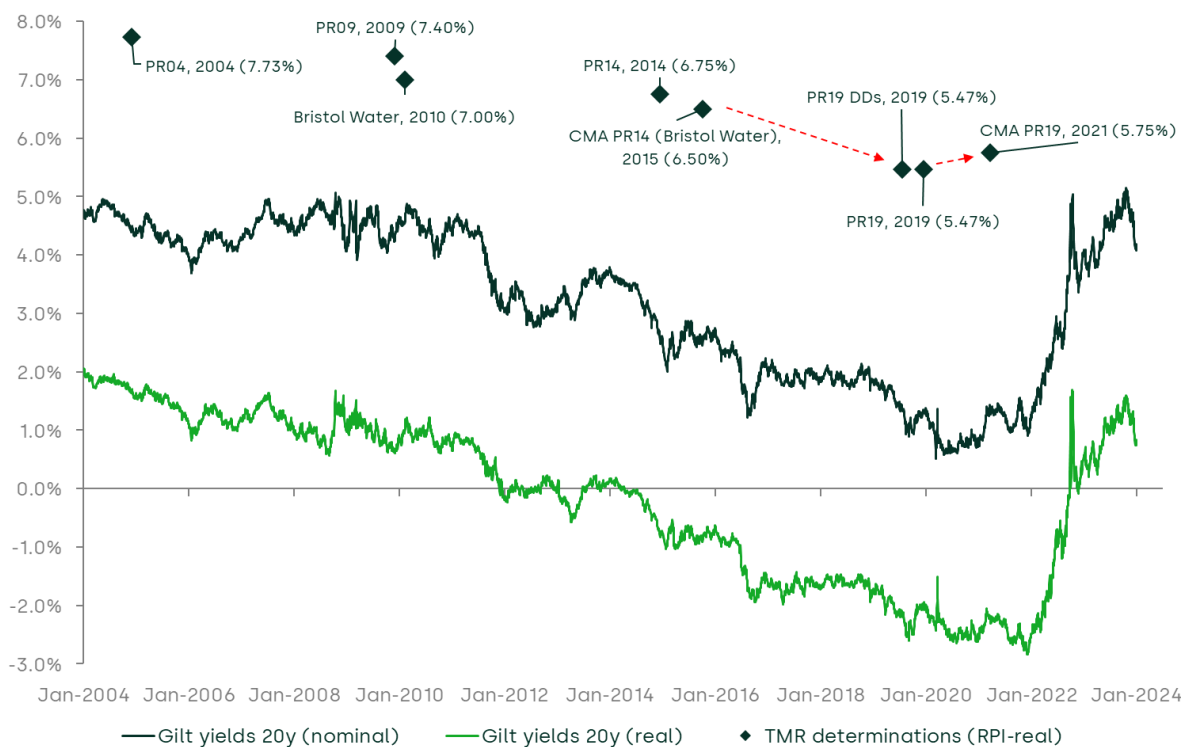
We have focused on historical ex post information and specifically relied on the arithmetic mean of annual returns over the entire Dimson, Marsh and Staunton ('DMS') series to determine our TMR estimate. In doing so, we have estimated the TMR to be 6.95% in CPIH-real terms. Acknowledging that there is uncertainty in deriving the true expected TMR, we consider that it would be appropriate to add ± 50 bps around the estimate of 6.95%, resulting in a TMR range of 6.45–7.45%.

We also note that Ofgem include a point estimate of 6.75% in their recent RII0-3 sector specific methodology. Ofwat's use of 6.58% appears to be towards the bottom end of the range of plausible estimates.

TMR determinations and gilt yields

We have further considered what the increase in interest rates implies for the TMR. The UKRN guidance observes that UK regulators have assumed greater stability in the TMR than the ERP and that continuing with this approach is preferable. In this context, we have examined a time series of water sector determinations by Ofwat and the CMA on the TMR and the development of gilt yields, to see how stable the TMR allowance was across the determinations.

From the chart below, it is apparent from that Ofwat and the CMA responded to the decline in gilt yields in the period 2010–21 by reducing the TMR allowance. Since early 2022 however, long-term gilt yields have sharply increased, reaching levels last seen during 2005–11. Given that the TMR was between 7.0% and 7.73% (RPI-real) during that period, a consistent regulatory approach over time should imply an increase in the TMR assumption in PR24, to take account of the higher interest rate environment.



A recent report from Frontier Economics (Additional Considerations for the PR24 Cost of Equity Allowed Return on Equity, April 2024) provides evidence and an approach to TMR that finds a relationship between Total Market Returns (TMR) and Index Linked Gilt (ILG) yields. This analysis suggested a TMR of c7.5% nominal. We think this provides an upper bound on TMR at PR24, but at this level would align more closely to investor expectations. At these higher levels we think this could duplicate the parameter uncertainty “aiming up” Ofwat reflect in the cost of capital.

Cost of debt (CoD)

Cost of embedded debt (CoED)

Ofwat proposed in the draft determinations a CoED of 2.46% in CPIH-real terms based on the mean of the medians of the company ‘all in’ cost and the actual notional of the large companies. Ofwat is thereby placing 50% weight on its notional-actual approach of the CoED. We consider that this is not an accurate representation of the actual outstanding debt instruments of the companies thus of the companies’ actual CoED. When only using the ‘all in’ cost across large companies approach and excluding Ofwat’s notional-actual approach, the CoED would be 2.47% based on Ofwat’s cost of debt model. This does not appear to be a material difference.

We believe there is a relatively narrow range for the cost of debt. There are two areas to consider:

In the time available for the DD response, we have not updated estimates of the cost of embedded debt for 2023/24 APR data that is now available. Given the increase in cost of recent issuances in the water sector, we believe there is therefore a potential for an updated embedded cost of debt to be higher than in the DD. We have maintained as an upper estimate the forecast that Oxera helped us prepare for our original plan of 2.65%

We also note updated estimates by KPMG in their project work on the cost of debt for Water UK. We note Ofwat’s comments on the additional complexity of collecting the data needed to populate this model compared to Ofwat’s simpler version. We agree with Ofwat that on balance the existing model should be used. This does mean that some caution should be applied to departing from an “all in” approach rather than using an “actual notional” framework.

The KPMG work is useful as a cross check for this price review. It estimated a higher 2.88% cost of embedded debt based on a May 2024 cut off, as well as reflecting 0.06% for basis risk management costs and 0.14% for carry costs, in addition to liquidity and issuance costs totally 0.15% aligned to Ofwat's DD. One of the key differences is forecasts for AMP7 issuance. This is a real factor to consider and we expect Ofwat's 2.46% to increase to by 0.15% - 0.20% based on 2023/24 and early 2024/25 data. This is something we believe Ofwat should consider and reflect for the FD.

We have therefore adopted Ofwat's CoED estimate of 2.46% in CPIH-real terms, which is currently only 1bp below our preferred approach.

Cost of new debt (CoND)

Our CoND estimate is based on a modification of Ofwat's methodology, where we look at the spot estimate of the average of iBoxx A/BBB rather than at the one-month average. This approach reflects the latest market observations and is consistent with our methodology for RfR. We no longer suggest adding a forward premium to the CoND as Ofwat plans to index CoND to outturn iBoxx at the end of AMP8, as discussed above. However, we also provide a CoND estimate including the forward premium in the appendix.

Table A1.8: Cost of New Debt

CoND	Calculation	Ofwat DDs	Our estimate	Comments
iBoxx A/BBB 10+, nominal	A	5.42%	5.66%	Ofwat's DDs uses the one-month trailing average of the benchmark index over March 2024. Our estimate uses the spot value as of cut-off date 5 July 2024 to reflect current market conditions. This yields a higher value than the average of March 2024.
CPIH inflation assumption	B	2.00%	2.00%	
Cost of new debt, CPIH real	$C=(1+A)/(1+B)-1$	3.36%	3.58%	
Forward premium (3Y)	D		0.26%	The derivation of the forward premium is detailed below.
Cost of new debt, CPIH-real (including forward premium)	E=C+D		3.85%	

On the cost of new debt recent sector issuances have been higher than the benchmark iBoxx index. This includes our recent £400m ETM issuance at 6.375% nominal, compared to the c5.6% (3.51% including 0.15% issuance and liquidity allowance and 2% CPIH) in the DD. We would anticipate Ofwat reviewing the evidence ahead of the DD.

Currently, all water company debt appears to be trading at a premium to iBoxx, for instance at the £400m 17 year South West Water issuance on 29 July was at an 81bps premium to iBoxx and the £350m Severn Trent 14 year tenor at 5.875% at a 30bps premium to iBoxx. Excluding Southern and Thames with their lower credit ratings, recent water company issuances have been at 25 to 32bps premium.

Therefore, we think that Ofwat's 3.36% DD cost of debt may need to be between 3.58% and 3.85% for the FD, based on updated market rates and a potential allowance for either forward rates or more recent issuance premia to iBoxx.

Overall cost of debt

In the DDs, Ofwat assumes the proportion of new versus embedded debt to be 26% and adds an allowance of 15bps to the CoD to account for issuance and liquidity costs. As re-estimating these parameters is outside the scope of this update, we have used Ofwat's parameters.

Table A1.19: Cost of debt

Cost of debt	Calculation	Ofwat DDs	Our estimate	Comments
Cost of embedded debt	A	2.46%	2.46% - 2.65%	Ofwat DDs. Potential uplift based on 2023/24 debt issuance and more recent issuances early in 2024/25
Cost of new debt	B	3.36%	3.58%	Excluding forward premium, but at current market rates, potentially higher with an emerging premia to iBoxx
Share of new debt	C	26.00%	26.00%	Ofwat DDs
Issuance and liquidity costs	D	0.15%	0.15%	Ofwat DDs
Cost of debt	$E=A*(1-C)+B*C+D$	2.84%	2.90% - 3.11%	We expect a rate of 3.04% within this range may be appropriate for the FD.

WACC

- We have estimated the weighted average cost of capital (WACC) as $WACC = \text{Cost of equity} * (1-\text{gearing}) + \text{Cost of debt} * \text{gearing}$. The cost of equity (CoE) is based on the CAPM framework.
- We have applied a retail margin adjustment of 0.06% to determine the wholesale WACC estimate. This is aligned with Ofwat's methodology in the DDs. Re-estimating this parameter is outside the scope of this analysis.
- It is evident that the aimed up CoE put forward by Ofwat in the DDs of 4.8% is materially below the high end of our CoE range, at 5.98%.
- While we acknowledge that Ofwat has aimed up the CoE, we consider that the CoE determined by Ofwat remains at the lower end of our estimated CoE range. This may cause difficulties for companies in attracting sufficient equity financing.
- The table below summarises the WACC parameters for our low and high scenarios and compares these with parameters proposed by Ofwat in the DDs. All numbers are CPIH-real.
- The WACC estimate below does not consider a forward premium for RfR and CoND. We present an additional WACC table including the 3y forward premium estimates.

Table A1.10: WACC parameters

Parameters	Ofwat DDs	Our low	Our high	Our potential FD estimate	Our low and high range identified by TMR and beta ranges
Gearing	55.00%	55.00%	55.00%	55%	As of Ofwat DDs
Total Market Return	6.58%	6.45%	7.45%	6.96%	With mid-point 6.96% as informed by the DMS data series and deflated with CPIH
Risk free rate	1.43%	1.66%	1.66% - 1.92%	1.92%	Our estimate includes RPI-CPI wedge and 5y convenience premium. Our FD estimate anticipates market rates and
Notional equity beta	0.60	0.63	0.73	0.64	Based on 10y spot betas
Cost of equity	4.80%	4.68%	5.90%	5.17%	Ofwat aimed up CoE estimate sits slightly above the bottom end of our range, but materially below the high end of our range.
Cost of embedded debt	2.46%	2.46%	2.65%	2.65%	As per Ofwat DDs. 2023/24 APR analysis may suggest higher rate, at this 20-30bps impact and could be reflected in higher cost of new debt.
Cost of new debt	3.36%	3.58%	3.585%	3.58%	Not including forward premium. Market rates or potential premium of c30bps to iBoxx
Share of new debt	26%	26%	26.00%	26%	As per Ofwat DDs
Issuance and liquidity costs	0.15%	0.15%	0.15%	0.15%	As per Ofwat DDs
Cost of debt	2.84%	2.90%	3.11%	3.04%	
Appointee WACC (real, vanilla)	3.72%	3.70%	4.37%	4.00%	
Retail margin deduction	0.06%	0.06%	0.06%	0.06%	As per Ofwat DDs
Wholesale WACC	3.66%	3.64%	4.31%	3.94%	

ARP-DRP framework

We use the ARP-DRP approach as a cross-check to the results of the cost of equity estimated by the CAPM.

- To achieve neutral treatment of inflation for ARP, we have estimated the ARP starting from CPIH-real TMR and RFR numbers, used in our CoE estimate without any modifications.
- The DRP is estimated based on the daily average yields of the iBoxx £ Utilities 10+ A and BBB indices. To stay neutral to the treatment of inflation, we have estimated the RfR used in the DRP calculation based on nominal gilt yields of maturity matching the modified duration of the iBoxx indices. To minimise the impact of debt market volatility, we took a five-year median of the DRP prior to the cut-off date 5 July 2024.

- We use a five-year median window to align with the length of the regulatory price control period.
- The 'expected loss' parameter represents the annualised probability of default, multiplied by the losses that a debt investor will suffer if a borrower defaults. Our estimate of this parameter is 0.30%.
- To estimate the equity and asset beta for the 'Ofwat DDs scenario', we backed out the equity and asset beta that results from Ofwat's aimed up CoE estimate of 4.8% as included in the DDs.
- We use a consistent high and low for the risk free rate for the purposes of this analysis, rather than reflecting a range for how this may change for the FD above.

Table A1.11: ARP-DRP

ARP-DRP	Ofwat DDs scenario	Our low	Our high	Comments
Gearing	55.00%	55.00%	55.00%	
Risk-free rate	1.43%	1.66%	1.66%	
TMR	6.58%	6.45%	7.45%	
ERP	5.15%	4.79%	5.79%	ERP = TMR - RfR
Asset beta	0.35	0.34	0.38	'Ofwat DDs scenario' uses the asset beta backed out from Ofwat's aimed up CoE. (Asset betas from the DDs are 0.31–0.34, midpoint 0.33).
Equity beta	0.65	0.63	0.73	'Ofwat DDs scenario' uses the equity beta backed out from Ofwat's aimed up CoE. (Re-levered equity betas from the DDs are 0.57–0.63, midpoint 0.60).
Cost of equity	4.80%	4.68%	5.90%	'Ofwat DDs scenario' uses Ofwat's aimed up CoE from the DDs.
ARP	1.80%	1.62%	2.23%	ARP = Asset beta * ERP. 'Ofwat DDs scenario' reflects ARP calculated using aimed up parameters.
DRP	1.25%	1.25%	1.25%	DRP = CoND - RfR - Expected loss - Convenience premium. Median DRP of the five-year period prior to the cut-off date.
ARP-DRP	0.55%	0.38%	0.98%	

All scenarios satisfy the necessary condition of a positive ARP-DRP differential. However, this alone is not a sufficient condition to cross check the calibration of return on capital. Therefore, we estimate the prediction of the ARP based on extrapolating the DRP to 100% gearing, as detailed in the table below.

