5. Delivering Great Service

5.1 Key messages

- **Ambitious and value for money service package:** Our overall package of Performance Commitments (PCs) provides ambitious levels of service at excellent value for money, demonstrating ambition in our service improvements whilst being mindful of cost pressures on customers and pace of delivery over AMP8 and the long term.
- **We are building on a strong track record of performance on AMP7 PCs and ODIs:** Our drive to deliver against our AMP7 performance commitment levels has delivered one of the strongest performances in the sector. In 2022-23 we achieved 83% of our performance commitment levels. Over the course of AMP7 to date we have met or exceeded around 80% of PCs, higher than the industry average of 64%. Our performance has earned a cumulative net financial reward of £61m to date in AMP7. We are also forecasting a reward on C-Mex and D-Mex.
- **Stretching improvement targets for AMP8:** We are targeting stretching performance levels based on historical performance and historical targets across the industry, in line with Ofwat's final methodology expectations. We provide compelling evidence to support our proposals including for the internal sewer flooding, storm overflows and unplanned outage performance commitments. We are pushing the frontier forward on reducing pollution in AMP8, building on a strong track record and are targeting a 32.9% performance improvement against Ofwat's storm overflow measure by 2030, leading to the biggest reduction in spills across the sector in both relative and absolute terms.
- **Bespoke ODIs reflecting local priorities: We have consulted widely with customers and stakeholders, understood their priorities and identified areas not covered by common commitments where they want to see action.** We propose three bespoke PCs focusing on North West issues for customers and the environment with action on embodied greenhouse gases, Windermere and non-household water efficiency and affordability.

5.2 Structure

This chapter demonstrates how our suite of common and bespoke performance commitments sets stretching and ambitious targets for areas of service prioritised by customers and stakeholders. We propose an ambitious level of service through our proposed performance commitment levels (PCLs) which are stretching but achievable when considered in the round with our efficient cost proposals put forward in Chapter 8.

This chapter is structured as follows:

- **Section 5.3** gives a high level overview of the ambition shown by our proposed performance commitment levels (PCLs) for 2025-30.
- **Section 5.4** provides detail on our approach to performance commitments (PCs) at PR24, what we have learnt from our experience in AMP7 and AMP6, how customers and stakeholders have influenced our plans and fed into our proposals for a stretching service package based on what matters for customers and the environment in the North West.
- **Section 5.5** describes how we have designed aspects of common PCs such as deadbands, caps and collars, to reflect an appropriate balance of risk in our plans. This section also outlines the three bespoke PCs which we include in this main submission.

Section 5.6 outlines how we have included Ofwat's indicative ODI rates in our submission and how we have proposed any other remaining ODI rates not provided by Ofwat such as for bespoke PCs, biodiversity and the two operational greenhouse gas PCs. It provides a brief overview of our triangulation processes for the calculation of bespoke PC ODI rates and the triangulation framework we have applied; additional information on our

triangulation approach is set out in supplementary document *UUW31 - Customer research triangulation*). We also set out how the bespoke PC ODIs reflect customer valuations and have been calculated based on the independently created and assured triangulation framework. This section also briefly outlines how our proposals on price control deliverables (PCDs) will protect customers against non- or late-delivery of enhancement projects. PCDs are described more fully in Chapter 8 Section 8.

- Sections **5.7** to **5.10** describe our strategy and PCs for each outcome and summarises why our proposed PCLs for 2025-30 are stretching and ambitious. It places our business plan and the proposed PCLs for each performance commitment in the context of our long term delivery strategy, including pace and affordability, supporting customers' escalated ambitions and priorities for the water environment, climate change, nature and resilient services.
  - **Section 5.7** describes our performance commitment levels for the outcome of "Customers receiving excellent service everyday"
  - **Section 5.8** describes our performance commitment levels for the "Environmental" outcome
  - **Section 5.9** describes our performance commitment levels for the "Asset Health" outcome
  - **Section 5.10** describes our suite of bespoke performance commitments, how they meet Ofwat's final methodology criteria and how our final submission responds to Ofwat's June 2023 feedback

  In addition, there is considerably further detail on our approach to each of the PCLs in the supplementary document *UUW30 - Performance commitments technical document*.
- **Section 5.11** summarises the balance of risk and return in our PC and ODI submission and gives an assessment of how our proposals sit within the expected +/- 1 to 3% of RoRE.

5.3 Overview

5.3.1 Ambition

In this section we describe our overall approach to the development of the performance commitment and incentive package, including stretching and ambitious PCLs and customer protection against under-delivery.

The tables below (Table 5-1, Table 5-2 and Table 5-3) summarise our significant ambition for AMP8 common PCs, stretching the performance improvement from this AMP to the end of AMP8 in 2030. The improvements in performance are backed up by carefully considered delivery plans and a strong track record of delivering on our performance commitments in AMP7. We have similar ambitions for our bespoke PCs and the performance related to them, outlined in Table 5-4.

Table 5-1: Performance ambition against common PCs – "Customers receiving excellent service everyday"

Measure	Service highlights	Performance commitment	Notes on PC design
Water supply interruptions	Delivering a significant improvement in water supply interruptions	12.7% performance improvement [1]	PCL reflects a duration threshold for certain planned interruptions of 8 hours or greater. Penalty collar proposed
Compliance Risk Index (CRI)	Sustaining our dedication to the high standards of water quality as highlighted in the DWI Chief Inspector's July 2023 report	100% compliance target	Proposed performance deadband
Customer contacts about water quality	Best ever performance, following on from our step change 42% improvement in AMP7	25.9% performance improvement [1]	
Internal sewer flooding	Ambitious performance levels proposed which take account of our operating circumstances and are consistent with our PR19 2-AMP strategy, with a proposed 55% improvement in performance since AMP6	31.9% performance improvement [1]	We propose 'environmentally adjusted' PCLs for each company, that take account of regional operating differences. Penalty collar proposed

[1] Improvement stated is from 2024/5 forecast to 2029/30 PCL

Measure	Service highlights	Performance commitment	Notes on PC design
External sewer flooding	Targeting upper quartile performance and a significant performance improvement despite our operating circumstances	12.8% performance improvement [1]	
Customer (C-MeX) Developer (D-MeX) Business Retail (BR-MeX)	Engaged and committed to Ofwat's reform and development of these measures to make sure that they incentivise companies to provide the experience customers want	Final definitions not yet published, but we expect to build on our strong AMP7 performance.	

We are committed to delivering the best possible service for customers, recognising that customers want great service and excellent water delivered to their tap and wastewater effectively removed from their drains. In terms of being a great company to deal with, we have a good track record. For example we expect to achieve a position in the top third of Ofwat's C-Mex measure in 2022/23, placing fifth of all companies. We aim to maintain this through AMP8 and have similar ambitions for our relative performance on D-Mex in the same period. We intend that our experience on both these measures will stand us in good stead for the new BR-Mex measure once it is defined.

We know that customers value a reliable and safe drinking water supply to their homes and target significant improvements in both water supply interruptions and water quality contacts, with improvements in the latter following on from our successful exiting of the DWI's transformation this year. Meanwhile, we propose a performance level for internal sewer flooding – targeting frontier performance by 2030 – which takes account of compelling evidence of our operating circumstances and should be seen as ambitious in that context.

Table 5-2: Performance ambition against common PCs – "Environmental"

Measure	Service highlights	Performance commitment	Notes on PC design
Biodiversity	Proposing ambitious plans to protect and enhance biodiversity through WINEP	New	ODI rate proposed based on Defra's net gain market average values
Operational GHG (W) Operational GHG (Ww)	Significant reduction in operational GHG emissions, minimising the impacts of substantial growth pressures (particularly Ww WINEP), by embracing efficiency, the newest technologies and innovation	12.37% (W) -10.66% (Ww) performance improvement [2]	ODI rate proposed aligned to latest government values from 2021
Leakage	After achieving the lowest ever level of leakage in the North West in AMP7 we intend to deliver a further 13.0% improvement in AMP8 to meet or beat progress required for our 2050 long term ambitions	13.0% performance improvement [3]	
Per Capita Consumption (PCC)	Building on our AMP7 achievements, we will continue working with customers to deliver a further 4.5% reduction in water demand in line with long term government targets	4.5% performance improvement [3]	
Business Demand	Supporting businesses and water supply retailers to reduce demand by a further 5.8%, conserving vital water supplies to make the North West stronger and greener	5.8% performance improvement [3]	

[2] Improvement stated is from 2021/22 baseline to 2029/30 PCL

[3] Improvement stated is from 2024/5 forecast to 2029/30 PCL, from the 2019/20 baseline

Measure	Service highlights	Performance commitment	Notes on PC design
Total Pollution Incidents	Targeting frontier performance by 2030, driving industry performance further forward through the use of technology and smart networks	25.0% performance improvement [1]	
Serious pollution incidents	Eliminate serious pollution incidents with a stretch target to deliver zero incidents two years running	100% compliance target	Reward gateway proposed for consistent track record of zero serious pollutions
Discharge permit compliance	Targeting 100% compliance at our wastewater treatment works	100% compliance target	Deadband proposed in line with environmental regulator's approach to performance measurement
Bathing Water Quality	Delivering an improvement to bathing water quality within base cost allowance	1.9% performance improvement [4]	
River water quality (phosphorus)	Improving river water quality and the aquatic environment by going significantly above and beyond required permit levels	21.25% performance improvement [5]	
Storm overflows	Aiming to deliver both the biggest percentage improvement and the biggest absolute improvement by any company in the industry	32.9% performance improvement [1]	Company specific PCL proposed to account for regional operating circumstances and aligned with WINEP investment programme

We have a strong track record on environmental performance and improvement and we aim to take this further in 2025-30. We have achieved the top 4 star rating in the Environment Agency's EPA in five of the last eight years. We intend to continue our industry leading position on eliminating pollution incidents, having reduced pollution incidents by 39% in AMP7 so far.

Ofwat's approach to water demand at PR24 will see the three related PCs (leakage, PCC and business demand) sit under the same umbrella. We propose stretching leakage reduction targets and water consumption targets for both household and business users in line with our WRMP. Our track record in hitting leakage PCLs (17 years in a row up to 2022/23) and annual PCC targets (expected by the end of AMP7) shows that we are capable of meeting stretching performance commitment levels on water demand.

We understand and share concerns about the use of storm overflows and are committed to responding to these. By 31 March 2023 we have already achieved a 39% reduction in reported spills since 2020, but we recognise the need to go faster and drive a step change in performance. This won't happen overnight, it will take sustained effort and investment over time. The North West has more rainfall and more combined sewers than elsewhere in the country, as well as a very large network. We propose an ambitious plan for the next regulatory period to reduce the use of storm overflows, including our biggest environmental programme yet, targeting a significant improvement in storm overflow performance. Consistent with that plan, based on Ofwat's measure of spills, we target a 32.9% performance improvement during AMP8.

[4] Calculated as the number of bathing waters that will be improved from the current classification (excluding those that are already Excellent quality and cannot improve any more)

[5] Improvement stated is from 2020 calendar year baseline to 2029/30 PCL

Table 5-3: Performance ambition against common PCs – "Asset health"

Measure	Service highlights	Performance commitment	Notes on PC design
Mains Repairs	Delivering upper quartile performance by ensuring robust asset health and resilience as custodians of the water network	Stable performance to the end of AMP8	
Unplanned outage	Meeting or beating upper quartile performance building on a strong track record in AMP7 to deliver water system resilience	82.5% performance improvement [1]	PCL reflects continuation of raw water quality exclusion
Sewer collapses	Driving further significant performance improvements, capitalising on our AMP7 step change in performance, through tech-driven proactive collapse detection and prevention	5.0% performance improvement [1]	

We are proposing stretching and ambitious PCLs for asset health which reflect that maintaining healthy and resilient networks for today and in the future is important for the services we provide to customers. Our performance commitment level for mains repairs is proposed in the context of the relationship with our ambitious leakage targets (see Figure 5-1).

For unplanned outage we propose a significant performance improvement based on the continued exclusion of raw water quality issues from the measure which is appropriate to ensure companies supplied by variable surface water quality can make appropriate operational decisions to protect water quality for customers and that there is no double jeopardy implied for doing so. We recognise the impact that sewer collapses can have on customers' lives and propose a highly stretching performance commitment level over the course of AMP8, sustaining our projected rate of improvement from AMP7, building on the advances we have made in proactive collapse detection and prevention enabled by the deployment of our dynamic network management (DNM) operating model.

Figure 5-1: Mains repair and leakage

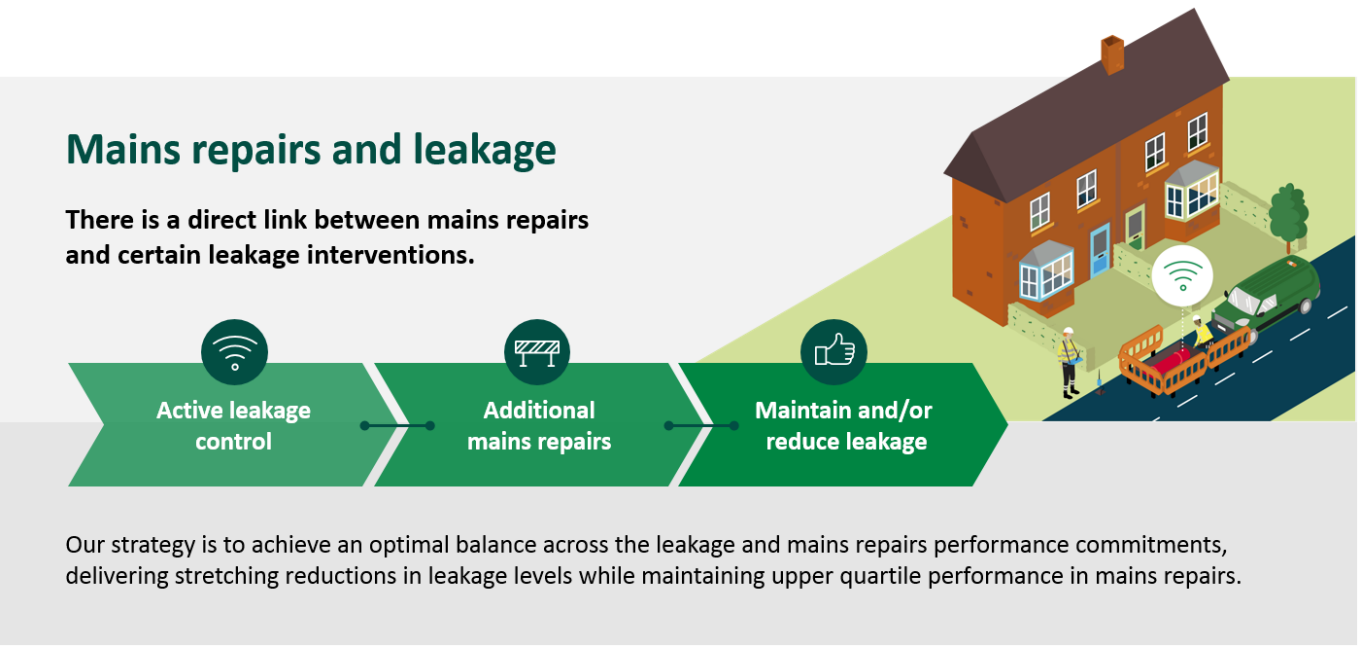


Table 5-4: Performance ambition against bespoke PCs

Measure	Service highlights	Notes on PC design
Embodied greenhouse gas emissions	Delivering a reduction in our embodied greenhouse gas emissions compared to that forecast in our plans.	Net reduction in embodied greenhouse gas emissions arising from construction activities from some of our largest wastewater treatment, non-infrastructure projects within the WINEP. The proposed programme reflects £693m of our total proposed WINEP and 40% of total Ww WINEP embodied emissions (excluding storm overflow projects). Financially incentivised by an ODI rate aligned to the latest government values from 2021 – matching our proposals for the common GHG PCs.
Wonderful Windermere	Working in partnership to help improve the health of England's largest lake – Windermere – a nationally significant water body, harnessing UUW's expertise in wastewater treatment and environmental management	Phosphorus in Windermere comes from a variety of sources. This PC will measure and model the impact of a range of interventions undertaken collectively with others to reduce phosphorus in Windermere. Going above and beyond our obligations, this measure will be financially incentivised, to enable us to significantly increase our activity and partnership working in the area in order to encourage everyone to make the environmental improvements sought here. The ODI is calculated using triangulated values from a range of research specific to the area, and will be a symmetric financial incentive. We have received support for this bespoke PC proposal from our Love Windermere partners – including the partnership chair, the Environment Agency – after discussing our proposals with them.
Improving water bill affordability for socially important non-household community groups	Helping the North West's local groups and communities to improve their water efficiency and reduce their bill	This PC aims to deliver a basket of interventions which should have the overall impact of improving water bill affordability for the targeted customer groups. This PC will be measured by how many interventions we make to this particular group of customers, with each intervention having a modelled assumption of water savings and actual bill savings. This PC will have a symmetrical financial ODI.

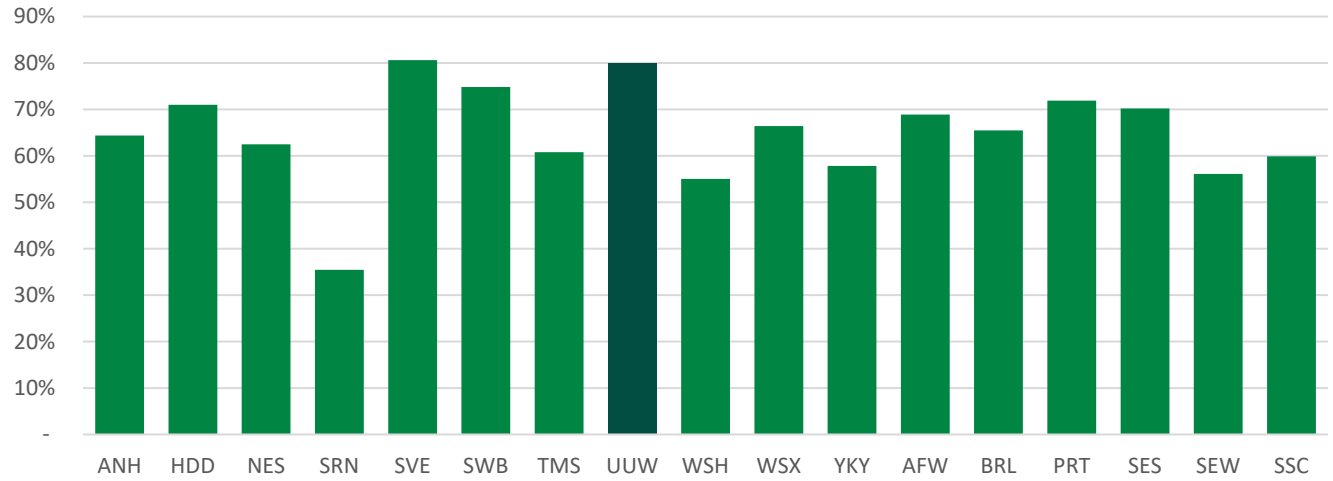
Our bespoke performance commitments are designed to complement the suite of PR24 common performance commitments. They focus on key areas of service and environmental performance which are important to customers and stakeholders in the North West but which are not covered by the industry-wide common PCs. We set stretching performance commitment levels for each bespoke PC, accompanied by financial ODIs which are fully supported by either triangulated customer research and insight or external market valuations.