Table A1.12: ARP

Notional gearing	A	55%
DRP	B	1.25%
ARP implied by 100% gearing (DRP/g)	$C=(B/A)$	2.27%

This theoretical relationship between the risk premia on debt and assets suggests that the ARP should be 2.27%, which is higher than the estimated ARP of 2.23% under our high scenario.

As the ARP reflects the assumed ERP and asset beta, this shows that only values towards the top of the TMR and asset beta ranges produce a risk premium on assets that is sufficiently high relative to the risk premium observed on debt.

Combined with the evidence on the ARP-DRP differential shown above, this suggests that the allowed CoE should be set near the top end of our range.

Forward premium estimation

The forward premium should reflect the yield on the RfR expected at the mid-point of the control period. This is to approximate the average RfR over the entire control period, assuming that capital investment will be spread evenly across that period. We therefore use a three-year forward premium, estimated as of the cut-off date, to approximate a premium in the middle of AMP8.

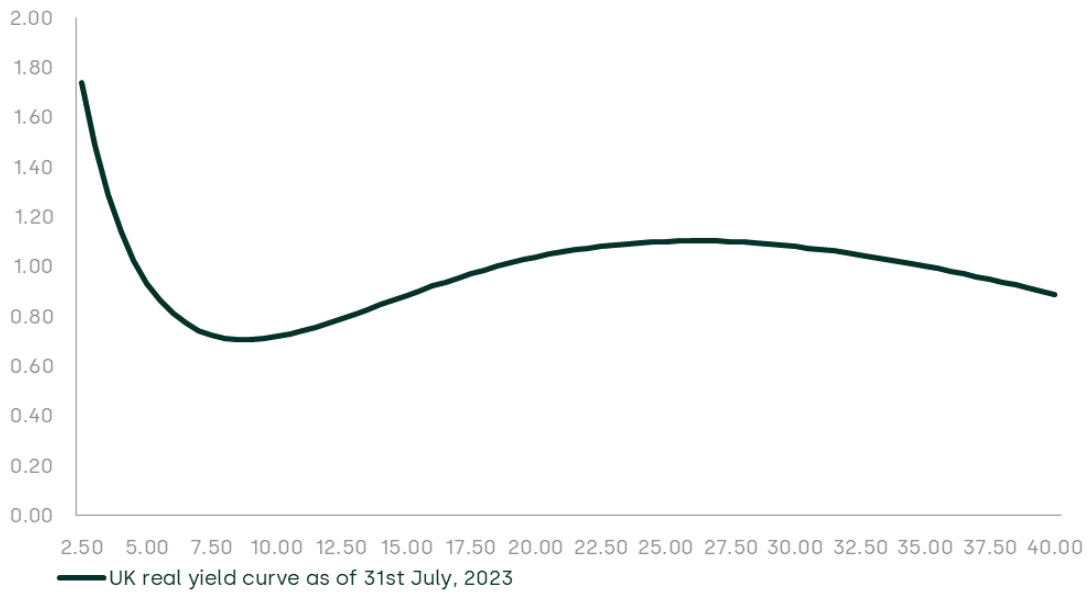
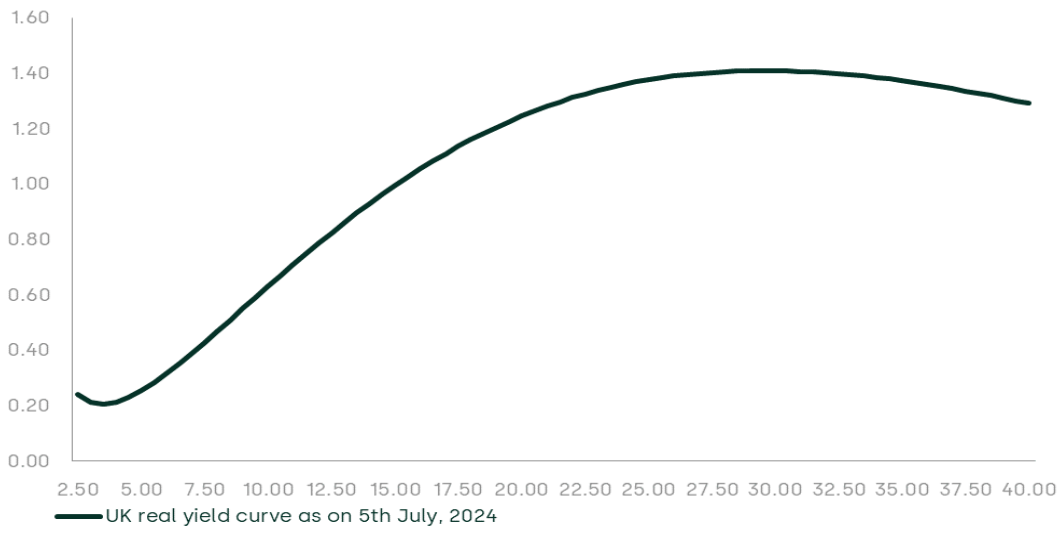
The yield curve has steepened significantly since 2023, when a five-year forward premium of 0.11% was estimated, as shown in the charts below. As of the current cut-off date 5 July 2024, we identify a three-year forward premium of 0.26%.

Table A1.13: 3 year forward premium

3y forward premium as of 5 July 2024 (20y index linked gilts)	Calculation	Value
3 year gilts' yield	i_b	0.21%
23-year gilts yield	i_a	1.34%
Forward rate	$A = \left[\frac{(1+i_a)^{t_a}}{(1+i_b)^{t_b}} \right]^{\frac{1}{t_a-t_b}} - 1$	1.51%
20 year spot gilts' yield	B	1.24%
Forward premium	C=A-B	0.26%

Table A1.14: 5 year forward premium

5y forward premium as of 31 July 2023 (20y index linked gilts)	Calculation	Value
5y gilts yield	i_b	0.93%
25y gilts yield	i_a	1.10%
Forward rate	$A = \left[\frac{(1+i_a)^{t_a}}{(1+i_b)^{t_b}} \right]^{\frac{1}{t_a-t_b}} - 1$	1.14%
20y spot gilts yield	B	1.04%
Forward premium	C=A-B	0.11%



WACC estimation including forward premium in RfR and CoND

Table A1.15: WACC parameters including forward premium

Parameters	Ofwat DDs	Our low	Our high	Our low and high range identified by TMR and beta ranges
Gearing	55.00%	55.00%	55.00%	As per Ofwat DDs
Total Market Return	6.58%	6.45%	7.45%	With mid-point 6.96% as informed by the DMS data series and deflated with CPIH
Risk free rate	1.43%	1.92%	1.92%	Our estimate includes RPI-CPI wedge, 5y convenience premium and 3y forward premium
Notional equity beta	0.60	0.63	0.73	Based on 10y spot betas
Cost of equity	4.80%	4.77%	5.97%	Ofwat aimed up CoE estimate sits slightly above the bottom end of our range
Cost of embedded debt	2.46%	2.46%	2.46%	As per Ofwat DDs
Cost of new debt	3.36%	3.85%	3.85%	Our estimate includes 3y forward premium
Share of new debt	26.00%	26.00%	26.00%	As per Ofwat DDs
Issuance and liquidity costs	0.15%	0.15%	0.15%	As per Ofwat DDs
Cost of debt	2.84%	2.97%	2.97%	
Appointee WACC (real, vanilla)	3.72%	3.78%	4.32%	
Retail margin deduction	0.06%	0.06%	0.06%	As per Ofwat DDs
Wholesale WACC	3.66%	3.72%	4.26%	

Evidence from Frontier's hybrid debt cross-check framework

A cross-check for the cost of capital derived from hybrid bonds uses the nature of these securities that combine debt and equity characteristics. As traded bonds, there is market information on the yields of these securities. This means those yields can be analysed to infer required equity returns. This cross-check provides a clear link from capital market conditions through to the equity returns that utilities investors are likely to require. It also helps to test whether the difference between the CoE and cost of new debt is consistent within reasonable bounds of the CAPM logic. As far as we are aware this evidence source and cross-check has not been discussed in the context of PR24.

This cross-check is based on ensuring that the CoE lies sufficiently far above the long-term return on senior investment-grade debt. This condition derives from the relative risk profile of debt and equity.

Specifically, Frontier use hybrid bonds issued by regulated UK utility networks companies as the basis of the cross-check. This provides an output which is relevant for PR24 given the similarities in regulation between water networks and the other utility networks. Drawing on recent capital market data, evidence from hybrid bonds indicates that the CoE should fall in the range 5.8% to 8.4% (CPIH deflated), with a central estimate of 6.6%. This compares with an 'early central view' allowed return on equity from the PR24 methodology of 4.14%.

Table A1.16: Hybrid bond spread

Value	Estimate
Hybrid bond spread (adjusted for default risk, at issue)	+136bps
iBoxx £ Utilities10Y+ (1Y average)	6.04%
Higher returns on equity (based on 50% equity-like)	+272bps
Nominal CoE	8.76%
Real CoE (CPIH deflated)	6.63%

Source: Frontier calculations

Note: Analysis as of 29 February 2024. Considers a 2% inflation assumption to derive CPIH-real CoE.

Frontier undertook a range of sensitivity testing on these results. Frontier also explore the comparability of results from a bond in the electricity network (National Grid in the above analysis) to the water sector. The raw equity beta estimates between National Grid, UU and Severn Trent are similar over time, and National Grid had lower gearing, implying that using the hybrid bond evidence produces a realistic and cautious cross check. The sensitivity testing suggests a range of 5.8% to 8.4% for the CoE, far above the PR24 range even updated for market rates. We note the lower end of the range at 5.8% is similar to the Barclays' survey of equity investor views on the real CoE at the time, although this has subsequently increase to 6.1% as a reaction to Ofwat's DD.

Annex B: Customer perspectives on risk and return

Customers care about the balance of future investment and affordability.

We have engaged customers further as we have looked to understand the affordability of bills today, and how that changes with our proposed plan. We have also discussed other elements that drive bills, such as incentives around the outcomes, and to what extent we should profile bills across the years and generations.

The benefits of our investments can last for generations, so the timing of our investment programme means there is a question about who pays for the work – whether it is the current or future generation of bill payers. We have engaged with these groups to understand their different concerns and priorities and have considered the balance between investing now to deliver benefits sooner, with an increasing impact on bills, or phasing investment into the future to impact future bills.

Our priorities research shows that customers are willing to see an investment programme suitably paced to achieve supporting a steady programme of investment, this is preferable to front or back-end programmes. However, the cost of living crisis is impacting on customer affordability and whilst investment in the environment is required, bill increases need to be reasonable.⁷

Affordability concerns continue to weigh heavily on customers in the SWB region and there is some evidence that suggests this view has been exacerbated more recently by the cost of living crisis. For instance:

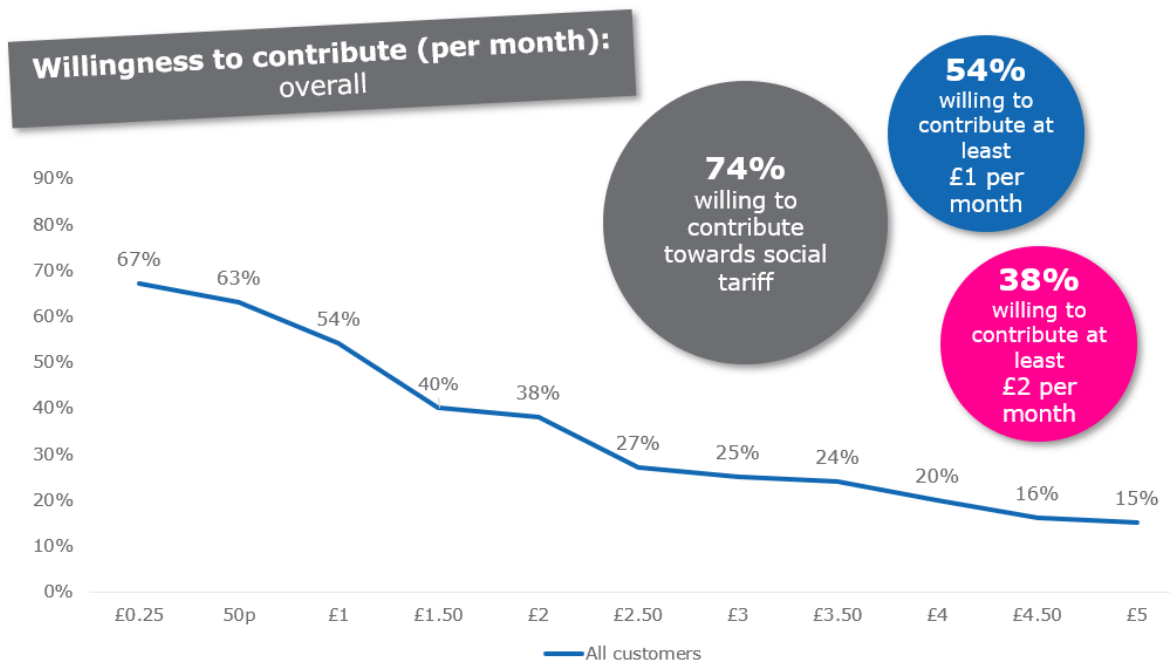
- Willingness to pay for a ‘package’ of service investments was reduced in 2022 (£6.90) relative to earlier PR19 research (£9.20)
- The most recent priorities research suggests that, while customers agree investment in the environment is required, there is a steep decline in household customers’ willingness to pay above a £50 bill increase with 58% of customers willing to pay a bill increase of £50, but 34% of customers willing to pay a bill increase of £100
- SWB’s annual affordability study for 2022/23 finds that, while customers continue to find their water bill affordable despite the increased cost of living (83% state that their bill is affordable), the percentage of customers who sometimes struggle to pay their water bill has increased from 10% in 2021/22 to 14% in 2022/23.

We have reflected this by:

- Going as far as we can to reduce the size of the enhancement investment programme – we had extensive discussions to ensure that the investment we are making aligns to the priorities of the Government and the Environment Agency, and any additional investment to this timing is of better value for the economy and communities of the region
- Made significant efficiency assumptions of c£600m (£300m base, £300m enhancement) without reducing the services customers will receive
- Used financial levers to minimise the bill impact on customers – including relevant reconciliation adjustments in the RCV rather than through PAYG, where the benefit to customers from the reconciliation is over a period of time.