5.4 Our approach to performance commitments

5.4.1 Background and approach

We have embraced the outcomes regime which has delivered improved services for customers and an enhanced environment for the North West. During AMP7 to date we met or beat targets for around 80% of performance commitments in each of the first three years. As shown in Figure 5-2 below, we are one of the top two performers for meeting or beating PCLs in AMP7 to date, with one percentage point between us and the top achiever to date over the three years.

Figure 5-2: AMP7 Percentage of PCLs achieved 2020/21 to 2022/23



Source: Company APRs 2020/21 to 2022/23

Across the first three years of AMP7, UUW earned net positive financial incentives reflecting delivery of its package of performance commitments, a cumulative net reward of £61m, excluding Mex measures. We are one of the few companies to earn net ODI outperformance rewards in the period to date.

This track record shows that we approach AMP8 from a position of understanding in what is expected of companies in an outcomes-based regime. This gives us confidence to propose an ambitious package for AMP8.

We have sought to engage in making further improvements to the outcomes regime and have been proactive participants throughout the PR24 preparation process. Examples include our Future Ideas Lab paper on "Making the cost assessment framework resilient to future challenges"[6] proposing company specific PCLs for certain PCs, to ensure that costs are not excessive to meet common performance targets.

Other examples of our action on the development of Ofwat's PR24 PC and ODI suite include co-chairing the River Water Quality group with the RSPB to develop the draft of the RWQ PC definition, being a key member of the group looking to develop performance commitments around greenhouse gases and responding constructively to all PR24 consultations on outcomes and performance commitments.

5.4.2 Well-rounded performance commitment suite

We have included all of Ofwat's common PCs in our PR24 business plan. At the time of our business plan submission, our plans were formulated based on the latest available PC definitions as of May and June 2023. As noted in *UUW30 - Performance commitments technical document* and in Table 5-1 to Table 5-4 above we have largely accepted every element of the definitions although we do make some additional proposals or suggestions such as regards to exclusions, penalty collars or deadbands.

Where PCs do not offer customer protection in the event of non-delivery of significant enhancement allowances, we propose PCDs (described more fully in section 8 of Chapter 8). Outside of PCs and PCDs there exists a wide range of customer protection tools to ensure that monopoly companies operate appropriately and in the interests of customers and the environment. These include charging rules, licence conditions and GSS. This comprehensive range of tools mean that PCs and PCDs are not required for every aspect of UUW's operations and activities, as noted by Ofwat in the PR24 final methodology.

5.4.3 How customers and stakeholders shaped our performance proposal

As set out in some detail in Chapter 3, we have engaged extensively with customers and stakeholders in the development of our plans over a long period of time. This engagement has had a direct impact on the PCLs which we propose in our business plan and the pace at which we propose to move in certain areas compared to others.

[6] Available at ofwat.gov.uk/wp-content/uploads/2022/09/UUW_Making_the_cost_assessment_framework_resilient_to_future_challenges.pdf

For example, in developing our proposed PCLs for the water demand measures, we co-created our DWMP and WRMP and optimised our plans with customers, including our plans for leakage and PCC performance levels. This was an extensive process which we began as far back as 2020 with many iterative refinements of our plans along the way in building to our final WRMP and DWMP submissions.

We started by gaining a broad understanding of which options customers favoured to solve issues in our water and wastewater service areas of supply, demand and capacity. For each of these areas we assigned a customer weighting and used an optimiser which could choose those weighted options, whilst all other options remained equal. We then tested acceptability of our proposed investments with customers, enabling them to build their own preferred plan which we then refined from there.

Through this process we refined our proposed plans which fed into the DWMP and WRMP, and then ultimately now feed into many of our proposed performance commitment levels for PR24. This holistic package of research has directly resulted in UUW action when developing our plans. For example, in the package of research including WRMP and DWMP Immersive Research, Customer Priorities Research and the Water Resources West Customer Research Synthesis a key finding was that customers prioritised leakage, smart metering and promoting water efficiency as top priorities for water resource management. We acted on these findings by prioritising demand options which support these in our decision-making methods in the WRMP. These plans then feed into the performance levels which we propose for the PR24 water demand PCs. Much more detail on how this has been achieved is set out in the detailed description of PCLs against each PC in the supplementary document *UUW30 - Performance commitments technical document*.

Our comprehensive customer research plan means that we constantly test and refine plans and proposals with customers, leading to iterations of our proposed performance levels, for example, from WRMP, DWMP to PR24. Performance levels were also tested through acceptability testing of our PR24 plans. This process was performed with both household and non-household customers, twice, to allow for iteration. When analysing the results, we considered key customer segments such as low income and vulnerable customers. It is important to us that the views of these different customer segments are considered, understood and help to form and shape our proposed plans.

We have engaged extensively with a wide range of stakeholders during the development of our plans, including regulators such as the DWI and the Environment Agency, local authorities, charities, MPs, metro mayors and environmental groups. Stakeholders from across the North West's five counties took part in our six "Your Water, Your Say" live forums. Further details of our stakeholder engagement process is available in Chapter 3.

5.4.4 Stretching performance commitment levels - overview

The PCLs we propose build on the improvements we have delivered in AMP7 and AMP6, under the outcomes regime. The PCLs we propose are stretching and ambitious, but cognisant of regulatory requirements, deliverability, cost constraints on customers and tackling intergenerational equity issues. PCLs are split between performance we propose from base expenditure and from enhancement expenditure.

Our PR24 proposals aim to deliver more from base expenditure than what we have historically achieved. This will only be deliverable through smarter ways of working, increasing digitisation of our networks and further systems thinking capabilities.

When developing PCLs and considering what additional performance can be achieved from each of base and enhancement expenditure, we included consideration of the Ofwat information requirements described in the PR24 final methodology[7]. These were:

- PCLs set at PR19;
- Historical outturn performance – both from an individual company level and from a sector level perspective
- Historical expenditure included in the base expenditure models at PR24;
- Our forecasts of performance levels that can be delivered from base expenditure;

[7] See Ofwat final methodology Appendix 9, p67

- Performance levels of efficient companies; and,
- Opportunity for transformational performance improvements.

When calculating performance targets we have used the most up to date and longest data sets possible (e.g. the historical data sets provided by Ofwat as part of the PR24 process and APR data up to and including APR23, and more specialist data sets for particular PCs, e.g. Defra "Swimfo" data for the bathing water quality PC). We have included consideration of upper quartile and frontier levels achieved during AMP7 and then compared our own ambitions to these, to verify the level of stretch.

5.4.5 Stretching performance commitment levels - Delivering more from base expenditure and enhancement investment

Our plan delivers ambitious levels of performance, targeting significant improvements in key areas such as storm overflows, sewer flooding and water supply interruptions, alongside frontier performance in pollution incidents by 2030. It also delivers wider environmental and social value and a large proportion of these improvements are being delivered through our base programme (as detailed in *UUW30 - Performance commitments technical document*). Excluding cost adjustment claims which reflect scope increases since PR19, our plan delivers these significant improvements at a base expenditure (botex) level that is lower than AMP7 anticipated outturn botex (as shown in figure 8-3 in Chapter 8).

We have analysed the historic performance data sets provided by Ofwat in our calculation of future forecast upper quartiles. Analysis of historic performance data shows that the top industry performers vary year-on-year and measure by measure – the upper quartile is rarely made up of the same group of companies. This dynamic nature of performance shows that, for some PCs, performance may not be a direct reflection of company performance alone, but rather a combination of factors, both within and outside of company control and reflecting a mix of current performance drivers and enduring local or historic circumstances.

The expected performance at 2024/25 provides the starting point for proposing most AMP8 PCLs. Our approach takes into account latest available actual performance data and trends at the time of the PR24 business plan submission, and planned improvements. Delivery of our proposed PCLs within the cost envelope reflected in the plan will not be straightforward. It will certainly require us to deliver a high level of innovation and efficiency improvements, building on our AMP7 performance and innovations. We have tested how stretching our proposed enhanced PCLs are by cross-checking them against historical and forecast performance for both UUW and across the industry, including long-term and statutory targets. Supplementary document *UUW30 - Performance commitments technical document* sets out for each PC how base and enhancement expenditure and the application of innovative techniques and solutions has been factored in to each proposed PC. We have also applied this approach to setting enhanced PCLs[8].

One example of where we are proposing to deliver more from base expenditure is in our total pollution performance. We propose a 25% reduction in pollution incidents by the end of AMP8, compared to the expected level at the end of AMP7. This performance improvement will be delivered entirely from base expenditure. We aim to push the frontier forward on this performance commitment by innovative ways of working including our investment in Dynamic Network Management (DNM) telemetry which means we use more real time information from the network to identify potential issues before they cause pollution. We introduced DNM capability in AMP7 and aim to develop and refine it further to improve our analytical ability and maintain the performance that has been achieved through deployment of this system.

We also plan to expand to DTM ("Dynamic Treatment Management") to enable us to achieve more performance from base expenditure, employing smarter ways of working in treatment as well as network. Our AMP8 projected performance is based on successfully proving this concept, exploring how our operation of WwTW can be altered to react to changes in weather, tourism and performance of nearby treatment works to further protect and enhance the environment in the North West. We will also ensure effective maintenance of assets, alarm management, and respond quickly when we are aware of an incident to protect the environment. We also have a

[8] We present enhanced PCLs for the following common PCs, in line with Ofwat's final methodology: water supply interruptions; leakage; per capita consumption; internal sewer flooding; external sewer flooding; and, total pollution incidents.

robust reporting procedure to ensure we understand the root cause of pollution when it does happen, so steps can be put in place to prevent a reoccurrence.

Enhancement investment is also an essential driver of better performance and stretching PCLs. Where investment is significant, we offer customer protection in the form of PCDs (see section 5.6.4). We have assessed the level of performance from enhancement expenditure with a similarly critical approach as that applied to levels of performance from base expenditure, evaluating the level of stretch in these PCLs (from enhancement expenditure) through the assessment criteria stated in section 5.4.3 where relevant (i.e. excluding considerations of performance from base).

We have also applied multiple considerations when critically appraising the level of performance from enhancement expenditure. These included cost-benefit analysis, with customer valuations based on triangulation. Our approach to triangulation and the framework which we have applied is described in *UUW31 - Customer research triangulation*. We also considered comparative information, historical information, minimum improvements, the maximum level attainable and expert knowledge.

Sections 5.7 to 5.10 set out more details of how we have met these criteria in calculating stretching PCLs for each of the common and bespoke performance commitments. Again, much further detail is provided in the supplementary document *UUW30 - Performance commitments technical document.*

5.4.6 Customer protection

Customers strongly support our proposed operational performance levels and our plans to achieve them in 2025-30. This is evidenced by the results of our comprehensive acceptability and affordability testing, conducted over two iterative phases. Our qualitative phase of PR24 affordability and acceptability research revealed that 78 per cent of household customers support the UUW business plan, as it delivers on customers' priorities for the improvement of their water and wastewater service. The quantitative phase showed that the plan was equally supported by 70 per cent of household customers. For further details of the research we conducted and the results, please see section 6 of Chapter 3.

Through the package of ODIs we should be strongly incentivised to meet or beat these PCLs which customer strongly support. We have included Ofwat's June 2023 indicative ODI rates in our business plan. These are based on a top-down percentage of RoRE, rather than directly mapped from Ofwat's collaborative customer research valuations as had been the original intention. We comment on this approach and its results in section 5.6.1. PCDs will also protect customers in the event of undelivered outcomes related to significant enhancement expenditure. We have insights from mechanisms similar to PCDs in our Green Recovery and accelerated investment plans and the development of these. Details on PCDs related to enhancement cases can be found in section 8 of Chapter 8.

For our bespoke PCs we have sought to ensure customers are protected by only proposing those bespoke PCs which they see as a priority, outside of the common PC suite. We conducted further research with customers, following on from our customer priorities research, to test customer support for the proposals[9]. Customers support the areas of activity covered by our bespoke PC proposals, seeing them as high and medium priorities. The bespoke PCs all have accompanying financial ODIs – thus offering further customer protection for the delivery of the services which customers prioritise. These financial ODIs have been calculated using an externally assured triangulation framework (or an external market valuation where more appropriate, i.e. for greenhouse gases) and a combination of customer research, stakeholder insight and data analysis to value the ODIs. More details can be found in *UUW31 - Customer research triangulation.*

5.4.7 Overall balance of our plan

We consider that our overall package is strongly supported by customers, as it delivers on customers' priorities for the improvement of their water and wastewater service. More details of this acceptability and affordability testing and results can be found in section 6 of Chapter 3.

[9] Trinity McQueen on behalf of United Utilities, "Bespoke Performance Commitments Testing Report", September 2023, unitedutilities.com/corporate/about-us/our-future-plans/listening-to-our-customers/insight-and-research-library#PCtesting

Alongside this plan we propose a comprehensive scope of support for customers and have engaged them throughout the plan design. We are mindful that affordability constraints for some customers are a concern, and that is why we are advancing the substantial affordability support programme detailed in Chapter 4 and the bespoke PC tackling water efficiency and affordability issues in areas of the wholesale market.

5.5 Performance commitment design

5.5.1 Overall approach

Our overall approach is to:

- Propose stretching yet achievable PCLs, prioritising improvements based on customer and stakeholder insight, balancing ambition, priorities and efficient costs for now and the long term
- Meet the needs of the region that we serve, and the customers and stakeholders within it
- Be compliant with Ofwat's PR24 final methodology, e.g. our plan includes all PR24 common PCs as set out in the final methodology, all bespoke PCs proposed meet the criteria as set out in the final methodology
- Set financial incentives for all bespoke PCs which incentivise us to deliver against our stretching PCLs and are robustly based on customer valuations.

Sections 5.7 to 5.10 set out more details of how we have calculated our stretching PCLs for each of the common and bespoke performance commitments. Much more detail on these is also provided in the supplementary document *UUW30 - Performance commitments technical document*.

5.5.2 Bespoke PC design

The process we went through to design our bespoke PCs was outlined in our April 2023 Early Submission document *UUW_BPC_001*. At the heart of our design process is the North West and ensuring that the complete suite of PCs represents as fully as possible the specific circumstances of the region.

Having developed our proposed bespoke PCs, we acted on Ofwat's June 2023 feedback to our early submission. We present the revised proposed bespoke PCs in this business plan. The bespoke PCs cover the areas of reducing embodied greenhouse gas emissions, working with others to help improve the health of Windermere and targeting water efficiency for socially important non-household customers. All bespoke PCs have associated financial ODIs, caps, collars and no enhanced incentive rates, as stipulated in the PR24 final methodology.

We propose stretching and ambitious PCLs for each of our bespoke PCs, described in more detail in *UUW30 - Performance commitments technical document* recognising that whilst we have some activity currently underway in all of these areas, it is the financial incentivisation offered by the bespoke PC mechanism which will mean we can go further, faster, in 2025-30. Our PCLs are ambitious as we seek to significantly ramp up activity in these areas, areas in which there are limited statutory obligations to act but where we want to act to address local needs and priorities.

5.5.3 Caps and collars

We propose caps and collars for all bespoke PCs, in line with Ofwat's final methodology. We also propose caps and collars for those common PCs as required in Ofwat's final methodology. The annual values for all caps and collars and the basis on which they have been set are detailed in *UUW30 - Performance commitments technical document.*

We make additional proposals for collars on the following common PCs:

Water Supply Interruptions – we propose a collar for this measure to account for extreme events, such as regional freeze-thaw impact. This is in line with Ofwat's guidance that it considered a collar to account for extreme events was appropriate.

Internal sewer flooding – we have also proposed a collar to reflect extreme events that might cause sewer flooding. An example of such an extreme event was a storm in the Manchester and Stockport region over a two day period in September 2016 which alone resulted in 933 hydraulic and severe weather incidents. Based on a

percentage of RoRE, whilst set at a very unlikely and high level, we consider that the collar would represent an extreme event outside of management control. Whilst we recognise Ofwat's view that companies are best placed and therefore should be incentivised to mitigate the impact of exogenous events on customers, there is also strong evidence that weatherproofing the network to take account of all possible events would be cost prohibitive. Therefore, consistent with the approach Ofwat has set out on water supply interruptions, we consider a similar collar should apply to internal sewer flooding. Otherwise, dealing with storms with such exceptional return periods would have an unacceptable impact on customer bills and, whilst UUW is proposing significant investment to increase resilience against severe weather, reasonable protection should be in place to mitigate exposure to low probability high consequence exceptional events.

Business demand – changes in the volume of water used by a small number of very large users has the potential to materially alter performance against this PC in a way which is wholly outside of company control. Should these high impact situations not be excluded from the measurement of the PC then we propose that the penalty collar should be set at a rate to account for such situations.

5.5.4 Deadbands

The detail of which PCs have deadbands, and their values, is set out in *UUW30 - Performance commitments technical document.* We make the following proposals relating to deadbands on common PCs:

Discharge Permit Compliance - We consider that this environmental measure should be aligned consistently with how the environmental regulator measures performance. Setting the PC with a deadband at 99.0% would be consistent with the Environment Agency's stretching targets for 4 star EPA status and would represent coherence with what the EA considers to be industry leading performance. Coherence in regulatory regimes is also helpful for customers. To align this PC with the Environmental Performance Assessment Version 10 Discharge permit compliance (numeric) measure, the deadband should be set at 99.0% compliance, a level which is categorised as 'Green' in the EPA. We also note that Discharge Permit Compliance is a core metric for EPA and that 99.0% compliance is a prerequisite to companies achieving 4 star status, even if all their other metrics are green. Historic evidence shows that this is an upper quartile level of performance which is accepted by the Environment Agency. As the responsible environmental regulator, we consider that the Environment Agency is well placed to be able to judge top tier performance on this measure and we consider that Ofwat's approach should embrace this.

CRI - Ofwat's PR24 final methodology proposes a deadband for CRI. We fully support this approach and Ofwat's reasoning given in the final methodology – that companies' CRI performance is impacted by customers' own internal fittings infringements. The same PC has a deadband of 2.0 in the current AMP and we understand that Ofwat will set the AMP8 deadband level after discussion with the DWI. Our recommendation for both Ofwat and the DWI is that a more restrictive deadband of 1.75 for 2025-30 would be appropriate, thus increasing the stretch on expected levels of company performance compared to the current AMP. This approach would also be sufficient to reflect that some elements of the CRI are areas where companies have only indirect influence. For example the responsibility and decision making on replacement of customers' taps and internal plumbing rests with customers themselves, rather than with companies. Whilst it is an area that we actively educate and support customers on, replacement of internal plumbing is ultimately a matter of customers' own choice.

River Water Quality - We assume that monitoring of this PC does not apply beyond the discharge permit limits for phosphorus. If this is exceeded, then we assume that the penalty will be applied through the Discharge Permit Compliance common PC – where it should best be captured – and not also through the River Water Quality common PC. However if this is not the case then we would expect a deadband to be implemented (i.e. at the P permit limit for individual WwTW) to prevent the double jeopardy of penalty in both DPC and RWQ for exceeding discharge permit limits for phosphorus. Non-compliance with permit conditions should only be financially incentivised once through performance commitments – it should not be captured at 100% in both DPC and RWQ common PCs, in effect a 200% valuation rate.

5.6 The design and calculation of incentive rates

5.6.1 Common PCs

We have included Ofwat's June 2023 indicative ODI rates in our business plan. As this is a requirement for company business plans, this does not imply that we endorse these values as being consistent with the value that customers in the North West place on these services, nor should it imply that we endorse the process or approach that Ofwat has taken to arrive at these values.