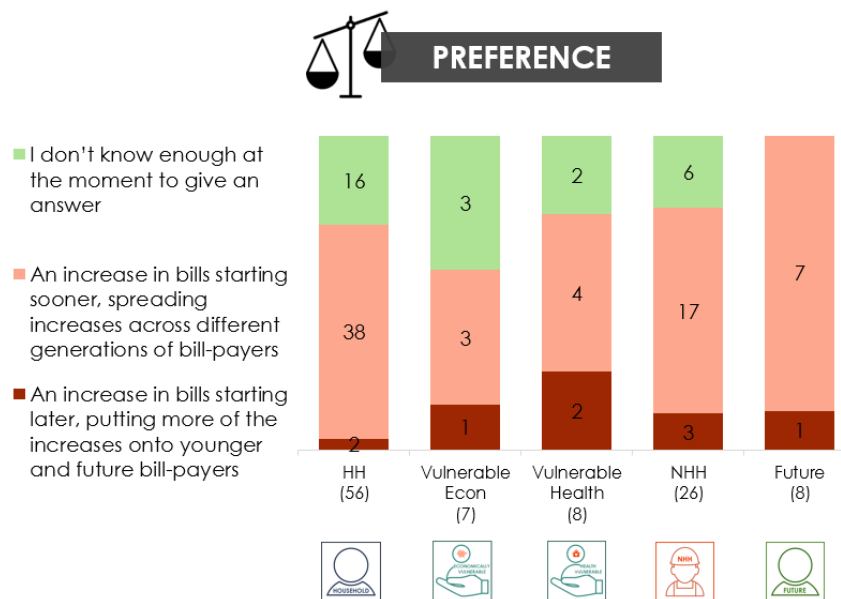
Qualitative testing for the Affordability & Acceptability Testing (AAT) found that most customer preferred accelerating investment, and bill increases would then reflect intergenerational equity. Using financial levers for investment already made is consistent with maintaining customer support with this approach.

⁷ Report 1.7 - Verve, PR24 Customer Priorities, February 2023



Source: AAT Qualitative Report: Blue Marble Research

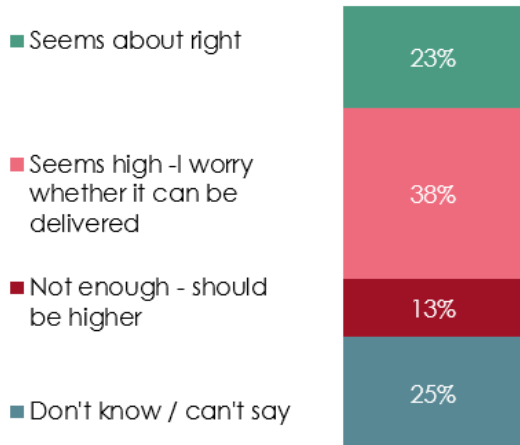
Customers retain their appetite for contributing to social tariffs



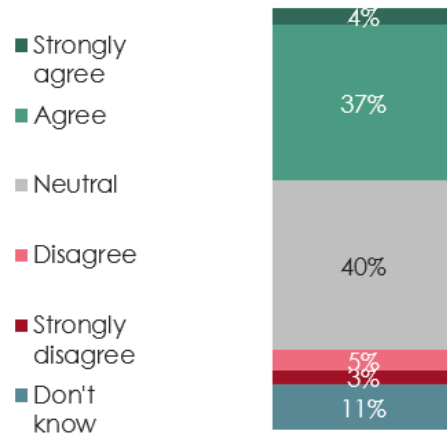
Source: 3.14 Social Tariff Report, DJS Research, June 2023

Customers in the AAT quantitative survey supported performance improvements, but the cost of living crisis made many consumers more price sensitive. Their Willingness to Pay for improvements had not declined, but efficiencies and other ways of reducing the bill were welcomed. There was a balance to be struck between large efficiency savings that we had in mind, with the credibility that they could be delivered and the positive contribution investment could make to the region.

What do you think about the scale of the efficiency savings proposed?



To what extent do you agree with the statement that the proposed investment will make a positive contribution to your region?



Source: Quantitative AAT Additional research report Blue Marble, September 2023

We describe our extensive customer research on outcomes and incentive design in the Outcomes representation document and on outcomes risk and return later in this document. Our customers’ preference is for a steady programme of investment (rather than front or back-end loading). The research is clear this includes not just the delivery of investment, but also consistent rises in bills that accompany investment being delivered at a steady rate. Therefore, Ofwat’s approach in the DD to reduce AMP8 customer bills at the expense of future bill increases is inappropriate.

Table B1.1: Bill profile preference

Customer type	Row %		
	Smoothed profile (Consistent rise in bills with improvements delivered at a steady rate)	Front loaded (Environmental improvements made early, but potentially driving up bills in the short term)	Back-end loaded (Bulk of investment made later, keeping bills lower for longer, but environmental improvements take more time)
SWW residential	57%	25%	18%
Bristol Water residential	62%	21%	17%
Bournemouth Water residential	58%	26%	16%
SWW business	61%	26%	13%
Bristol Water business	50%	24%	26%
Bournemouth Water business	49%	36%	15%

Customer preference is to start bill increases sooner rather than later, to spread increases across different generations of bill payers.

Table B1.2: Customer segmentation on bill profile

Customer type	Row %		
	Starting sooner, spreading increases across different generations of bill-payers	Starting later, putting more of the increases onto younger and future bill-payers	I don't know enough at the moment to give an answer
SWW (Household & Non Household)	36%	22%	42%
Bristol Water (Household & Non Household)	46%	15%	39%
Bournemouth Water (Household & Non Household)	46%	17%	37%

Acceptability & Affordability Testing (AAT) – Bluemarble Quant Report Main AAT Quant Report

Annex C: RoRE scenarios

We set out in this annex our supporting evidence for the outcome and totex incentives RoRE scenarios and ranges. This does not replace the original reports provided with our original business plan. Our ODI analysis in particular does not duplicate our Outcomes representation document. We provide updates on the What Base Buys (WBB analysis) and Oxera analysis of Ofwat outcomes DD framework, rather than repeating the reports, simulation evidence and tools provided for our original business plan. We only describe here the RoRE calculations undertaken for our full framework ODI proposals.

Totex / Cost risk

We have undertaken a similar process to totex risk as with our original business plan. We describe below the steps we have taken to assess the totex risk in the DD and for our response.

Ofwat's DD totex risk range appears balanced and includes totex risk/ opportunity of +/- 1.6% from 1% wholesale costs, 0.3% PCD timing and 0.3% retail costs. The Ofwat assessment of risk is simplistic – taking 8.5% totex variation as an upside or downside. Our own assessment adjusts this risk for industry risks from the Ofwat DD mechanisms, alongside updating our own detailed assessment for our plan. The range of +1% to -2.2% for our view of the DD is very similar to the totex risk we saw in our plan, before proposing more flexibility through uncertainty mechanisms and PCDs in our plan to produce a more balanced cost risk of +1.0% to -1.6%. The main difference for downside risk from our plan is our acceptance of Ofwat's 1% p.a. frontier shift compared to the 0.5% p.a. in our plan.

We first set out our totex risk framework for our assessment of the DD, and then the equivalent table for our DD response. We show spend variance on an accounting basis, probability and then the mitigations. Supporting spreadsheets with our totex risk and the 2023-24 APR base modelling are available to Ofwat on request. We summarise here rather than supplying the supporting spreadsheets as the information below should be sufficient to review the thoroughness and appropriateness of our totex risk estimates for the DD and our response.

Table C1.1: Totex RoRE – our view of the DD

Our view of the DD - Totex

Cost Item	Plan Base	Upside	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside
Real price effects		-	-	-	-	Labour and cost indexation	-	-
Frontier Shift	£4623m	-£12m	+£26m	50%	50%	-	-£6m	+£13m
Total RPE & Frontier Shift		-£12m	+£26m				-£6m	+£13m
RORE %						Post mitigation	+0.05%	-0.11%
Base cost efficiency models	£2725m	-£308m	+£117m	60%	10%	N/A	-£185m	+£12m
Impact of APR 2023-24 on base models		-£13m	+£7m	100%	25%	N/A	-£13m	+£2m
RORE %						Post mitigation	-£198m	+£13m
							+1.62%	-0.11%
Specific base cost risks								

Cost Item	Plan Base	Upside	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside
Areas with cost below AMP7 run rate		-	£65m	10%	10%	N/A	-	+£7m
Network valve maintenance		-£5m	+10m	25%	25%	N/A	-£1m	+£3m
Leakage		-£50m	+£109m	25%	25%	N/A	-£13m	+£27m
EO monitoring		-	+£20m	-	50%	N/A	-	+£10m
Water quality contacts		-£3m	+£4m	25%	25%	N/A	-£2m	+£1m
DWI transformation – increase in reservoir inspection & maintenance		-£10m	£51m	25%	25%	N/A	-£3m	+£13m
Wastewater networks		-£43m	£151m	50%	10%	N/A	-£22m	+£15m
Wastewater WWTW – Plymouth central rebuild risk		-£23m	£63m	25%	25%	N/A	-£6m	+£16m
Wastewater supply demand risk		-£20m	£31m	25%	25%	N/A	-£5m	+£8m
IT – increased cost as systems ages		-£10m	£35m	25%	25%	N/A	-£3m	+£9m
Net zero		-£11m	£31m	100%	100%	N/A	-£11m	+£31m
Facilities investment – cost of new lab		-£5m	£13m	-	25%	N/A	-	+£3m
Opex cost run rate risk		-	£130m	-	50%	N/A	-	+£65m
RORE %						Post mitigation	-£65m +0.53%	+£218m -1.78%
Enhancement risks								
Lead - change in programme scale		-£20m	+£26m	10%	10%	N/A	-£2m	+£3m
WRMP - licence capping uncertainty		-	+£60m	-	10%	Qualifies as RCC	-	-
Leakage - investment assumed in base		-	+£32m	25%	10%	N/A	-	+£3m
Water metering - AMI cost risk		-£6m	+£9m	25%	10%	N/A	-£2m	+£1m
Water WINEP			+£2m	10%	10%	N/A		+£0.2m

Cost Item	Plan Base	Upside	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside
Water WINEP (Upstream thinking)			£11m	100%	50%	N/A		+£6m
Water WINEP (Abstraction screens – statutory only)			£2m	10%	10%	N/A		+£0.2m
Water WINEP (Invasive species – statutory only)		-£10m	£27m	10%	10%	N/A	-£1m	+£3m
Water WINEP (WQ – ecological improvement)			£24m	10%	10%	N/A		+£2m
DWI WQ programme (Rebuild base contribution)		-£14m	£55m	100%	50%	N/A	-£14m	+£28m
DWI WQ programme (Littleton TW)		-£70m	£140m	75%	25%	N/A	-£53m	+£35m
Nutrient WINEP - scheme scope and cost confidence		-£60m	+£123m	100%	50%	Potential for swaps or RCC. Accelerated investment removes risk	-£8m	-
Storm overflows - nature vs grey solution		-£30m	+£111m	50%	50%	Notified item	-	-
Net zero enhancement and process emissions		-	+£150m	10%	10%	N/A	-	+£15m
RNAGS - WINEP includes WISER expectation without rephasing		-	+£309m	10%	10%	N/A	-	+£31m
Supply schemes and interconnectors		-	+£15m	100%	100%	N/A	-	+£15m
Bioresources (costing confidence)		-£2m	-	100%	100%	N/A	-£2m	-
River water quality monitors		-	+£4m	-	-	N/A	-	-
Bioresources – AMP8 Appropriate Measures		-	+£150m	-	25%	RCC	-	+£75m

Cost Item	Plan Base	Upside	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside
Storm overflows (WQ monitors)	-		+£23m	-	10%	Notified item	-	+£2m
Storm overflows (Additional 14 overflows)	-		+£22m	-	25%	Notified item	-	+£6mm
Storm overflows (Additional 16 overflows for bathing water designations)	-		+£48m	-	25%	Notified item	-	+£12m
Storm overflows (Cost model risk)	-		+£35m	-	100%	Notified item	-	+£35m
PFAS – potential upgrades	-		+£34m	-	25%	Uncertainty mechanism	-	+£9m
RORE %						Post mitigation	-£81m +0.66%	+£259m -2.11%
PCDs								
Non-delivery	-		£237m	-	25%		-	+£59m
Timing incentive	-£8m		£13m	5%	35%	DCCM	-£0.04m	+£1.2m
RORE %						Post mitigation	-	+£60m -0.5%
Representations	-		£315m	-	20%		-	+£63m
RORE %						Post mitigation	-	-0.5%
RORE% - Total totex risk pre tax and pre cost sharing						Post mitigation	+2.85%	-5.11%
RORE% - Total totex risk pre tax and post cost sharing						Post mitigation	+1.36%	-2.53%
RORE% post tax and post cost sharing						Post mitigation	+1.0%	-2.2%

- We show no upside or downside risk for RPEs, on the basis that the Ofwat Labour and Energy cost indexation provides suitable mitigation.
- Frontier shift reflects a total range of 0.1% to 1.2%, based on a mixture of the Economic Insight range from our original business plan and the CEPA range published by Ofwat in the draft determination. The central estimate reflects the DD assumption of 1.0% p.a. We have assumed that the Ofwat innovation fund provides a greater upside rather than downside probability.
- We take account of our positive position on the Ofwat water cost efficiency models in particular. Any strengthening of the benchmark beyond upper quartile would result in a change of our assessed impact and probability of upside and downside.

- We have estimated the impact of 2023-24 data on the base cost efficiency models. These do not appear to make a material difference to cost allowances, and therefore this provides a relative narrow range of uncertainty that the cost models may not reflect a stable and efficient company perspective, for the purpose of totex risk assessment.
- We include our assessment of plan base cost risks. These are similar to our plan reflecting the efficiency of the plan overall. We show an estimate of the risk that industry cost trends (based on our cost run rate risk and tested against the base cost models with trend rates in the models), which provide a downside risk of c£130m. We use a 50% probability.
- We are accepting a net zero cost risk rather than the allowances we could have accepted in the draft determination. This reflects customer views on what they are willing to pay for.
- Enhancement risks we consider movement in the statutory programme and in particular storm overflow swaps compared to our original plan. For risks such as storm overflows, PFAS and river water quality monitors, these have been reduced since our original plan by the DD notified items and the swaps we have made to our totex enhancement programme to accommodate these areas of uncertainty that have crystallised since we submitted our PR24 plan. We would like to note the supportive approach the Environment Agency has taken to helping us mitigate both cost risk and bills to customers over 2025-30, whilst still delivering essential investment to areas that are the most sensitive or where bathing waters makes the most significant economic and environmental contribution.
- In practice we do not believe that timing incentives in PCDs will make a significant difference if they are properly calibrated. There is very little risk we perceive, but the customer protection is far less than the administrative burden as part of PCDs, which we believe is a much bigger issue as part of non-delivery PCDs. In practice we believe the Delayed Delivery Cashflow Mechanism will have a much more significant impact.
- We set out our PCD assumptions for non-delivery and timing of delivery in our cost and efficiency document. We set out the PCD non-delivery inefficiency from admin burden, restrictions of flexibility leading to lost opportunities for programme efficiency and the other risks from PCDs in the main totex RoRe section of this document. The total impact is -0.5% RoRE, compared to the +/- 0.3% Ofwat used in its plan.
- Our plan representations have a risk range of 20% applied that are the range of efficiency Ofwat have applied through the “shallow dive” process.
- We demonstrate in our response that our plan was efficient and therefore the totex gap in our plan carries a risk in terms of the RoRe range of +1.0% to -2.2%. This is after 50% cost sharing on base, 40% on enhancement and 25% tax (lowering the totex RoRe impact).