We have also provided suggested ODI rates for the three common PCs which Ofwat has not provided indicative ODI rates for: Operational Greenhouse Gases (Water and Wastewater) and Biodiversity. These rates are required in order to calculate the full picture for ODI risk and return for data table RR30. The three ODI rates we have used for these PCs are based on credible external valuations, following the approach which Ofwat has indicated it will use. These are based on external market values in order to align the financial incentives of these new mechanisms with those markets.

Following extensive industry engagement and open consultation throughout 2022, Ofwat set out to calculate ODI rates on a bottom-up basis based on their collaborative customer research. This approach was aimed at ensuring alignment between the customer preferences expressed through the research and the incentives embedded in the business plan.

Ofwat's collaborative research results were shared with the industry in early 2023, helping us to shape our plans with the use of further customer valuations, adding to our own large body of research. Ofwat then mapped these results bottom-up to ODI rates and shared with companies in April and May 2023. However, since publication of the PR24 final methodology and these bottom-up rates – in May 2023 – Ofwat's approach to calculating ODI rates changed significantly, choosing to calculate rates set on a top-down basis as a percentage of RoRE. This top-down approach runs contrary to Ofwat's stated intentions in its PR24 methodology which built on its February 2022 discussion paper on outcome delivery incentives. Whilst this could be an appropriate basis on which to set rates, it requires rates to be calibrated against the risks which the company's whole business plan faces and also against the particular activity which the rate relates to. We consider that this exercise has not yet been completed and therefore some rates are inappropriately calibrated either to incentivise companies, support customer interests or produce a balanced ODI risk profile.

Due to the recent timing of publication and change of valuation approach – at a relatively late stage in our business plan development process – there has been insufficient time to fully consider the impact of these rates on proposed investment plans. Given prior direction from Ofwat, we have not undertaken specific company research into ODI rates for common PCs. It has therefore been infeasible in the time available to formulate considered alternatives to Ofwat's indicative ODI rates. However, we are able to note a significant area where we can clearly foresee issues created by the magnitude of the indicative incentive rates, relating to internal sewer flooding.

In the collaborative customer research, Ofwat asked customers directly how much they valued the avoidance of service failure around internal sewer flooding. This has a direct mapping to the common PC "Internal Sewer Flooding" and Ofwat published ODI rates using this direct mapping in April 2023. Through Ofwat's most recent top-down approach to calculating this ODI rate, the indicative rate is now not based on this explicitly expressed customer valuation. Rather, the indicative rate is in the region of ten times more powerful than Ofwat's research indicated customers actually valued avoiding service failure in this performance area. The rate is also double the PR19 ODI rate that applied to UUW.

We have incorporated Ofwat's indicative ODI rate in our proposed performance commitment whilst also setting a PCL and deadband which reflects regional operating circumstances. However, we could not accept the "top down" ODI rate as a reasonable estimate if that was coupled with unattainably high performance commitment levels that did not take into account companies' regional operating circumstances. To do so would lead to an excessively negative skew for the risk/reward framework.

It is clear that in the case of internal sewer flooding, the plan has been subject to significant late changes in ODI rates which do not appear to have compelling evidence to support them and show significant divergence from past customer valuations. However, we consider that issues with ODI rates are not confined to this metric alone.

Ofwat should calibrate its ODI rates and PCL levels to ensure that, for each PC, both ODI and PCL are set coherently to incentivise companies to take action to perform to the level which customers value. This customer valuation can be drawn from the past three AMPs of customer research. Net ODI payments should form part of Ofwat's assessment as to whether they offer each company a balanced package of risk, including that of common and bespoke ODI rates, PCLs, PCDs, cost allowances and return. We note that Ofwat expects PCDs to cover 60-80% of enhancement expenditure, and are "penalty only". Therefore, the financial risk that PCDs expose companies to is asymmetric and to the downside, and could be significant in value (given the scale of AMP8 enhancement requirements). However this risk has not yet been included as part of Ofwat's assessment of RoRE risk and return, as it is absent from data table RR30 "RoRE analysis".

When they are set at the right level, ODIs can be effective in driving companies to successfully balance competing pressures in allocating cost and effort to different areas of customer service delivery. To do this effectively, incentives should be evenly balanced and symmetrical in both their under- and out-performance rates. However, the PR24 risk profile is more skewed to the downside, due to:

- Ofwat's common PC suite – with three penalty only PCs, and no reward only PCs;
- The broad removal of collars, deadbands and exclusions – in particular, the removal on exclusions generates asymmetric risk, as PCL targets will not only reflect the best performing companies, but also those companies that had not faced, in a particular year, the consequence of an external event (such as extreme weather);
- Ofwat's insistence that PCDs must be penalty only, and not be symmetric.

It is therefore imperative that Ofwat sets appropriate incentive values, alongside setting appropriate performance targets (for example, by adopting our proposed approach to setting 'environmentally adjusted' sewer flooding targets[10]). This should ensure the effectiveness of incentives and avoid inefficient allocation of resources and investment decisions, to the detriment of company, customers and the environment. Alternatively, if this cannot be delivered within the time still available for the final determination, a more extensive application of bespoke caps and collars is required. Ofwat will need to ensure that the effective impact of ODI rates is sufficiently financially incentivising to companies to act in customers' interests, but cognisant of the need to determine a balanced package of risk. We would be pleased to discuss these points further with Ofwat.

5.6.2 Bespoke PCs and triangulation of customer research

Each of our proposed bespoke PCs has an associated financial ODI. We have produced overall valuations by applying a robust triangulation framework to triangulate various sources of customer research, external market data, economic insight, operational and third party data, including Ofwat's collaborative customer research and our own bespoke PC customer research. We have followed a framework drawn up for us by third party experts, drawing on best practice, including recent guidance from PR19 onwards from CCW, SIA Partners, and Ofwat.

We have received third party assurance to evidence that we have appropriately and consistently applied this third party framework in the calculation of the ODI rates. We have discussed our approach with YourVoice, the independent challenge group representing UUW customers and stakeholders, and made changes in response to their comments on our approach and customer research.

We also commissioned two pieces of customer research related to valuing ODIs for bespoke PCs. The first of which, intended as part of the development of our long list of bespoke PCs, closely followed Ofwat's collaborative customer research approach which was used as part of the valuation of ODIs related to common PCs. The second was a more qualitative piece, looking to consolidate our understanding of customer support for the final bespoke PCs which we propose.

[10] For further details, please see our Future Ideas Lab paper 'What lessons can we learn from cost assessment at PR19?' ofwat.gov.uk/wp-content/uploads/2022/04/United-Utilities-What-lessons-can-we-learn-from-cost-assessment-at-PR19.pdf

Further detail on our triangulation framework, how we have applied it to value ODI rates associated with PR24 bespoke PCs and the external assurance on this process is set out in *UUW31 - Customer research triangulation.*

We support Ofwat's approach to incentivising company performance in AMP8 and likewise also propose the application of symmetrical financial incentives to our proposed bespoke PCs with both out- and under-performance payments to all but the embodied greenhouse gas emissions PC where, given the limited maturity of the concept globally, we have proposed an outperformance ODI only, opposite a stretching level of performance.

We have sought to create simple to understand ODI designs. This means that we have minimised the use of deadbands and exclusions in the measurement and incentivisation of the bespoke PCs. We have also used our experience of AMP6 and AMP7 ODIs to propose incentives designed to be simple to explain to customers and stakeholders and straightforward to measure and assure.

We have applied robust methods to calculate our ODI rates for each of the bespoke PCs. Ofwat guided[11] that companies could:

- Use customer research to inform the rates
- Use an approach that is broadly consistent with Ofwat's top-down approach used to set the indicative ODI rates
- Use credible external valuations, as Ofwat propose to do for the biodiversity and operational greenhouse gas emission common performance commitments.

We have used a combination of these approaches to value our proposed ODI rates. This is set out in more detail in *UUW31 - Customer research triangulation*. We provide robust justifications for the approaches used, clearly presenting the evidence and assumptions we have used to underpin the ODI rates which we propose.

Table 5-5 below provides some examples of the variety of sources we have used to value ODI rates.

Table 5-5: Incentive rate valuation sources

Performance Commitment	Valuation sources include (not exhaustive):
Embodied greenhouse gas emissions	Credible external valuation proposed aligned to the latest government values from 2021 (matches our proposed approach for Operational greenhouse gas common PCs) UUW PR24 customer research PR24 bespoke PCs 2022-3
Wonderful Windermere	Windermere Catchment: Tourism Value (an EA commissioned report) Windermere Water Quality Management Opportunities Project Report UUW Green Recovery proposals Ofwat PR24 collaborative customer research 2022-3 UUW PR24 customer research PR24 bespoke PCs 2022-3
Improving water bill affordability for socially important non-household community groups	2023-24 UUW volumetric charge for standard Non-household metered premises Ofwat PR24 top-down indicative ODI rates UUW PR24 customer research PR24 bespoke PCs 2022-3 UUW schools water efficiency visit data Thames Water - water efficiency trials data

For measures where we have applied a range of research findings to determine a value, the calculation of the value is described in *UUW31 - Customer research triangulation.* Where the value is primarily from one source (i.e. for common and bespoke greenhouse gas PCs and the Biodiversity PC) this is described in the details for the performance commitment in *UUW30 - Performance commitments technical document.*

[11] "Outcomes working group: Indicative ODI rates", slide 3, Ofwat Outcomes Working Group, 29 June 2023

5.6.3 Enhanced ODI rates

Our proposals for enhanced outperformance incentive rates are in line with Ofwat's PR24 final methodology, set at twice the size of standard incentive rates with no enhanced underperformance rates. We do not propose enhanced ODI rates for any bespoke PCs.