Our DD response - Totex

Table C1.2: Totex RoRe analysis – our DD response

Cost Item	Plan Base	Upside Risk	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside
Real price effects		-	-	-	-	-	-	-
Frontier Shift	£4623m	-£17m	+26m	75%	25%	Labour and energy cost index (50%)	-£9m	+£13m
Total RPE & Frontier Shift		-£17m	+£26m				-£9m	+£13m
RORE %						Post mitigation	+0.07%	-0.11%
Base cost efficiency models	£2725m	-£308m	+£117m	50%	50%	N/A	-£154m	+£58m

Cost Item	Plan Base	Upside Risk	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside
Impact of APR 2023-24 on base models		-£13m	+£7m	50%	50%	N/A	-£7m	+£3m
RORE %						Post mitigation	-£161m +1.31%	+£62m -0.5%
Specific base cost risks								
Areas with cost below AMP7 run rate		-	+£65m	10%	10%	N/A	-	+£7m
Network valve maintenance		-£5m	+10m	25%	25%	N/A	-£1m	+£3m
Leakage		-£50m	+£109m	25%	25%	N/A	-£13m	+£27m
Water quality contacts		-£3m	+£4m	25%	25%	N/A	-£1m	+£1m
DWI transformation – increase in reservoir inspection & maintenance		-£10m	+£51m	25%	25%	N/A	-£3m	+£13m
Wastewater networks		-£43m	+£151m	-	10%	N/A	-	+ £15m
Wastewater WWTW – Plymouth central rebuild risk		-£23m	+£63m	25%	25%	N/A	-£6m	+£16m
Wastewater supply demand risk		-£20m	+ £31m	25%	25%	N/A	-£5m	+£8m
IT – increased cost as systems ages		-£10m	+£35m	25%	25%	N/A	-£3m	+£9m
Net zero		-£11m	+£31m	-	100%	N/A	-	+£31m
Facilities investment – cost of new lab		-£5m	+£13m	-	25%	N/A	-	+£3m
Opex cost run rate risk		-	+£130m	-	33%	N/A		+£43m
RORE %						Post mitigation	-£30m +0.25%	+£174m -1.43%
Enhancement risks								
Lead - change in programme scale		-£20m	+£26m	10%	10%	N/A	-£2m	+£3m

Cost Item	Plan Base	Upside Risk	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside
WRMP - licence capping uncertainty		-	+\$60m	-	10%	N/A	-	+\$6m
Leakage - investment assumed in base		-	+\$32m	25%	10%	N/A	-	+\$3m
Water metering - AMI cost risk		-\$6m	+\$9m	25%	10%	N/A	-\$2m	+\$1m
Water WINEP			+\$2m	10%	10%	N/A		+\$0.2m
Water WINEP (Upstream thinking)			+\$11m	100%	50%	N/A		+\$6m
Water WINEP (Abstraction screens – statutory only)			+\$2m	10%	10%	N/A		+\$0.2m
Water WINEP (Invasive species – statutory only)		-\$10m	+\$27m	10%	10%	N/A	-\$1m	+\$3m
Water WINEP (WQ – ecological improvement)			+\$24m	10%	10%	N/A		+\$2m
DWI WQ programme (Rebuild base contribution)		-\$14m	+\$55m	100%	50%	N/A	-\$14m	+\$28m
DWI WQ programme (Littleton TW)		-\$70m	+\$140m	25%	25%	N/A	-\$18m	+\$35m
Nutrient WINEP - scheme scope and cost confidence		-\$60m	+\$123m	100%	50%	RCC and accelerated investment reduce risk	-\$8m	-
Storm overflows - nature vs grey solution		-\$30m	+\$111m	50%	50%	Bespoke uncertainty mechanism	-	-
Net zero enhancement and process emissions		-	+\$150m	10%	10%	N/A	-	+\$15m
RNAGS - WINEP includes WISER expectation without rephasing		-	+\$309m	10%	10%	N/A	-	+\$31m
Supply schemes and interconnectors		-	+\$15m	100%	100%	N/A	-	+\$15m

Cost Item	Plan Base	Upside Risk	Downside Risk	Upside probability	Downside Probability	Mitigation	Post mitigation upside	Post mitigation downside	
Bioresources (costing confidence)		-£2m	-	100%	100%	Notified item	-	-	
River water quality monitors		-	+£4m	-	-	N/A	-	-	
RORE %						Post mitigation	-£44m +0.36%	+£147m -1.2%	
PCDs									
Non-delivery		-	£237m	-	-	Flexible WaterShare+ true up at RP29	-	-	
Timing incentive		-£8m	£13m	-	-	Removed	-	-	
RORE %						Post mitigation	-	0.00%	
Representations									
RORE %						Post mitigation	-	0.00%	
RORE% - Total totex risk pre tax and pre cost sharing							Post mitigation	+1.99%	-3.24%
RORE% - Total totex risk pre tax and post cost sharing							Post mitigation	+1.0%	-1.6%
RORE% post tax and post cost sharing							Post mitigation	+1.0%	-1.6%

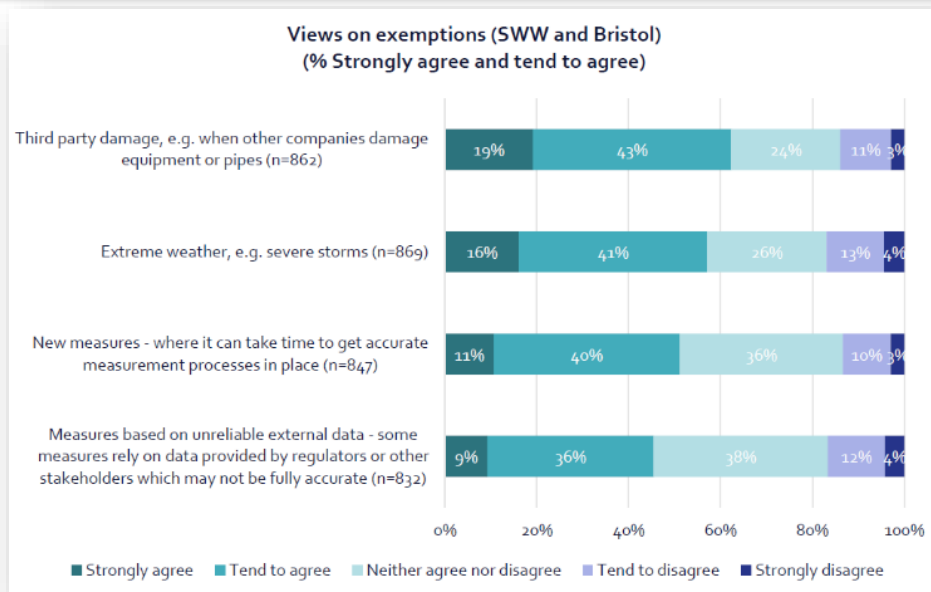
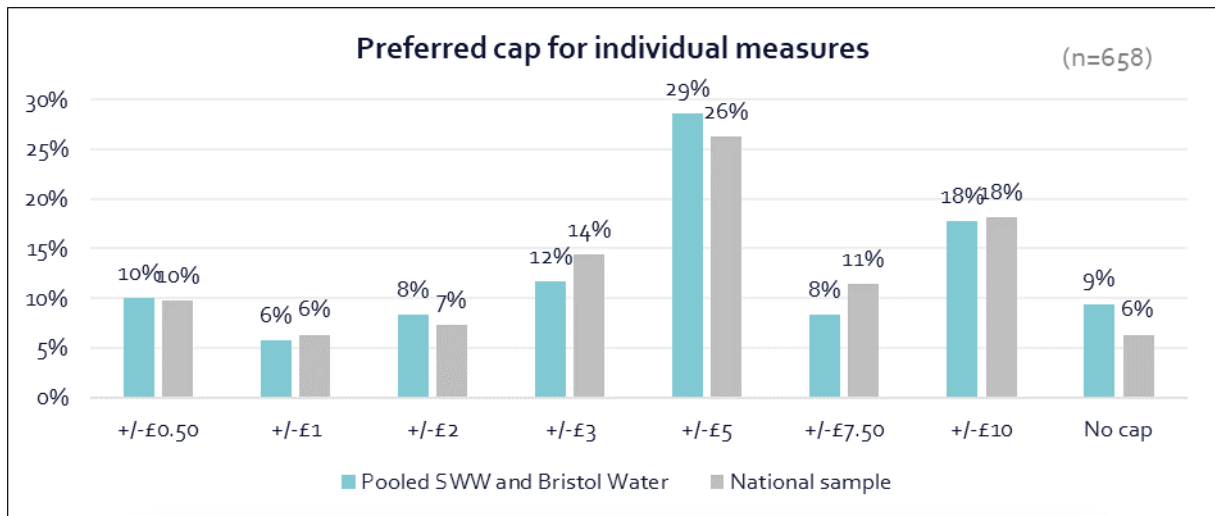
- Restoring our plan totex as per our representations increases the probability that frontier shift will be higher in the water sector by 25%.
- Our responses on base cost models and removing the additional cost allowances, which do not align with our customer preferences, increase the downside and reduce the upside probabilities from the DD< which suggests less positive net base cost balance. We offset this change in risk with removing the associated PCD risk, with more flexibility. This demonstrates the better value to customers and efficiency from our preferred approach.
- EO monitoring is removed as a risk with our proposed amendment to the storm overflows notified item
- The potential upside on net zero is removed, with our request not to apply the DD additional funding as customers expected us to absorb these costs.
- Wastewater network upside is reduced as an impact of our storm overflow uncertainty mechanism and PCD responses would mean that customer benefit from further swaps, reducing the potential synergy benefits we had assumed in our original plan.
- Opex cost run rate risk reduces from 50% to 33% following our base cost model representations
- A number of risks change from our representations, including licence capping and base/enhancement overlap and AMP8/AMP9 overlap for Littleton treatment works.

- The bioresources, storm overflow and PFAS risks shown in the view of the DD totex risk assessment are removed with our proposed adjustments to the DD uncertainty mechanism proposals. This reduces the net enhancement risk from +0.7% to -2.1% to +0.4% to -1.2%. We consider it appropriate to have a skew of totex upside and downside risk. This derives from the need to protect customers from the scale of the enhancement programme.
- We remove the PCD RoRE risk of 0.5% from our view of the DD. This is with our proposal to allow a net correction at PR29, following WaterShare+ scrutiny of our delivery and sharing (in advance of PR29) of any benefits of our delivery, net of new obligations. This is another factor that means we can justify a net totex downside skew of +1.0% to -1.6%.
- Representation risk is removed – it shows that Ofwat should accept our DD response totex proposals in the round as part of considering the overall balance of totex risk.
- We show the steps of applying base cost 50% sharing and 40% for enhancement, proposals we welcome in the draft determination.
- Our response to the DD shows that we will not expect to pay any tax due to cost deductions over 2025-2030. Therefore for the DD response view of totex risk we do not include the benefit of any tax in the totex component of RoRE. Given the tax reconciliation at PR29 would remove the benefit of any change in tax policy, we think this is a consistent approach to the regulatory framework in response to the DD. We retain this tax assumption in our view of the DD for transparency as that is Ofwat’s standard approach to RoRE.

The above analysis is split into the price controls shown in Table ADD18. This shows our view of the DD and then the adjustments necessary to arrive at our response to the DD.

Line Description	Units	DPs						Average
			2025-26	2026-27	2027-28	2028-29	2029-30	2025-30
Company view of Draft Determination (DD) Totex scenarios - high case								
Wholesale water costs - high case	£m	3	5.804	6.487	6.828	8.194	6.828	6.828
Wholesale wastewater costs - high case	£m	3	7.679	12.051	13.123	12.059	11.535	11.289
Retail costs - high case	£m	3	1.287	1.359	1.430	1.502	1.573	1.430
Bioresources costs - high case	£m	3	1.161	1.626	1.781	1.626	1.549	1.549
Additional control costs - high case	£m	3	4.722	4.972	5.223	5.475	5.726	5.223
Price control deliverables - high case	£m	3	0.044	0.044	0.044	0.044	0.044	0.044
Totex scenarios - high case – total	£m	3	20.697	26.538	28.429	28.898	27.254	26.363
Company view of DD Totex scenarios - low case								
Wholesale water costs - low case	£m	3	-9.682	-10.292	-10.813	-13.199	-11.085	-11.014
Wholesale wastewater costs - low case	£m	3	-19.251	-29.283	-32.593	-30.336	-30.449	-28.382
Retail costs - low case	£m	3	-0.176	-0.183	-0.191	-0.199	-0.208	-0.192
Bioresources costs - low case	£m	3	-3.964	-5.319	-6.270	-5.841	-6.022	-5.483
Additional control costs - low case	£m	3	-5.270	-5.867	-6.467	-6.523	-6.715	-6.168
Price control deliverables - low case	£m	3	-1.180	-1.180	-1.180	-1.180	-1.180	-1.180
Totex scenarios - low case – total	£m	3	-39.522	-52.125	-57.514	-57.279	-55.659	-52.420
Company view of DD impact on RoRE - high case								
Wholesale totex RoRE - high case	%	2	0.86%	1.08%	1.11%	1.08%	0.97%	1.02%
Retail totex RoRE - high case	%	2	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
Totex RoRE - high case	%	2	0.91%	1.13%	1.17%	1.13%	1.03%	1.08%
Impact of changes proposed by company in representations on high case								
Wholesale totex RoRE - impact on high case	£m	3	-1.441	-1.668	-1.794	-1.466	-1.754	-1.625
Retail totex RoRE - impact on high case	£m	3	0.178	0.187	0.197	0.207	0.217	0.197
Totex RoRE - impact on high case	£m	3	-1.263	-1.480	-1.596	-1.259	-1.537	-1.427
Impact on RoRE on high case - Company view of representations								
Wholesale totex RoRE - representations high case	%	2	0.79%	1.00%	1.03%	1.02%	0.90%	0.95%
Retail totex RoRE - representations high case	%	2	0.06%	0.07%	0.07%	0.07%	0.07%	0.07%
Totex RoRE - representations high case	%	2	0.86%	1.07%	1.10%	1.09%	0.97%	1.02%
Impact on RoRE on low case - Company view of representations								
Wholesale totex RoRE - representations low case	%	2	0.11%	0.34%	0.43%	0.36%	0.38%	0.32%
Retail totex RoRE - representations low case	%	2	-0.03%	-0.07%	-0.07%	-0.07%	-0.07%	-0.06%
Totex RoRE - representations low case	%	2	-1.42%	-1.66%	-1.69%	-1.66%	-1.49%	-1.58%

- If we were to set common ODIs with common incentive rates, centralised customer research based on compensation was unlikely to produce meaningful results. Bottom-up stated preference WTP results could be triangulated with specific top down ODI research.



Ofwat's attempt to produce top down customer research did not provide entirely meaningful results, and even if it did the translation of the customer valuation through to individual outcome incentives was likely to be a fruitless exercise without some measures of changes in risk in order to calculate a marginal benefit value. The attempts to translate the collaborative customer research not surprisingly did not produce useful results. We welcome Ofwat's recognition of the limitation of the collaborative research approach when it was applied in practice to ODI rates. The alternative of triangulating incentive rates as a percentage of RORE into High, Medium and Low categories includes more subjective judgement than we believe appropriate. As part of our plan we always intended to develop the research approach we set out in our Future Ideas Lab Proposal. This research was successful in providing ODI incentive values for our plan based on robust and compelling research. Whilst for our plan we have based this on our customers' views, we also tested the methodology with a smaller national sample and the approach could easily be replicated in advance of draft and final determinations. This approach is set out in the research report from ICS Consulting [Outcome Delivery Incentives Research – Informing top-down Incentives for PR19 – September 2023].

The approach is two-fold – it tests the relative importance of individual incentives, and then pooled groups of incentives. Customer weights between performance commitments are also established through a “best worst” series of choices. Their view on the size of overall package of incentives was a cap/collar of £5 per incentive per annum, with little difference between the national and SWB/BRL samples in either case.

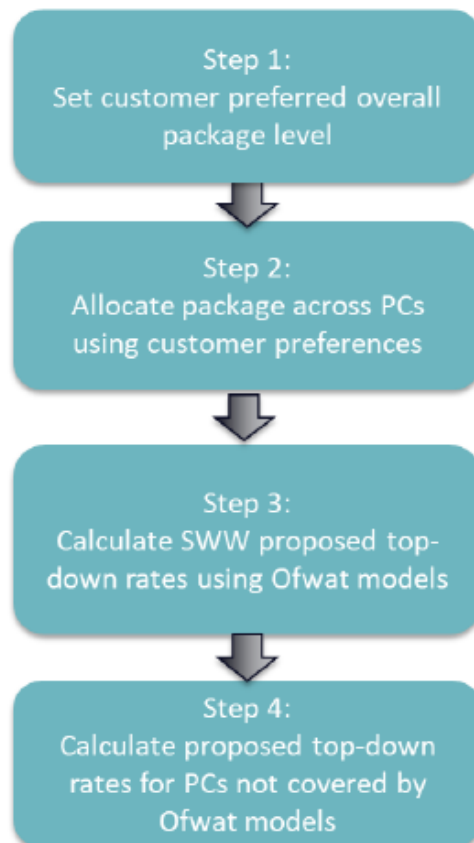
As well as incentive rates, the research also helps to demonstrate customer support for ODI design features. As well as a balanced approach to incentives, there remains strong customer support for third party impacts, weather, data uncertainty and new metrics risk to be taken into account in setting a balanced suite of performance incentives.

We used a geometric mean between method 1 (importance scores) and method 2 (best worst comparison exercise), in order to derive the relative weight of value that should be applied to each incentive area (£5 equating to c2% of RORE)

Table C1.3: ODI customer research comparison

Performance commitment	Ofwat customer research				South West /Bristol customer research			
	1	2	3	Ofwat proposed ranking	1	2	Geometric mean	SWW customer ranking
Internal sewer flooding	1	H	84%	H	7.3	1.3	3.1	M
External sewer flooding	2	H	84%	H	7.4	1.4	3.2	M
Water supply interruptions	3	H	83%	H	7.2	1.0	2.7	M
Compliance risk index (CRI)	4	H	87%	H	7.8	2.0	3.9	H
Customer contacts	5	H	87%	H	7.2	0.8	2.4	L
Discharge permit compliance	-	M	82%	M	7.7	1.6	3.6	H
Serious pollution incidents	6	M	82%	M	7.7	2.1	4.0	H
Storm overflows	7	L	82%	M	7.2	0.9	2.5	L
Total pollution incidents	8	M	82%	M	7.1 using minor	0.8 using minor	2.4	L
River water quality	9	M	82%	M	7.5	1.7	3.6	H
Biodiversity	-	M	69%	M	7.2	0.9	2.6	M
Asset health 1: Mains repairs	-	-	78%	M	7.4	1.7	3.5	M
Asset health 2: Sewer collapses	-	-		M	7.3	1.2	3.0	M
Asset health 3: Unplanned outage	-	-		M	7.0	0.9	2.6	M
Leakage	10	M	81%	M	7.6	1.5	3.3	M
Per capita consumption	10	L	79%	L	7.1	1.1	2.8	M
Business demand	10	L	79%	L	6.9	0.7	2.1	L
Operational GHG emissions	-	L	68%	L	6.9	0.7	2.2	L
Bathing water quality	11	L	82%	L	7.7	1.6	3.5	H

ICS Consulting also prepared a further report setting out the calculation of incentive rates from this research [PR24 Outcome Delivery Incentive Rates – A customer informed top-down approach to setting ODIs]. To be consistent with the Ofwat approach to PR24, we used the original Ofwat top-down rate models in order to use the research and customer preferences to derive our incentive rates. ICS consulting has produced a further think piece [Worthless or Priceless? What is the value of listening to customers when setting outcome delivery incentives] which reprises the journey of looking beyond customer WTP surveys in setting incentives. It is a journey for South West Water that started at PR04 and when we look at the PR24 DD incentives, is where our thoughts first return. We are not dogmatic about incentive rates, they are only one way of addressing outcomes RoRE balance, but the customer voice aspect means it is our first point of call after the service levels we propose.



The geometric mean relative to the average weighting produces the % of regulated equity, which can then be used to calculate incentive unit rates. This is compared below to the Ofwat judgement (based on interpretation of measures as High, Medium or Low)

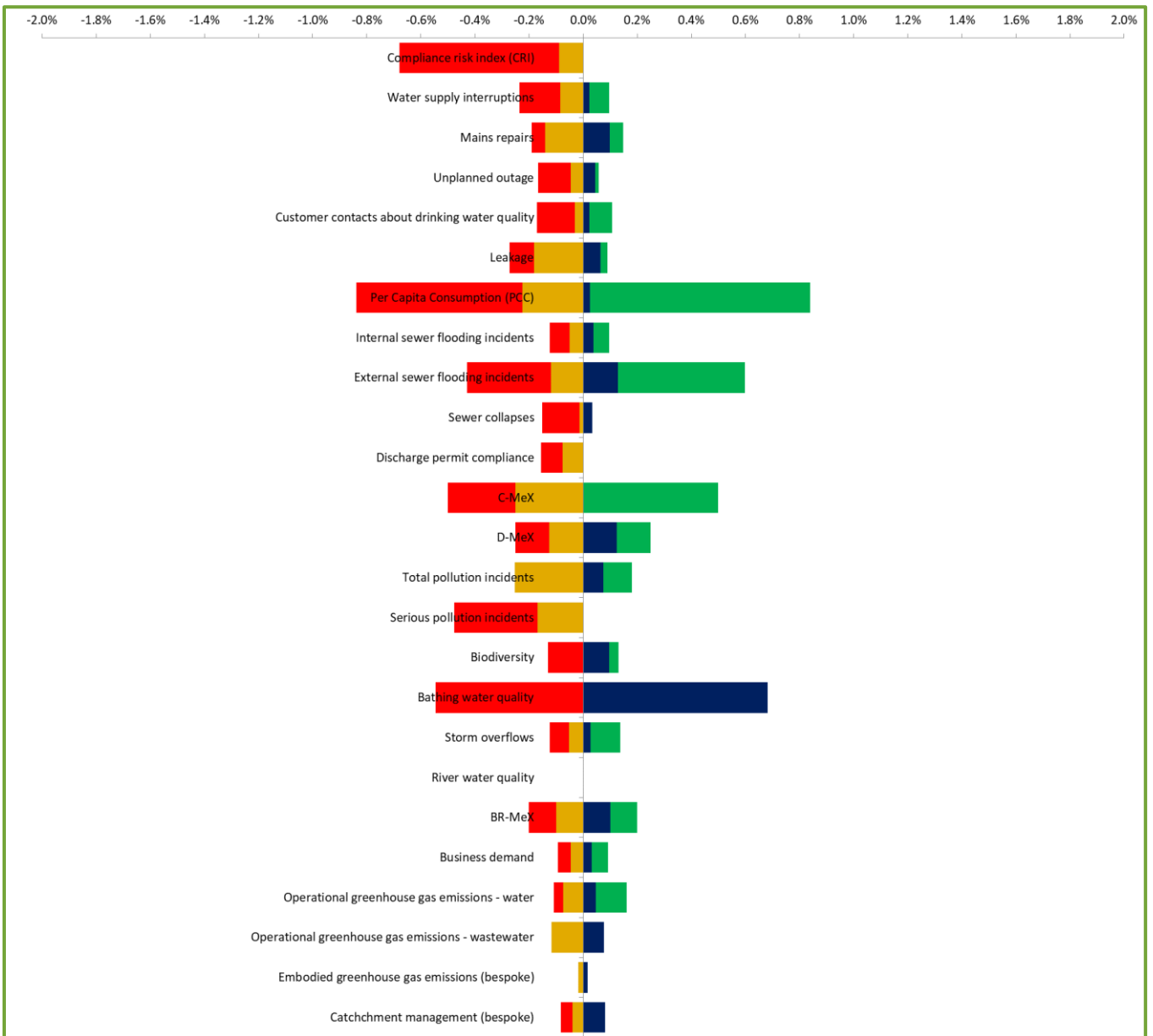
Performance commitment	Ofwat priority	Ofwat intention	SWW geometric mean	SWW customer priority	Relative to average	SWW proposed
Storm overflows	M	0.5%	2.5	L	0.8	0.18%
Total pollution incidents	M	0.5%	2.4	L	0.8	0.17%
River water quality	M	0.5%	3.6	H	1.2	0.25%
Biodiversity	M	0.5%	2.6	M	0.9	0.18%
Asset health 1: Mains repairs	M	0.5%	3.5	M	1.2	0.25%
Asset health 2: Sewer collapses	M	0.5%	3.0	M	1.0	0.21
Asset health 3: Unplanned outage	M	0.5%	2.6	M	0.9	0.18%
Leakage	M	0.5%	3.3	M	1.1	0.24%
Per capita consumption	L	0.4%	2.8	M	0.9	0.20%
Business demand	L	0.4%	2.1	L	0.7	0.15%
Operational GHG emissions	L	0.4%	2.2	L	0.7	0.15%
Bathing water quality	L	0.4%	3.5	H	0.7	0.15%
Catchment management	-	N/a	2.5	L	0.8	0.18%
Carbon from construction	-	N/a	2.0	L	0.7	0.14%

Performance commitment	Ofwat priority	Ofwat intention	SWW geometric mean	SWW customer priority	Relative to average	SWW proposed
Internal sewer flooding	H	0.6%	3.1	M	1.0	0.22%
External sewer flooding	H	0.6%	3.2	M	1.1	0.23%
Water supply interruptions	H	0.6%	2.7	M	0.9	0.19%
Compliance risk index (CRI)	H	0.6%	3.9	H	1.3	0.28%
Customer contacts	H	0.6%	2.4	L	0.8	0.17%
Discharge permit compliance	M	0.5%	3.6	H	1.2	0.25%
Serious pollution incidents	M	0.5%	4.0	H	1.4	0.29%

The Incentive rates and outcomes design are set out in our separate outcomes document. In this section we describe the overall risk and return range. We have tested this in a number of ways. The overall outcomes range we have established through our design is -5.2% to +3.9%, including the range of caps and collars. The more likely P10 to P90 range is broadly symmetrical at -2.0% to +1.7%. This is only achievable with the ODI design that we present, alongside the use of our own incentive rates. Given our approach to minimising bills this is therefore part of a balanced plan package and should be considered as a whole.

ODI Incentive range (£m p.a.)

The yellow and blue bars represent the P10 and P90 ranges for each incentive for our DD response. Red and dark green bars fall outside of the P10 and P90 expected performance range, and light green represents the potential impact of enhanced ODI performance incentive rates.



For our business plan we tested our ODI design through with a number of scenarios – this covered both SWB and BRL separate ODIs and incentive rates, but we consider the overall impact at appointee level. In our original plan we carried out a range of tests on risk and return

Table C1.4: Outcomes RoRE summary

Appointee level - % RORE average AMP8 p.a.	Ofwat incentive design P10	Ofwat incentive design P90	Our incentive design and rates P10	Our incentive design and rates P90
2022/23 actual performance rolled forward	-6.0% (-3.7% excluding GHG, RWQ and bespoke metrics which have AMP7 baselines)		-2.6% (-1.2%)	
2024/25 forecast performance rolled forward	-3.1%		-1.1%	
RORE range (additive P10/P90)	-6.1%	+2.8%	-2.8%	+1.6%
RORE range (sensitivity tested)			-2.0%	+1.7%
Probability distribution (linked) – SBB forecast performance	-2.1%	+1.3%	-0.9%	+0.8%
Probability distribution – Oxera WBB industry performance	-1.2%	-0.2%	-0.4%	0.0%

The additive P10/P90 range from the Ofwat incentive rates fell well outside the methodology and is not symmetrical. The impact of our ODI incentive rates and design (supported by customer research) reduces this range to within the overall RORE range, but was still not symmetrical.

Reviewing the range further we identified that there were aspects of performance (such as bathing water and internal flooding) that overall could produce a symmetrical RORE range of c+/- 2%, as part of a set of mitigating impacts within our plan (including both ODI design and uncertainty mechanisms). The delivery of this is uncertain, given the changes in ODI definition and the scale of impact. Removing some of the uncertainties (such as the assumption that there would be a penalty rate of 100 spills for storm overflows EDM non-operation and now deadband allowance, when the EA EDI operability expectation is 90%) cannot be economic or part of a balanced range of risk and return. Removing such aspects of potential PR24 incentives is necessary, which when combined with our forecast performance, suggests a performance range of c.+1% to -1% which provides some headroom for delivery uncertainty. We do not take into account in this analysis the performance uncertainty associated with regulator reclassification of performance metrics, such as the potential removal of no impact incident classification for pollution incidents.