For the Serious Pollution PC, we propose an enhanced incentive for wastewater companies that achieve zero serious pollution incidents for two consecutive years. Whilst sector performance has improved significantly since 2011, there is a clear need for wastewater companies to improve further. The addition of this positive financial incentive to the Serious Pollution PC aims to achieve that.

5.6.4 PCD rates

We have developed PCDs for relevant enhancement programmes against a common framework, taking account of Ofwat's developing process, as set out in its PR24 methodology, follow-up workshop and subsequent Information Notice 23/05. Our key principles for PCDs are:

- PCDs should ensure that customers are compensated in the event of non-delivery of enhancement investment assumed at price control, and hence funded from customer bills;
- PCDs should compensate customers for the time value of money arising from late delivery of investment relative to that assumed at the price control; and
- PCDs should be adjusted to avoid duplication or double counting of other incentives (e.g. cost sharing and ODIs).

We also note that PCDs place an asymmetric risk onto companies. Ofwat has insisted that PCDs should be applied asymmetrically, as a "penalty only" clawback mechanism, to compensate customers for non-delivery. However, Ofwat's proposed design leads to companies being negatively impacted in all circumstances, including delayed delivery – not only non-delivery. The design also fails to incentivise early delivery as there is no corresponding benefit for making the additional effort and investment required for early delivery. Ofwat should reconsider aspects of its PCD methodology, to allow (even if only limited) some greater symmetry in each PCD mechanism, and/or the ability for a company to be able to trade early delivery off against late delivery, both within and between PCDs (even if an overall cap of zero is retained). Our PCD proposals are described more fully in section 8 of Chapter 8 and detailed in the relevant supplementary documents *UUW60 to UUW67*, as referenced in Table 8-8.

5.6.5 Timing of ODI payments

In line with the PR24 final methodology, we propose in-period financial payments for all but one of our bespoke ODIs. For one bespoke PC, embodied greenhouse gas emissions, we propose annual reporting in years 1-4 leading up to an end of period financial ODI. This approach is because the method of measuring this metric is maturing but we envisage that by the final year of AMP8 our reporting processes – as well as those of our capital delivery partners – should be of sufficient maturity to warrant financial incentives.

5.6.6 Avoiding double-counting in setting incentive rates

We have explicitly avoided the double-count of performance or cost in the calculation of the bespoke ODI rates. We have calculated incentive rates to avoid rewarding or penalising twice for the same performance as measured and financially incentivised across the PC and PCD suite. We would urge Ofwat to do likewise in the calculation of ODI rates and the design of incentives for other performance commitments.

For example performance against the Discharge Permit Compliance PC can impact a number of other performance commitments. Failure to achieve compliance at wastewater treatment works (covered by the DPC PC) also has the potential to adversely impact four other performance commitments: Serious pollution incidents; Total pollution incidents; River water quality; and, Bathing water quality. The potential for double jeopardy with the Discharge Permit Compliance and River Water Quality common PCs, would occur should the latter extend beyond the discharge permit limits for phosphorus. As the Discharge Permit Compliance performance commitment level is 100 per cent, there is only the potential for underperformance penalties for this measure,

and the potential to be penalised twice (or more) if a failure has an adverse impact on any of the above measures. Such double counting should be corrected by excluding the multiple impacts from the five PC definitions.

We have endeavoured to identify and remove all double counts from our proposed bespoke PCs by either careful design of the measure itself or by explicitly removing the double count from the ODI rate. For example, we have explicitly removed any ODI benefit from the non-household-focused bespoke PC by removing the ODI financial benefit for Business Demand (Ofwat's indicative ODI rate) from the calculation of the bespoke PC ODI rate. This ensures that customers will not pay twice for the same water efficiency benefit.

Aligned to this, there is a significant risk that the removal of the water quality exclusion from the definition of the unplanned outage PC presents double jeopardy for companies. Where companies rely on surface water sources and have an integrated network, typical operating strategies involve making active decisions to take a treatment works off line to manage water quality issues arising from raw water quality in order to safeguard the water quality at the customer tap. By removing this exclusion, such companies face only the dilemma of which penalty to experience: leaving the works online will lead to penalties for water quality, but taking the works offline will lead to penalties for creating an outage. Our package of ODI proposals has assumed that this entirely unreasonable double jeopardy is removed.

5.6.7 Summary

We have included Ofwat's June 2023 indicative ODI rates in our business plan and propose financial ODIs for all bespoke PCs calculated in line with Ofwat's stated approach. These are calculated based on a rigorous and externally assured approach to triangulation of various sources of customer research and valuation. For further details please see *UUW31 - customer triangulation document.*

5.7 Outcome: Customers receiving excellent service everyday

5.7.1 Overview

Our track record shows that we focus on what the customer wants and great customer service. This thread can be seen clearly in our ambitions for service delivery and the stretching and ambitious PCLs that we propose. There are eight common performance commitments which support this outcome. A summary of our performance ambitions for each of these measures is provided below, including the PCL and why it is stretching. Further detail on each PC within this outcome is set out in *UUW30 - Performance commitments technical document*.

5.7.2 PR24_WSI – Water supply interruptions

Table 5-6: UUW Water supply interruptions - PCL overview: targets, measurement and reporting and incentive design

Water supply interruptions	**Units:**	Hours: minutes; seconds (HH:MM:SS) per property per year		**Reporting Period:**	Reporting Year	**PCL Type:**	Common
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	0:05:00	0:04:52	0:04:45	0:04:37	0:04:30	0:04:22	0:01:30
Improvement from 2024-25		2.5%	5.1%	7.6%	10.1%	12.7%	70.0%
Annual improvement		2.5%	2.6%	2.7%	2.7%	2.8%	
Proposed Collar	00:22:45	00:13:45	00:13:45	00:13:45	00:13:45	00:13:45	
Proposed Enhanced Threshold		00:01:53	00:01:47	00:01:42	00:01:37	00:01:32	
Incentive Design:	Indicative with enhanced incentive rate		**Incentive rate (£m):**	£2.06 per minute per property per year			

We propose to continue to improve performance in this measure aiming for an upper quartile target calculated using the historical data sets provided by Ofwat for these purposes. Individual year performance in this measure is influenced by a number of exogenous factors that can contribute to significant events and contribute to

variances and peaks but are underpinned by continuing performance improvements over the AMP. The upper quartile companies vary each year illustrating the variability of this measure in a single year and emphasising the importance of analysing longer-term trends when setting PCLs.

Our overall trend shows continued improvement with investment in asset health, proactive maintenance, focus on restoration, and a move to a digitally enabled proactive network. We will continue this trend to meet the proposed challenging targets. This follows on from our commitment to the continued improvement profile we set out at PR19.

The duration threshold for supply interruptions associated with planned works related to the proposed leakage enhancement will be extended to eight hours. This allows the leakage enhancement programme to be delivered using innovative methods, providing cost and time efficiencies for the programme. We spoke to customers in the North West to get their views on "planned interruptions"[12]. Customers told us that they were supportive of longer duration planned supply interruptions if the additional time allowed for greater innovation and reduced general disruption (e.g. traffic disruption).

In line with Ofwat's proposal we propose a flat underperformance collar to account for the impact of extreme events such as a significant regional freeze-thaw. The collar has been calculated to provide UUW with an equivalent risk exposure in penalty to AMP7, when adjusted for inflation. Our expectation is that events resulting in water supply interruptions beyond the collar are very substantially outside of normal operational response or control and would only result from, for example, high numbers of private pipe bursts during a freeze thaw event.

5.7.3 PR24_CRI – Compliance risk index (CRI)

Table 5-7: UUW Compliance risk index (CRI) - PCL overview: targets, measurement and reporting and incentive design

Compliance Risk Index (CRI)	**Units:**	Numerical CRI score		**Reporting Period:**	Calendar Year	**PCL Type:**	Common
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	2.74	0.00	0.00	0.00	0.00	0.00	0.00
Improvement from 2024-25		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Proposed Deadband		1.75	1.75	1.75	1.75	1.75	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£1.90	per numerical CRI score			

Reported annually on a calendar year basis. For example, 2025-26 value will be based on the calendar year 2025

We propose a PCL of 0.00 CRI score (equating to 100% compliance) in line with Ofwat's, customers' and other regulators' views on this. We consider this to be an appropriate PCL when coupled with an appropriately calibrated deadband.

Ofwat intends to set this deadband after discussion with the DWI. We propose that a deadband of 1.75 for 2025-30 would be appropriate. This is tighter than the stretch on expected levels of company performance compared to the current AMP. Such a level would continue to acknowledge that not everything captured by the CRI measure is within the scope of our obligations, such as infringements from customers' own internal water fittings. We note that CRI has previously shown to be a volatile measure, and given that associated ODIs are penalty only, a deadband is appropriate based on historic evidence.

[12] InSites Consulting on behalf of United Utilities, "Expectations of Service", October 2021, https://www.unitedutilities.com/corporate/about-us/our-future-plans/listening-to-our-customers/insight-and-research-library#serviceresponse

Our recent Water Quality First programme was well received by the DWI with the Chief Inspector noting in the 2022 report[13]: *"United Utilities was taken out of transformation in early 2023. Since the transformation programme was instigated in 2016, the company has invested considerable effort, time and money into improving its assets. This has included improvements to site specific disinfection policies, disinfection arrangements, chemical dosing and monitoring, and taste and odour. Recently, the company achieved significant milestones with their service reservoirs notice. The Inspectorate welcome this positive action by the company in putting water quality first and all staff should be commended."*

This gives us confidence that a PCL of 0.00, with a deadband of 1.75 would represent a stretching but achievable target and the tighter deadband will act to provide incentives for improved performance compared to the prior AMP.