We applied a simple probability distribution between P10 and P90 levels of performance, using 2022/23 performance between the 10th and 25th percentile and 2024/25 performance between the 25th and 40th percentile. For outperformance we varied between neutral ODI performance, 2024/25 performance and if 2030 performance targets were delivered in all years between the 40th and 90th percentile, depending on the overall impact.

We have repeated the Monte-Carlo simulation elements for the DD response. We retain our view that an additive view works best, and we have not updated the original Oxera analysis – the reference for this work and supporting spreadsheets were provided with our original plan.

We have updated our analysis to reflect our view in the DD response of performance levels and ODI design. The difference between the two scenarios below therefore is the Ofwat vs our incentive rates. The gap between the -6.6% to +2.1% outcomes range and the -2.8% to +1.1% shown here for the Ofwat incentive rates is the impact of changes to performance level and ODI design changes (“what you believe about risk differences”). Here we focus on the “what you believe about incentive rate differences”.

As part of this analysis we linked probabilities for the metrics where performance can be aligned for exogenous impacts such as weather events:

An example of the annual distribution of incentive performance (£m) is shown below. As part of this analysis we linked probabilities for the metrics where performance can be aligned for exogenous impacts such as weather events:

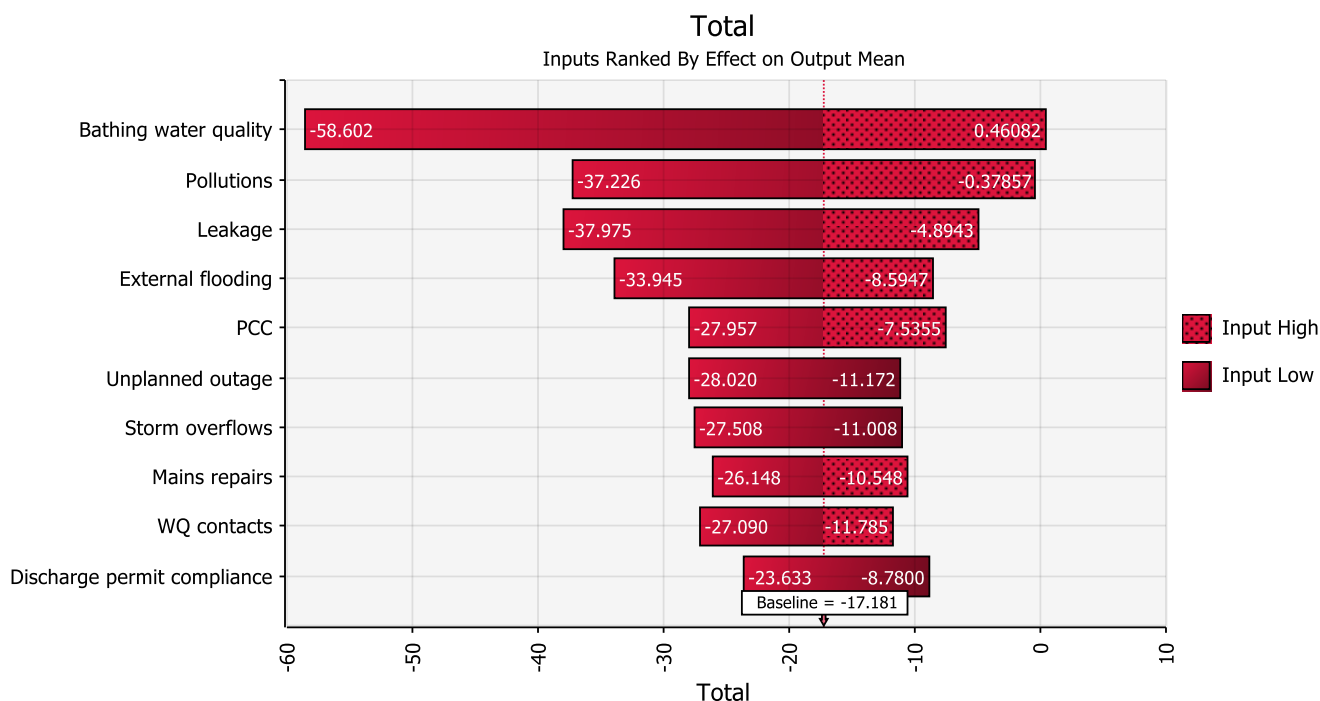
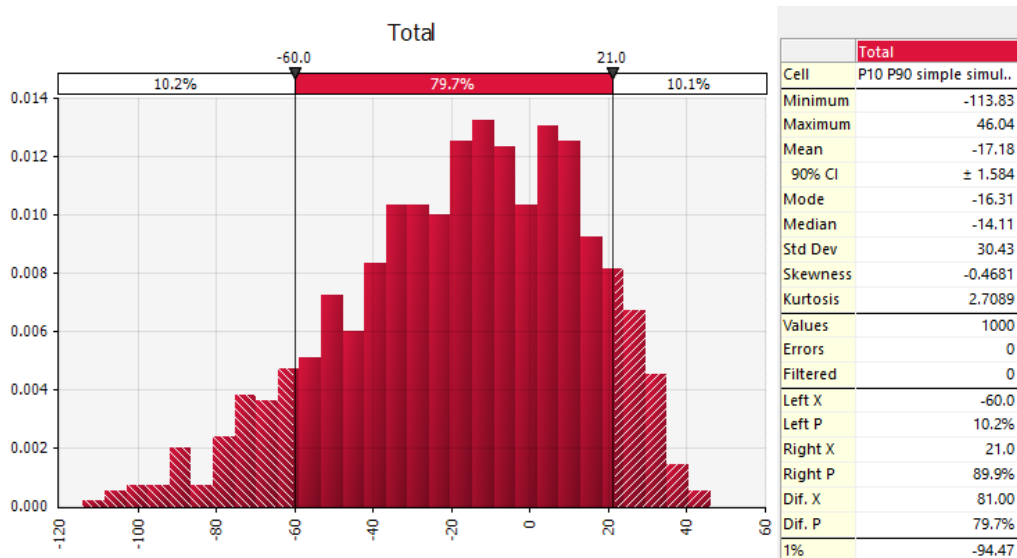
Table C1.5: Monte Carlo simulation probability framework (£m)

		10%	25%	40%	70%	90%
	P10	22/23	24/25	Target	24/25	P90
CRI	-1.9	-0.9	-0.9	-0.3	0.0	0.0
Supply interruptions	-2.1	-1.1	-0.6	0.0	0.0	0.6
WQ contacts	-1.6	-1.0	-0.3	0.0	0.1	0.7
Mains repairs	-3.4	-2.0	0.0	0.0	0.1	2.4
Unplanned outage	-2.6	-0.4	0.0	0.2	0.2	0.7
Pollutions	-8.4	-8.0	-0.4	0.0	0.1	1.0
Serious pollution incidents	-4.2	-1.4	0.0	0.0	0.0	0.0
Discharge permit compliance	-2.0	-1.5	-1.3	0.0	0.0	0.0
Internal flooding	-1.3	-0.2	-0.1	0.3	0.3	0.3
External flooding	-6.6	-2.9	-0.9	0.0	0.2	3.1
Sewer collapses	-1.0	-0.3	-0.3	0.0	0.6	0.8
Storm overflows	-3.7	-2.2	-0.6	-0.2	0.0	0.0
Leakage	-4.2	-4.0	0.0	0.0	0.8	1.1
PCC	-5.7	-3.4	-1.6	-1.4	0.0	4.7
Business demand	-0.3	-0.3	-0.2	-0.1	0.0	0.0
Bathing water quality	-15.8	-10.6	8.4	15.8	15.8	15.8
Operational GHG water	-1.8	-1.4	-0.7	0.0	0.7	1.8
River water quality	0.0	0.0	0.0	0.0	0.0	0.0
Operational GHG wastewater	-2.6	-2.1	-1.5	0.0	1.5	2.6
Catchment management	-7.1	-1.4	-1.0	0.0	1.0	2.0
Carbon emissions from construction	-1.3	0.0	0.0	0.1	0.3	0.9
Biodiversity	0.0	0.0	0.0	0.0	0.0	0.0

For linked analysis we recognised a connection and assigned the same probabilities to:

- CRI probabilities linked to WQ contacts and unplanned outage
- Pollution incidents, serious pollution incidents and external flooding
- PCC and internal flooding have opposite probabilities (dry and wet weather)
- Mains repairs and leakage
- Business demand and PCC

Running Monte-Carlo simulation over our incentive design and rates demonstrated that they provided a balance of risk and return, without asymmetry that would require incentives adjustment. At the extremes of performance there can be significant penalties, but these are remote enough to be mitigated by the ODI aggregate sharing proposal within the PR24 methodology.



The main factors influencing the outcome relates to bathing waters, offsetting the risk of pollution incident risk.

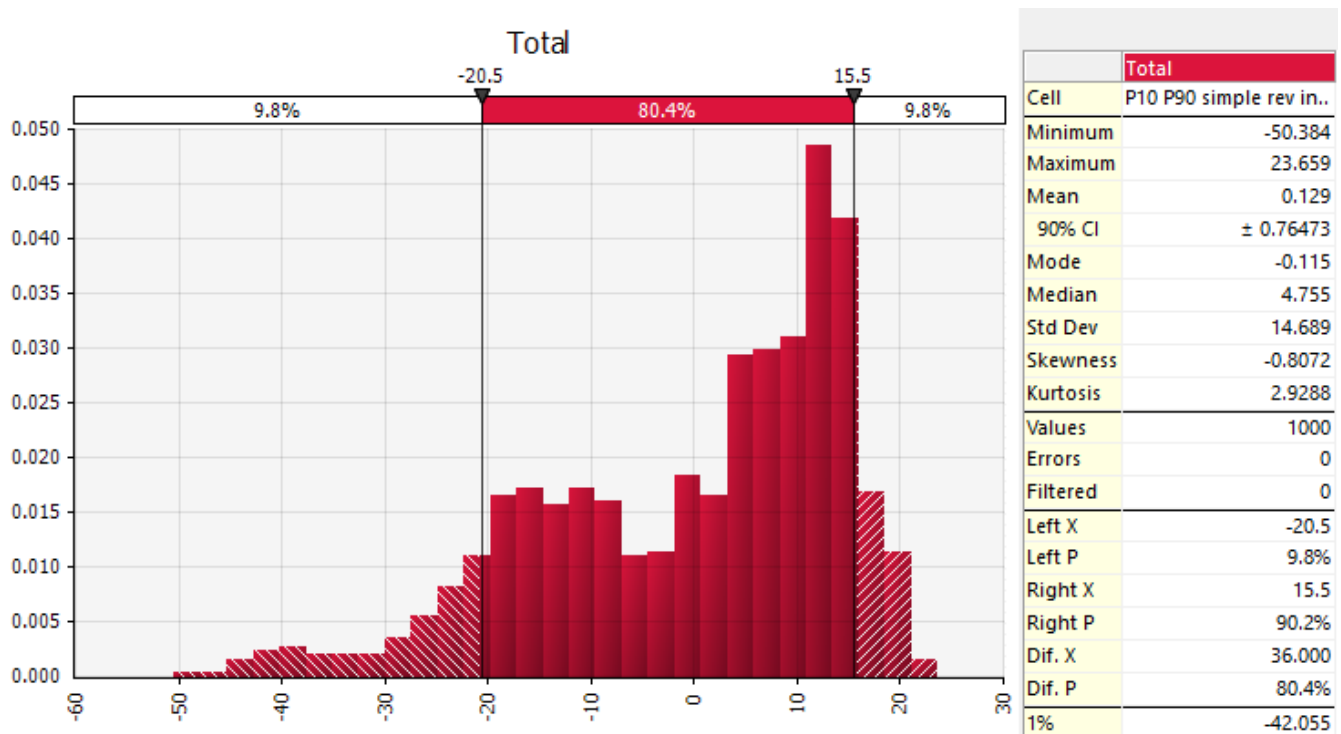
The Ofwat incentive rates framework applied to our view of target and risk remains unbalanced – both using individual probability distributions or linked distributions. Our analysis avoids using normal distributions as this narrows risk when service levels are improving compared to past delivery risk data.

Table C1.6: Outcomes RoRe analysis – Ofwat incentive rates

Ofwat incentive rates	P10	Median	P90
Skew analysis (£m)	-60	-17.2	21.0
RORE	-2.4%	-0.7%	0.8%
Linked risk analysis (£m)	-70	-17.2	28.0
RORE	-2.8%	-0.7%	1.1%

This analysis which informed the CMA decision to aim up at PR19 shows a significant downside and a need for a c0.7% uplift on the cost of equity, just because of Ofwat’s ‘stronger’ incentive rates.

Correcting this produces an incentive range that is balanced overall. There is still a net downside skew with a long tail of potential risk outside of P10 levels. This is the type of risk that the sector must accommodate (it could be constrained further with incentive caps or more dynamic incentives). However, the aggregate sharing mechanism at c£100m would protect from more extreme risks and would be a backstop in this situation. This level of incentives risk should be within the cost of equity that investors expect – mean zero outperformance with improvements in most years that act as a buffer for exceptional risks arising to performance.



The overall distribution and linked risk analysis produces small net OPI outperformance (assuming performance continues to improve so the P50 level matches the target). This reflects SBB assessment of deliverability plans, rather than a notional industry position.

Table C1.7: Outcomes RoRe analysis – our incentive rates

Our incentive rates	P10	Median	P90
Skew analysis (£m)	-20.5	0.2	13.5
RORE	-0.8%	0.0%	0.5%
Linked risk analysis (£m)	-20.5	0.1	15.5
RORE	-0.8%	0.0%	0.6%

Table ADD18

Table ADD18 shows the total ODI impact and incentive range. The split by price control reflects that there are no retail ODIs at PR24. The Bristol ODIs are shown as part of the additional controls. For this notional estimate we have taken an additive approach as the assumption of normality in Ofwat's Monte Carlo simulation approach is not supported by the evidence. We have also taken into account Oxera's conclusions in their original WBB analysis. We show this above with the long tail of downside risk compared to the low range of upside risk that can be derived from simulations. This supports the additive approach in order to consider the overall RoRE range. The overall impact of ODI protections we have proposed to avoid excessive penalties overall results in a balanced RoRE range, with a small net downside of -0.2% from the one-sided penalty only incentives. We do not believe this to be material as is demonstrated in our Monte Carlo simulation testing above.

We explain our view of the DD and have supporting analysis from Oxera which explores some of the incentives and also shows the comparison of our full framework ODI response [Oxera, August 2024, Outcome delivery incentive risk analysis: Exploring the balance of risk at PR24].

The focus on pollution incentives is part of our focussed framework which considers how incentives could be balanced with more selective changes to the Ofwat DD framework that our full framework response, which effectively returns to the incentives rate and design of our original plan, albeit with some service level changes.

We welcome Ofwat's recent recognition that the DD incentives may need to be revisited, even if this is limited to water quality contacts and discharge permit compliance for WoCs initially.