5.7.4 PR24_WQC – Customer contacts about water quality

Table 5-8: UUW Customer contacts about water quality - PCL overview: targets, measurement and reporting and incentive design

Customer contacts about water quality	**Units:**	Number of consumer contacts per 1,000 population		**Reporting Period:**	Calendar Year	**PCL Type:**	Common
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	1.08	1.02	0.97	0.91	0.86	0.80	0.40
Improvement from 2024-25		5.2%	10.4%	15.6%	20.7%	25.9%	63.0%
Annual Improvement		5.2%	5.5%	5.8%	6.1%	6.5%	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£19.06	per number of consumer contacts per 1,000 population			

Reported annually on a calendar year basis. For example, 2025-26 value will be based on the calendar year 2025

We propose a common PCL for this measure based on our assessment of forecast upper quartile performance for 2025-30 using historical datasets. This is a notably volatile measure where a single year upper quartile view is not necessarily representative on an underlying performance trend. The identity of the upper quartile companies vary each year illustrating the variability of this measure in a single year and emphasising the importance of analysing longer-term trends when setting PCLs.

Our proposed PCL represents yet another significant improvement, building on a targeted 42% improvement in the current AMP. This is a particularly ambitious target for UUW due to the specific challenging circumstances in which we operate, in comparison with other regions of England and Wales. We have predominantly upland, surface-fed water sources. This results in many challenges which may impact the aesthetic parameters of our drinking water, primarily:

- **Discolouration** – This is a particular risk in areas where peat or other high colour catchment soils can discolour reservoirs during high rainfall periods. Also impacting discolouration of our water sources is the relatively high levels of iron found in the North West's geology.
- **Algal/Cyanobacteria activity** – This is common within reservoirs during summer. While our advanced treatment processes make water safe to drink (and therefore not captured by cost drivers relating to water quality), our water is sometimes left with an unpalatable earthy/musty taste.

Both of these factors are significantly challenging, and must be managed through operational excellence, robust treatment processes and source to tap interventions focused on continuing our programme of improvements that impact on taste, smell and appearance - combining to make an upper quartile PCL a challenging target for UUW to achieve.

[13] "Drinking Water 2022 – Public supplies England", page 48, Drinking Water Inspectorate, July 2023, dwi-content.s3.eu-west-2.amazonaws.com/wp-content/uploads/2023/07/11131751/E02864254_DWI-Public-water-supplies-in-England-2022_Accessible.pdf

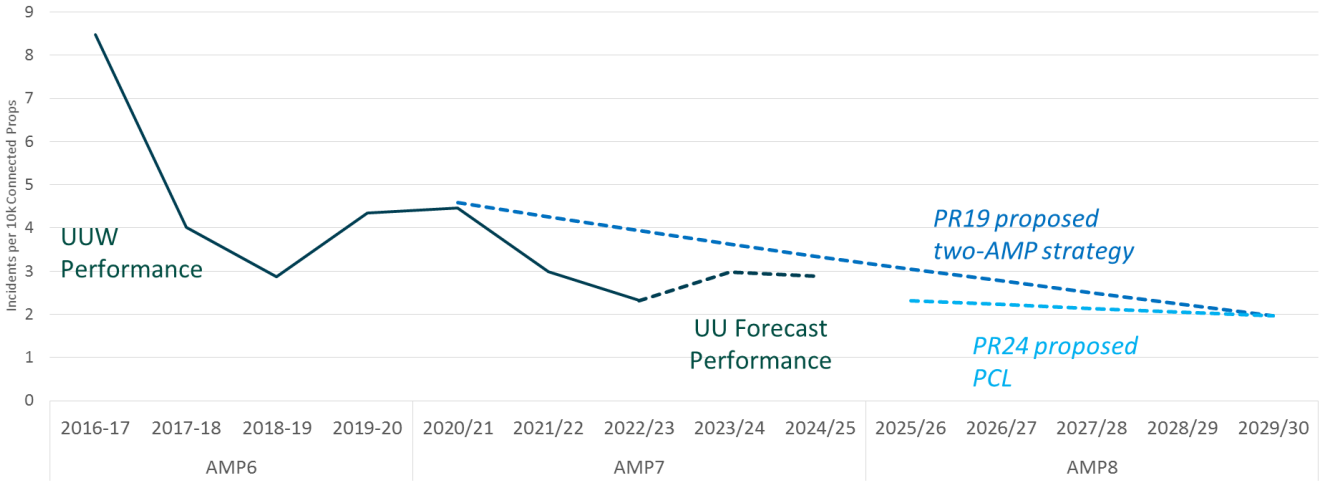
5.7.5 PR24_ISF – Internal sewer flooding

Table 5-9: UUW Internal sewer flooding - PCL overview: targets, measurement and reporting and incentive design

Internal sewer flooding	Units:	Number of incidents per 10,000 sewer connections		Reporting Period:	Reporting Year	PCL Type:	Common (environmentally adjusted)
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	2.88	2.32	2.23	2.14	2.05	1.96	1.43
UUW Performance Target (incidents)	1,007	815	790	765	740	715	
Improvement from 2024-25		19.4%	22.6%	25.7%	28.8%	31.9%	50.3%
Annual Improvement		19.4%	3.9%	4.0%	4.2%	4.4%	
Proposed Collar		3.56	3.48	3.39	3.30	3.21	
Proposed Enhanced Threshold		1.92	1.84	1.75	1.66	1.57	
Proposed Enhanced Cap		0.87	0.78	0.69	0.60	0.52	
Incentive Design:	Indicative with enhanced incentive rate	**Incentive Rate (£m):**	£15.10	per number of incidents per 10,000 sewer connections			

We have made a significant reduction in internal sewer flooding incidents in AMP7 and propose a significant reduction again in AMP8. This trajectory and the 2030 PCL we propose is in step with the two-AMP strategy which we proposed at PR19, a 57% reduction over two AMPs, AMP7 and AMP8, targeting a 2030 outturn position of 715 incidents. The PCLs we propose for 2025-30 are part of what was – and still is – a very ambitious strategy. At PR19, Ofwat set a common target for internal sewer flooding based on the simple upper quartile of industry sewer flooding incident levels. Ofwat is proposing the same approach for PR24. We raised substantive concerns regarding this approach in our Future Ideas Lab Paper *'What lessons can we learn from cost assessment at PR19'*[14] and consider that Ofwat has not yet taken account of these points. The significance of this issue has been compounded by proposed incentive rates which are significantly in excess of either historic ODI rates or recent customer valuations meaning that the level of downside implied by a common PCL set at an unattainable target would represent an unacceptable target.

Figure 5-3: Reduction in UUW internal sewer flooding incidents from AMP6 to 2030, actual, forecast, PR24 PCL and PR19 business plan proposed two-AMP strategy



A common target set at an unadjusted industry upper quartile fails to account for the significant environmental differences between company regions and how that impacts on attainable performance. As such, Ofwat's proposed approach does not lead to an equivalent level of stretch being applied to each company, with some

[14] For further details on this process, please see our Future Ideas Lab paper 'What lessons can we learn from cost assessment at PR19?' ofwat.gov.uk/wp-content/uploads/2022/04/United-Utilities-What-lessons-can-we-learn-from-cost-assessment-at-PR19.pdf

companies being penalised for not being able to deliver unachievable targets, whilst others are rewarded for outperforming targets that are insufficiently stretching and are straightforward to attain within their regional operating circumstances. We propose that 'common (environmentally adjusted)' PCLs are instead set using a common methodology that takes account of the relevant environmental differences (principally urban rainfall, the proportion of combined sewers and food service establishment (FSE) density) between company regions, thereby setting specific PCLs for each company that are equally stretching for all companies. In contrast, Ofwat's proposals for a (simple) common target is unreasonably punitive for companies that operate in more challenging environments, and relatively easy to achieve for companies in more favourable environments.

UUW has undertaken a reproducible econometric modelling analysis to define PCLs for all companies on a common basis, by adjusting for these regional environmental operating circumstances. Specifically, we propose that PCLs for all companies are set at the 'environmentally-adjusted upper quartile', i.e. an upper quartile that is adjusted for the above environmental operating circumstances in each region. UUW is not seeking a company-specific, more lenient PCL than other companies – rather, UUW is seeking that PCLs for all companies fairly reflect the different operating challenges arising in each company region.

Recognising that sewer flooding is one of the worst service failures customers can experience we are therefore committed to pushing ourselves to the boundaries of what is achievable and honouring 2030 outturn targets published in our PR19 business plan submission. Such an outturn position is beyond the environmentally-adjusted frontier, i.e. the minimum number of flooding incidents modelled to be achievable within the environmental operating circumstances of the North West. In relative terms, UUW's performance improvement of 46.7% between 2020 and 2023 far exceeds that seen in the industry where improvement in the upper quartile over the equivalent period is 33.3%. Our proposed AMP8 improvement rate exceeds that seen within the wider industry in AMP7 to date.

Owing to our significantly elevated exposure to severe weather flooding as a result of our unique regional operating circumstances, we also propose a collar to provide protection against only the most exceptionally severe events. Without a collar, companies are exposed to an unacceptable level of financial risk for severe weather events that are largely outside of their control.

For example, in September 2016, UUW experienced exceptionally severe weather in the Manchester and Stockport region over a two day period, with localised return periods in excess of 1 in 1,000. This two-day period alone resulted in 933 hydraulic and severe weather incidents – over 60% of the total number of incidents of this type reported in the whole year from two days alone. This type of "spike" in incidents over a very limited time period is analogous to the situation that might arise during a "freeze thaw" event and its impact on water supply interruptions; a significant proportion of the full year performance against the target is driven by one-off, exogenous events. Ofwat considers that an underperformance collar is appropriate in order to mitigate the impact of extreme events on water supply and the same approach appears valid on flooding metrics. It would be prohibitively expensive to seek to weatherproof the drainage system against extreme weather events.