We have considered two approaches – our ADD18 table reflects our full framework representation because there is a clear choice – between dramatic changes to Ofwat's DD approach (as proposed in our plan) that has a balance of risk and return, or more dramatic upside and downside which is at least balanced overall, if not wider. Either scenario is challenging to implement at this stage of PR24 but is essential as the Oxera analysis and current industry performance demonstrates. In summary we see a choice between:

- An outcomes 'focused' representation: in this representation we adopt Ofwat's incentive rates. But we also adjust a number of the performance commitments, in order to 'balance' the downside skew in Ofwat's draft determination. We show in our outcomes document the need for serious pollution and discharge compliance deadbands, and amending internal sewer flooding and catchment management targets and incentives, and bathing water targets, to offset pollution and downside risk in general.
- An outcomes 'full framework' representation: in this representation, we have reflected on how the focused framework still results in an ODI range above the indicative +/- 3% RoRE range. These impacts are being driven by the strong incentive rates Ofwat has applied, so we have created a package based on our business plan incentives and various ODI protections, such as the inclusion of deadbands for external sewer flooding and for storm overflows.

Both frameworks assume our business plan bespoke ODIs are adopted – different RORE ranges would result if bespoke ODIs are not included in the outcomes framework. There are other potential solutions, such as the dynamic incentives we suggested in our original plan. These options are now unfortunately too late to agree ahead of the implementation of PR24. A focused or full framework adjustment for what should now be an interim step before a reset for PR29 is the most practical step.

Table C1.8: ODI RoRE ranges (P10/P90)

Approach	Underperformance as a % of RORE	Underperformance £m p.a. (averaged)	Outperformance as a % of RORE	Outperformance £m p.a. (averaged)
PR24 methodology: Ofwat's top-down approach to setting ODIs (with limited ODI protections)	-5.9%	-120	3.9%	80
Business Plan: our proposal	-2.0%	-43	1.7%	37
PR24 draft determinations: Ofwat's risk analysis	-1.4%	-32	0.9%	19
PR24 draft determinations: our risk analysis	-6.6%	-166	2.1%	52
PR24 draft determinations: focused framework	-4.8%	-120	4.1%	103
PR24 draft determinations: full framework representation (included in ADD18 representation)	-1.8%	-44	1.6%	40

Our outcomes response provides the specific analysis on outcomes which we use in table ADD18. We highlight above the plan, DD view and response, the latter two being included within ADD18.

Line Description	Units	DPs						Average
			2025-26	2026-27	2027-28	2028-29	2029-30	2025-30
Company view of DD Outcome Delivery Incentives scenarios - high case								
Water ODIs - high case	£m	3	27.034	25.370	23.420	18.469	16.831	22.225
Wastewater ODIs - high case	£m	3	31.086	27.581	22.999	19.618	10.495	22.356
Retail ODIs - high case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Additional control ODIs - high case	£m	3	6.752	6.508	6.324	6.154	7.443	6.636
Outcome Delivery Incentives scenarios - high case ~ total	£m	3	64.871	59.459	52.744	44.241	34.769	51.217
Company view DD Customer measures of experience scenarios - high case								
C-MeX - high case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
D-MeX - high case	£m	3	2.717	2.808	2.925	3.056	3.182	2.938
BR-MeX - high case	£m	3	1.811	1.872	1.950	2.037	2.121	1.959
Customer measures of experience scenarios - high case ~ total	£m	3	4.529	4.681	4.875	5.093	5.304	4.896
Company view of DD Outcome Delivery Incentives scenarios - low case								
Water ODIs - low case	£m	3	-44.351	-50.093	-53.762	-57.620	-64.144	-53.994
Wastewater ODIs - low case	£m	3	-74.362	-77.656	-80.969	-84.116	-88.541	-81.129
Retail ODIs - low case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Additional control - low case	£m	3	-25.461	-26.467	-27.077	-27.995	-29.674	-27.335
Outcome Delivery Incentives scenario - low case ~ total	£m	3	-144.173	-154.216	-161.809	-169.731	-182.359	-162.458
Company view of DD Customer measures of experience scenarios - low case								
C-MeX - low case	£m	3	-11.322	-11.702	-12.187	-12.733	-13.259	-12.241
D-MeX - low case	£m	3	-2.717	-2.808	-2.925	-3.056	-3.182	-2.938
BR-MeX - low case	£m	3	-1.811	-1.872	-1.950	-2.037	-2.121	-1.959
Customer measures of experience - low case ~ total	£m	3	-15.850	-16.383	-17.062	-17.827	-18.563	-17.137
Company view of DD impact on RoRE - high case								
Outcome delivery incentives RoRE - high case	%	2	2.86%	2.54%	2.16%	1.74%	1.31%	2.12%
Customer measures of experience RoRE - high case	%	2	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
Company view of DD impact on RoRE - low case								
Outcome delivery incentives RoRE - low case	%	2	-6.37%	-6.59%	-6.64%	-6.66%	-6.88%	-6.63%
Customer measures of experience RoRE - low case	%	2	-0.70%	-0.70%	-0.70%	-0.70%	-0.70%	-0.70%
Outcome delivery incentives RoRE - impact on low case	£m	3	101.182	110.309	116.752	123.910	134.230	117.276
Customer measures of experience RoRE - impact on low case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Impact on RoRE on high case - Company view of representations								
Outcome delivery incentives RoRE - representations high case	%	2	1.90%	1.68%	1.59%	1.47%	1.36%	1.60%
Customer measures of experience RoRE - representations high case	%	2	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%
Impact on RoRE on low case - Company view of representations								
Outcome delivery incentives RoRE - representations low case	%	2	-1.90%	-1.88%	-1.85%	-1.80%	-1.81%	-1.85%
Customer measures of experience RoRE - representations low case	%	2	-0.70%	-0.70%	-0.70%	-0.70%	-0.70%	-0.70%

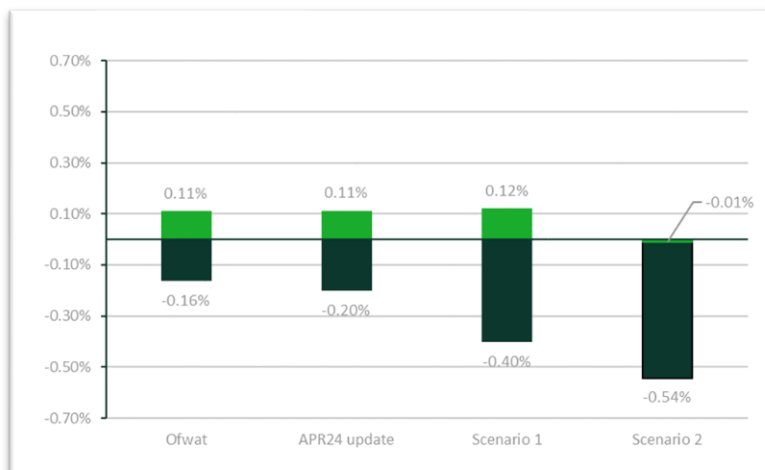
Our representation on C-MeX explains the customer experience measures skew in our view of the DD of +0.2% to -0.7%. Removing the UKCSI benchmarking restores the upside to +0.7%, which is our view of the symmetrical upside/downside of customer experience measures as a whole.

Oxera assessment of outcome risk

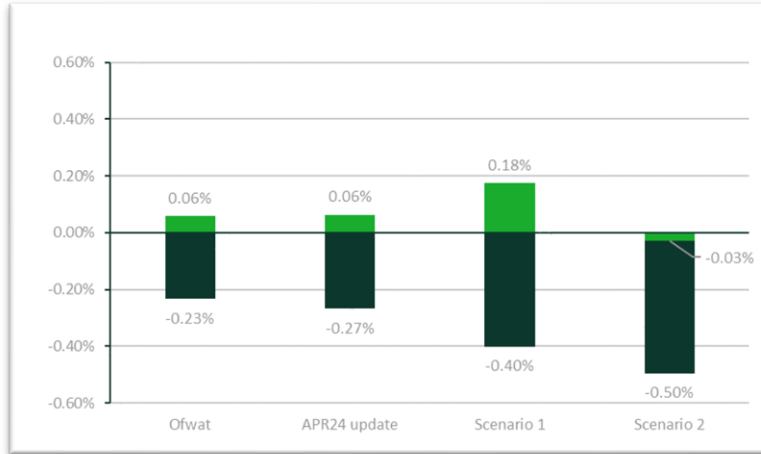
The Oxera analysis uses Ofwat's additive and Monte Carlo ODI modelling in order to demonstrate the limitations of Ofwat's assumptions. It demonstrates that there is a wider downside skew.

- The report focuses on a limited number of ODIs, with illustrations as examples for Pollutions (POL) and Supply Interruptions (WSI)

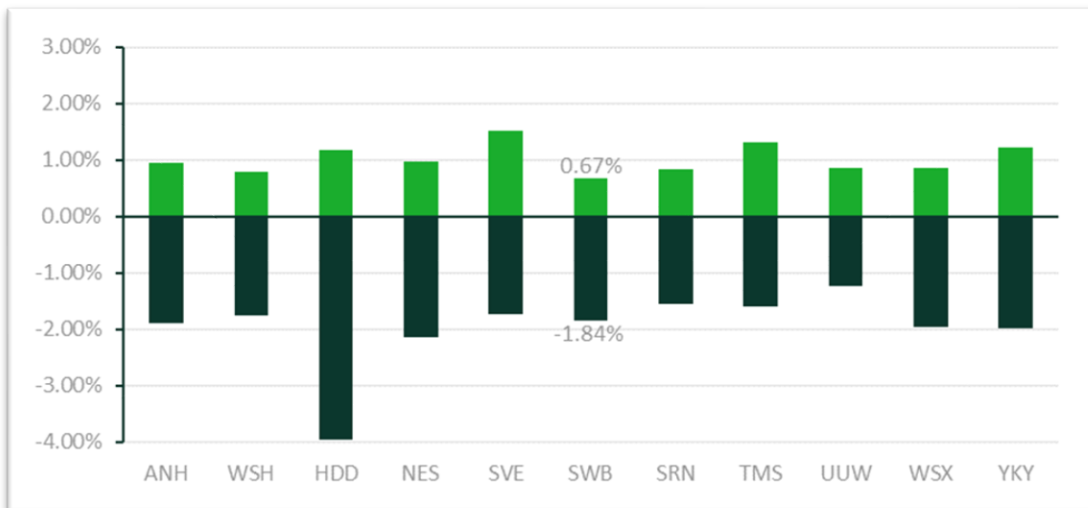
Pollution ODI range



Water Supply Interruptions ODI range



- Subsequently there are charts that show overall risk at the wholesale wastewater or water level. The report presents revised RORE results overall across PCs – once the above adjustments are made to the two individual PCs concerned and risk is recalculated. This therefore underestimates the overall limitations of Ofwat’s analysis, as similar adjustments may be needed for all the other PCs.



- The section on the Monte Carlo simulation models look at overall risk at the wholesale wastewater or water level, once the above adjustments to the individual PCs (POL and WSI) have been made - plus incorporation of our ODI rates, protections, etc across all PCs.
- Oxera’s pollution P10 downside risk of -0.54% compares to our analysis of -1.2% and -0.5% for supply interruptions compared to our P10 analysis of -0.2%.
- This demonstrates there are a number of ways of assessing downside risk. But just for two metrics the Oxera analysis suggests -1.04% downside and our analysis -1.4% downside, compared to Ofwat’s total assessment for all metrics of outcomes downside at -1.4% (-0.39% for these metrics in the additive model).

What base buys and the service cost relationship

We have updated the original What Base Buys tool developed for us by Oxera to include 2023/24 APR industry data. We observe in the main section of this document the continued worsening of both totex and outcomes performance across AMP7, such that there are now no companies outperforming on both totex and outcomes.

This emphasises the portfolio risk at PR24, the risk that Ofwat picks the upper quartile or better on granular cost models, performance levels and outcome risk assessments. The resulting output is a risk and return balance that no company can meet, and for some companies results in a vicious spiral of cost and outcome underperformance that results in financeability challenges. We are an outstanding company and have been resilient so far to the trends in this framework, spending significant additional money as cost and performance risks emerge. The regulatory framework will need a reset.

Our What Base Buys analysis helps to identify:

- a) Where such a reset is required, looking at individual metrics
- b) At a high level looking at the trends of the cost benchmark compared to other companies
- c) The trends in future targets and performance that come from historical (base and enhancement expenditure).

This is a powerful tool. Together it provides insights on areas where performance can be stretched, and whether we can expect a cost – service relationship for further investigation. This, rightly, were questions Ofwat asked in the original methodology and we took that on board in stretching cost efficiency and service levels in our plan. Where we have a challenge is the incentives framework that comes with this in the DD – it diverges from our outstanding plan. We have not completed a full update with Oxera for 2023/24 data but share our internal update model with Ofwat (unaudited) as part of this response. We hope that Ofwat can use this data set as part of the engagement needed up to the end of PR24 and beyond.

We have taken the decision not to use this tool to push back on DD service levels in general. The original dataset helped support the stretching performance that made our plan outstanding. The table here helps to indicate where Ofwat should consider moderating incentive target and design risk, and where not doing so is likely to result in overspending (service-cost relationship) and large outcome incentive penalties (Portfolio Risk). This is in addition to ensuring that incentive rates a) balance risk and return and b) reflect economic value rather than penal rates.

We summarise in the table below our updated analysis:

Metric	WBB output	Conclusion on risk	Conclusion on service-cost relationship	PO ⁹
Leakage	<p>Industry (weighted average - due to base expenditure) regression: $y = -0.444x + 9.6741$, $R^2 = 0.7816$</p> <p>Benchmark (UQ weighted average - due to base expenditure) regression: $y = -0.1032x + 7.4995$, $R^2 = 0.7479$</p>	<p>Relatively low evidence of increasing risk. Benchmark companies show flattening off of performance improvement</p>	<p>The trend from base performance is rising rather than reducing as shown. Clear evidence therefore of increasing base cost, supporting a cost adjustment claim</p>	
Mains repairs	<p>Industry (due to base expenditure) regression: $y = 0.5278x + 172.77$, $R^2 = 0.0165$</p> <p>Benchmark (due to base expenditure) regression: $y = 0.1987x + 158.12$, $R^2 = 0.0022$</p>	<p>No statistical trend in performance. Weather impacts are significant. Conclusion is to protect through ODI design (e.g. weather)</p>	<p>Service-cost relationship is linked to leakage.</p>	
PCC	<p>Industry (weighted average) regression: $y = 0.454x + 150.06$, $R^2 = 0.0367$</p> <p>Benchmark (due to base expenditure) regression: $y = 0.1693x + 149.82$, $R^2 = 0.0047$</p>	<p>No statistical trend. Ofwat stretch of PCC target beyond WRMP therefore not justified and carries significant delivery risk</p>	<p>No evidence of service cost relationship. Ofwat therefore should provide significant enhancement funding to support any reduction and stretch on PCC targets.</p>	

⁹ Assessment of RAG for potential for portfolio risk – the risk that one company could not be good (upper quartile) of enough aspects of cost and service. This represents whether the notional framing is realistic to actual companies who are efficient and performing in line with the efficiency cost.

Metric	WBB output	Conclusion on risk	Conclusion on service-cost relationship	PO ⁹
Business demand	<p>megallitres per day</p> <p>2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030</p> <p>Industry (weighted average) Benchmark (UQ weighted average) Benchmark 2030 target (draft WRMP24 ambitions) Industry 2030 target (draft WRMP24 ambitions) Predicted - Industry Predicted - Benchmark</p> <p>$y = 21.795x + 1987.3$ $R^2 = 0.1698$</p> <p>$y = -8.0643x + 1908.8$ $R^2 = 0.0197$</p>	Rising trend in business demand post Covid-19 is within business plan trendlines	No evidence of service cost relationship Ofwat should provide significant enhancement funding to support any reduction and stretch on business demand targets.	
Unplanned outage	<p>Outages as share of peak capacity (%)</p> <p>2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030</p> <p>Industry (unweighted average) Benchmark (UQ unweighted average) Predicted - Industry Predicted - Benchmark</p> <p>common target*: 2.34 Industry predicted: 1.4 Benchmark predicted: 1.1</p>	Downward trend, but not in cost benchmark companies, where there is a flat / increasing trend.	No apparent service cost relationship	
Water Quality Contacts	<p>Nr of contacts per 1,000 population</p> <p>2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030</p> <p>Industry (due to base expenditure) Benchmark (due to base expenditure) Predicted - Industry Predicted - Benchmark</p> <p>$y = 0.0137x + 2.854$ $R^2 = 0.0888$</p> <p>$y = -0.0026x + 0.0111$ $R^2 = 0.3375$</p>	Downward trend in cost benchmark companies	Relationship with enhancement expenditure and company specific base cost allowances for mains repairs	

Metric	WBB output	Conclusion on risk	Conclusion on service-cost relationship	PO ⁹
CRI	<p>Numerical CRI score</p> <p>2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030</p> <p>Industry (due to base expenditure) Benchmark (due to base expenditure) Predicted - Industry Predicted - Benchmark</p> <p>Common target: 0 Common deadband: 2 PR24 target</p> <p>$y = 0.4008x + 3.0235$ $R^2 = 0.4718$</p> <p>$y = 3.8599e^{0.009x}$ $R^2 = 0.0881$</p>	<p>Upward trend in performance</p> <p>Penalty only ODI - should include an increasing deadline</p>	<p>Potential area of cost service relationship.</p>	
Sewer collapses	<p>Sewer collapses/1,000km of mains</p> <p>2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030</p> <p>Industry (weighted average) Benchmark (weighted average) Industry 2030 target (wbbb) Predicted - Industry Predicted - Benchmark</p> <p>$y = -0.2784x + 11.409$ $R^2 = 0.2177$</p> <p>$y = -0.4698x + 10.661$ $R^2 = 0.8875$</p>	<p>Potential future trend risk – cost benchmark companies require a step change down in performance</p>	<p>Potentially</p>	
Storm overflows	<p>Adjusted spills per overflow</p> <p>2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030</p> <p>Industry (due to base expenditure) Benchmark (due to base expenditure) Predicted - Industry Predicted - Benchmark</p> <p>Common target: 20.0</p> <p>$y = 52.576e^{0.007x}$ $R^2 = 0.2921$</p> <p>$y = 67.888e^{0.004x}$ $R^2 = 0.6271$</p>	<p>Area of rising risk due to performance trends.</p> <p>Owat are likely to understate risk if removing observations from past risk analysis</p>	<p>Yes – lower 20 target from base below level either cost benchmark or average company achieved</p>	

Metric	WBB output	Conclusion on risk	Conclusion on service-cost relationship	PO ⁹
Pollution incidents		Increasing performance risks at both median and cost benchmark companies.	Yet to emerge, but will exist if pollution incident targets are stretched by 30% from PR19 2024/25 levels as proposed in DD	
Internal sewer flooding		Industry target levels set below benchmark and median cost companies, although there was a reducing trend in performance apparent	No clear pattern to suggest service cost relationship.	
External sewer flooding		Cost benchmark companies have better performance but adverse service trend	Suggests there is a service-cost relationship emerging	

Metric	WBB output	Conclusion on risk	Conclusion on service-cost relationship	PO ⁹
Discharge permit compliance	<p>The chart displays treatment work compliance percentages from 2018 to 2030. The y-axis ranges from 96.5% to 100%. The x-axis shows years from 2018 to 2030. Data points for Industry (due to base expenditure) are: 97.8 (2018), 98.4 (2019), 98.2 (2020), 98.8 (2021), 98.2 (2022), 98.4 (2023), 99.0 (2025), and 99.9 (2030). Benchmark (due to base expenditure) values are: 98.7 (2018), 98.6 (2019), 98.2 (2020), 99.1 (2021), 99.0 (2022), 98.6 (2023), and 99.0 (2025). Industry 2025 target is 98.4. Predicted - Industry values are: 98.2 (2020), 98.8 (2021), 98.2 (2022), 98.4 (2023), 99.0 (2025), and 99.9 (2030). Predicted - Benchmark values are: 98.7 (2018), 98.6 (2019), 98.2 (2020), 99.1 (2021), 99.0 (2022), 98.6 (2023), and 99.0 (2025). A common deadband of 99% is indicated.</p>	Convergence of cost benchmark and median company performance suggests deadband similar to PR19 ODI design remains valid	No service cost relationship apparent	
Serious pollution incidents	<p>The chart displays the number of serious pollution incidents per 10,000 km of sewers from 2012 to 2030. The y-axis ranges from 0 to 2.5. The x-axis shows years from 2012 to 2030. Data points for Industry (weighted average) are: 2.1 (2012), 1.2 (2013), 1.6 (2014), 1.2 (2015), 1.1 (2016), 1.0 (2017), 1.0 (2018), 1.1 (2019), 0.9 (2020), 0.8 (2021), 1.1 (2022), 0.8 (2023), 0.9 (2024), 0.9 (2025), 0.1 (2026), 0.1 (2027), 0.1 (2028), 0.1 (2029), and 0.1 (2030). Benchmark (UQ weighted average) values are: 1.0 (2012), 1.0 (2013), 1.0 (2014), 0.7 (2015), 0.5 (2016), 0.6 (2017), 0.3 (2018), 0.6 (2019), 0.2 (2020), 0.3 (2021), 0.5 (2022), 0.3 (2023), 0.1 (2024), 0.1 (2025), 0.1 (2026), 0.1 (2027), 0.1 (2028), and 0.1 (2030). Industry predicted(exp) values are: 0.7 (2025), 0.7 (2030). Benchmark predicted(exp) values are: 0.2 (2025), 0.2 (2030). Common target is 0. PR24 target is 0.1.</p>	Data suggests a deadband is required on a company specific (scaled) basis in order to manage risk	No service cost relationship apparent. Benchmark companies have better performance	

Other RoRE components

We explain our financing and revenue RoRE components in our main commentary. We adopt Ofwat’s revenue RoRE estimate, but we disagree with the DD that there is an upside on financing ODIs, which Ofwat use in the DD to offset outcomes downside. Even if there was such an upside, we do not think it can offset outcomes skew.

The overall RoRE view of the DD and the DD response align with the overall diagrams we present in the overview for this document.

Line Description	Units	DPs						Average
			2025-26	2026-27	2027-28	2028-29	2029-30	2025-30
Company view of DD Financing scenarios - high case								
New debt issuance - high case	£m	3	5.477	5.661	5.895	6.159	6.414	5.921
Inflation - high case	£m	3	9.057	9.362	9.750	10.187	10.607	9.793
Financing scenarios - high case ~ total	£m	3	14.534	15.022	15.645	16.346	17.021	15.714
Company view of DD Revenue & other impacts - high case								
Revenue - high case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other - high case - Please specify	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Revenue & other - high case ~ total	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Company view of DD Financing scenarios - low case								
New debt issuance - low case	£m	3	-5.845	-6.041	-6.292	-6.574	-6.845	-6.320
Inflation - low case	£m	3	-9.057	-9.362	-9.750	-10.187	-10.607	-9.793
Financing scenarios - low case ~ total	£m	3	-14.902	-15.403	-16.042	-16.761	-17.453	-16.112
Company view of DD Revenue & other - low case								
Revenue - low case	£m	3	-1.132	-1.170	-1.219	-1.273	-1.326	-1.224
Other - low case - Please specify	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Revenue & other - low case ~ total	£m	3	-1.132	-1.170	-1.219	-1.273	-1.326	-1.224
Regulated Equity as included in DD Financial Model								
Average Regulatory Capital Value (RCV) - financial model output	£m	3	5,031.817	5,200.924	5,416.643	5,659.276	5,892.998	5,440.332
Notional gearing	%	2	55%	55%	55%	55%	55%	55%
Average regulated equity	£m	3	2,264.318	2,340.416	2,437.489	2,546.674	2,651.849	2,448.149
Company view of DD impact on RoRE - high case								
Financing RoRE - high case	%	2	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%
Revenue & other RoRE - high case	%	2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RoRE - high case ~ total	%	2	4.62%	4.52%	4.17%	3.71%	3.18%	4.04%
Company view of DD impact on RoRE - low case								
Financing RoRE - low case	%	2	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%
Revenue & other RoRE - low case	%	2	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%
RoRE - low case ~ total	%	2	-9.52%	-10.22%	-10.41%	-10.32%	-10.38%	-10.17%
Impact of changes proposed by company in representations on high case								
Financing RoRE - impact on high case	£m	3	1.316	1.361	1.417	1.481	1.542	1.423
Revenue & other RoRE - impact on high case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
RoRE - impact on high case ~ total	£m	3	-11.643	-9.970	-3.483	4.791	13.123	-1.436
Impact of changes proposed by company in representations on low case								
Financing RoRE - impact on low case	£m	3	0.184	0.190	0.198	0.207	0.216	0.199
Revenue & other RoRE - impact on low case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
RoRE - impact on low case ~ total	£m	3	108.688	123.758	133.314	139.124	150.614	131.099
Impact on RoRE on high case - Company view of representations								
Financing RoRE - representations high case	%	2	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%
Revenue & other RoRE - representations high case	%	2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RoRE - representations high case ~ total	%	2	4.11%	4.09%	4.03%	3.90%	3.68%	3.96%
Impact on RoRE on low case - Company view of representations								
Financing RoRE - representations low case	%	2	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%
Revenue & other RoRE - representations low case	%	2	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%
RoRE - representations low case ~ total	%	2	-4.72%	-4.94%	-4.94%	-4.86%	-4.70%	-4.83%

Annex D: Building blocks of revenues

We set out below further detail and useful information of the building blocks of allowed revenue and outputs of our financial modelling.

Retail Cost and margins

The retail costs and margins apply through our area – Bristol and Bournemouth are single service allowances and South West area dual services. In our DD response, costs to serve and household numbers are per the draft determination, which overwrote our original cost to serves by customer type with a value equal for each customer group, but varying by year (the lack of variation by customer type doesn't impact bills as that depends on the relative expenditure by customer type). Apart from the margin increase to 1.2% and the interest rate to 4.9%, all other figures were left as per our BP.

Tax

Our DD response reflects the Business Plan except where Government policy on capital allowances and Ofwat guidance has changed. Government policy changes published post-BP impact on PR19 reconciliation models and the PR24 main financial model, resulting in:

- a) PR19 reconciliations – a material downwards revision of the PR19 revenue adjustment from the BP submission to the DD response model. This is due to the corrections made to the completion of table PD10 to extend full expensing from March 2023 to the end of AMP7.
- b) PR24 – a material downwards revision in the tax allowance and charge in the wholesale business from the BP to zero in the DD response model. This is as a result of the Government announcement in November 2023 to extend the full expensing rules indefinitely.

Current Government tax policies around capital allowances mean that the overall wholesale tax charge and allowance are zero across the period. However there is always the potential for changes in policy which will require future reconciliation, and the basis for the calculations should be robust to this. The main issues we have identified are:

- a) Deferred tax – the year end balance is not including the impact of any tax losses within the period. If at a future date tax is payable, tax losses would be utilised appropriately which would reduce the cash impact of any charges payable.
- b) Retail tax – where there is taxable profit and a tax charge within the Retail price control, this tax is being treated as being paid and showing up in the appointee cash flow. However, in reality, tax is paid at an overall statutory company level (with any necessary adjustments being made for presentation in the APR for the appointee level). Given the retail tax charge is not offset by a tax allowance within revenue, the current model treatment impacts on the appointee level financial statements and ratios, whereas it should be shown to reduce the wholesale tax loss (which should then impact on the deferred tax balance).

A query on this has been raised to Ofwat on the treatment of deferred tax and the retail tax charge (OFW-IBQ-SBB-028). Ofwat have responded that as part of their PR24 Final Determination modelling, they will consider whether changes to the modelling of tax are appropriate.

Allowed revenue

Table D1.1: Allowed revenue 2025-30

Allowed revenue 2025-30	Water resources	Water network plus	Wastewater network plus	Bioresources	Bristol water resources	Bristol Water network plus	Wholesale total
PAYG	118.703	654.250	501.958	171.825	74.691	285.297	1806.725
RCV run off	44.121	450.434	618.805	43.031	17.834	148.888	1323.113
Return on capital	54.832	353.315	455.434	24.556	24.112	102.898	1015.147
PR19 reconciliation adjustments	-0.302	-19.587	-23.483	-1.225	2.349	6.844	-35.405
Tax	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grants and contributions (price control)	0.000	11.845	12.270	0.000	0.000	3.515	27.630
Other income (non price control)	-1.235	-5.180	-4.845	0.000	0.000	0.000	-11.260
Innovation fund	0.000	10.956	8.251	0.000	0.000	4.859	24.066
Revenue reprofiling	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wholesale total	216.120	1456.033	1568.390	238.186	118.987	552.302	4150.017
Residential retail							278.881
Total							4428.898

Table D1.2: Profile of allowed revenue by control

Allowed revenue by year	2025/26	2026/27	2027/28	2027/29	2029/30	Total
Water resources	40.327	41.273	42.565	44.751	47.203	216.120
Water network plus	273.739	282.006	291.782	302.330	306.177	1456.033
Wastewater network plus	295.253	307.376	312.738	321.116	331.906	1568.390
Bioresources	42.227	43.663	50.732	50.174	51.391	238.186
Bristol water resources	22.016	23.140	23.973	24.790	25.068	118.987
Bristol water network plus	99.893	105.748	111.677	116.290	118.693	552.302
Residential retail	52.860	54.712	56.399	57.184	57.726	278.881
Total	826.314	857.917	889.866	916.637	938.163	4428.898