Whilst we recognise Ofwat's view that companies should be incentivised to mitigate the impact of exogenous events on customers, designing solutions to cope with storms of such unlikelihood would also have an unacceptable impact on customer bills. Thus, whilst UUW is proposing significant investment to increase resilience against severe weather, protection should be in place to mitigate exposure to low probability high consequence exceptional events.

We note the inclusion of flooding extent assessment (FEA) in the PR24 metric and that companies shall make all reasonable efforts to determine the number of properties affected by a flooding event. We have historically raised our concerns regarding under-reporting of incidents – those reactively identified during on-site investigation – by other companies. UUW has a long-standing process for identifying properties affected in this way (for example by visiting adjacent properties during reactive sewer flooding incidents). We are pleased to see that other companies have recently made advances in the number of properties identified via onsite investigation but we encourage Ofwat to ensure this trend is continued during wetter years. Now that external sewer flooding is also a common metric, we recommend that FEA reporting should also be applied to external flooding events in order to ensure that ODI performance is measured against more robust underlying data.

5.7.6 PR24_ESF – External sewer flooding

Table 5-10: UUW External sewer flooding - PCL overview: targets, measurement and reporting and incentive design

External sewer flooding	Units:	Number of incidents per 10,000 sewer connections		Reporting Period:	Reporting Year	PCL Type:	Common
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	15.66	15.20	14.75	14.40	14.07	13.65	10.90
UUW Performance Target (incidents)	5,476	5,350	5,231	5,153	5,082	4,975	
Improvement from 2024-25		2.9%	5.8%	8.0%	10.2%	12.8%	30%
Annual Improvement		2.9%	3.0%	2.4%	2.3%	3.0%	
Proposed Enhanced Threshold		12.03	11.58	11.23	10.90	10.48	
Proposed Enhanced Cap		10.82	10.37	10.02	9.69	9.27	
Incentive Design:	Indicative with enhanced incentive rate	**Incentive Rate (£m):**	£6.76	per number of incidents per 10,000 sewer connections			

UUW has accepted Ofwat's proposal for a common performance commitment level (PCL) for external sewer flooding. UUW's proposed PCL delivers a stretching 12.8% improvement upon our forecast end of AMP7 performance. Sensitivity analysis demonstrates that whilst external flooding performance is responsive to exogenous factors, such as urban rainfall and the proportion of combined sewers, it is less so than internal flooding performance. It is for this reason that we consider a common PCL is appropriate for this measure.

However, we consider that it is very challenging to define a robust industry upper quartile owing to the bespoke nature of the performance commitment in AMP7 and the application of caps and collars during AMP7 (since removed for 2025-30) influencing historic levels of performance. Indeed, a forecast based on a logarithmic projection of historic upper quartile would result in an upward trend (i.e. deteriorating performance) in 2025-30. We therefore propose a common PCL set at a level equivalent to the modelled frontier for UUW. This is within the uncertainty band of the upper quartile and therefore an appropriate substitute. The PCL targets a stretching improvement to our 2024/25 performance level and represents a target that is substantially beyond anything that UUW has historically been able to deliver. Whilst we recognise this represents a very stretching target, we know that sewer flooding is one of the worst service failures customers can experience and are therefore committed to pushing ourselves to the boundaries of what is achievable.

We note the inclusion of flooding extent assessment (FEA) in the PR24 metric. We have historically raised our concerns regarding under-reporting of incidents – those reactively identified during on-site investigation – by other companies. UUW has a long-standing process for identifying properties affected in this way. We therefore welcome the inclusion of FEA in the PR24 metric.

5.7.7 PR24_CMEX, PR24_DMEX and PR24_BRMEX measures of experience

We are committed to delivering the best possible service for customers and have a strong track record of performance on customer service metrics.

At the time of submission, the AMP8 definitions of these measures are yet to be finalised. In line with Ofwat's extended timelines for the definition of AMP8 customer and business retailer experience measures we are working with Ofwat and the industry to develop and refine the MeX incentive suite. We will determine our relative performance targets for these measures as and when the details of them are finalised. We will be aiming to build on our improving customer service performance to deliver an excellent service experience for all customer groups.

5.8 Outcome: Environmental

5.8.1 Overview

Our strong track record on great environmental performance translates into an ambitious approach at PR24 on the twelve environmental common performance commitments. A summary of our performance ambitions for each of these measures is provided below, including the PCL and why it is stretching. Further detail on each PC within this outcome is set out in *UUW30 - Performance commitments technical document.*

5.8.2 PR24_BIO – Biodiversity

Table 5-11: UUW Biodiversity - PCL overview: targets, measurement and reporting and incentive design

Biodiversity	**Units:**	Biodiversity units per 100km2 of land in the company's area		**Reporting Period:**	Reporting Year	**PCL Type:**	Company Specific
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	0.00	0.00	0.00	0.07	0.38	0.64	35.82
Biodiversity units (cumulative from base year)	0.00	0.00	0.00	19.53	111.14	187.84	6,183.33
Proposed Cap		£1.00 m	£1.00 m	£1.65 m	£7.00 m	£6.00 m	
Proposed Collar		-£1.00 m	-£1.00 m	-£1.65 m	-£7.00 m	-£6.00 m	
Incentive Design:	External market valuation	**Incentive Rate (£m):**	0.02280	per Biodiversity units per 100km2 of land in the company's area			

UUW proposes a company specific PCL for this measure and supports Ofwat's approach to normalisation – based on company area, rather than company owned land.

Through the development of AMP8 investment plans – such as the WINEP – we have identified opportunities where biodiversity may be improved through our activities and included these in the Wider Environmental Outcome (WEO) assessments. Whilst these assessments have been conducted on a desk based assessment for comparative purposes between different options to support decision making we have used these values to form the basis of our PCLs for AMP8. The WINEP development process identified the units that would be delivered over a 30 year period. For this performance commitment we have identified projects where we have predicted a biodiversity delivery over and above the requirements of biodiversity net gain and profiled the expected unit delivery over the 30 year period. This has been used as our proposed PCL.

There is no proposed performance commitment level for years one and two of AMP8 because, in line with the PC methodology released in May 2023, biodiversity assessments need to be baselined and then reassessed after four years. The nature of biodiversity delivery is that it is very site specific and impacted by many factors which require detailed site assessment to truly understand the unit value of the baseline and the likely impact of any interventions. Factors such as condition and extent of specific habitats within land parcels can only be fully assessed with onsite assessments, and the nature of our investments – with delivery often focused on specific targets such as species preservation or improving SSSIs – may deliver significant ecological enhancement but little benefit when assessed purely through the Defra metric. This initial reassessment is the first point that biodiversity improvements could be realised under this PC. We are now able to commence baseline assessments following the May 2023 methodology publication, with reassessments (demonstrating biodiversity gain in line with the requirements of this PC) therefore only possible from 2027/28.

Although this is a new common PC for AMP8 we are already demonstrating good understanding and performance in the wider ESG area prior to AMP8 through our annual reporting[15]. Our current reporting shows that we understand the importance of biodiversity and therefore our limitations in setting ex ante PCLs for biodiversity without detailed biodiversity assessments in line with the Defra metric. Although there are elements of biodiversity included in our AMP7 natural capital PC, the AMP7 measure is far broader and biodiversity is

[15] unitedutilities.com/corporate/responsibility/our-approach/esg-performance/

assessed in a far more simple way in AMP7 which does not capture biodiversity benefit as comprehensively as the current definition of the AMP8 common PC.

5.8.3 PR24_OGW and PR24_OGWW – Operational GHG emissions Water and Wastewater

Table 5-12: UUW Operational greenhouse gases (Water) - PCL overview: targets, measurement and reporting and incentive design

Operational greenhouse gases (Water)	Units:	Percentage reduction from baseline (tCO2e)		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	9.56	10.17	10.54	11.14	11.96	12.37	26.14
Percentage point change from 2024-25		0.61	0.98	1.58	2.40	2.81	16.58
Proposed Cap		12.17	12.54	13.14	13.96	14.37	
Proposed Collar		9.97	10.34	10.94	11.76	12.17	
Incentive Design:	External market valuation	**Incentive Rate (£m):**	£0.000130	per tCO2e			

Table 5-13: UUW Operational greenhouse gases (Wastewater) - PCL overview: targets, measurement and reporting and incentive design

Operational greenhouse gases (Wastewater)	Units:	Percentage reduction from baseline (tCO2e)		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	-13.19	-15.03	-15.17	-15.32	-10.22	-10.66	-40.76
Percentage point change from 2024-25		-1.84	-1.98	-2.13	2.97	2.53	-27.57
Proposed Cap		-13.03	-13.17	-13.32	-8.22	-8.66	
Proposed Collar		-15.23	-15.37	-15.52	-10.42	-10.86	
Incentive Design:	External market valuation	**Incentive Rate (£m):**	£0.000130	per tCO2e			

We lead the industry on carbon reporting and emissions reductions and are actively working with the industry to improve carbon reporting and achieve net zero targets. We are therefore keen to see these two new common PCs achieve their aims. Our drive comes from a background with a strong track record of emissions reduction: since 2005 we have achieved a 72% reduction in our scope 1 and 2 emissions by making strong progress towards our six carbon pledges and putting us ahead of many other water companies on their emissions reduction. For example, we now only use green electricity and have invested in new renewable self-generation facilities, generating 196 GWh of green energy in 2022/23 which is our largest amount yet. Added to this, in 2021 UUW was the first in the UK water sector to set science based targets (SBTs) across our direct and indirect emissions (scope 1, 2 and 3).

Our proposed PCLs are based on the operational GHG emissions arising from our Water, Wastewater, Bioresources base activity, and from the operational impact of enhancement programmes. They are set as a percentage reduction from our baseline (forecast annual emissions at FD for UUW's operational GHG emissions for Water and Wastewater) using historical data sets where applicable. We propose that the baseline and target are set before the start of the reporting period (2025-2030) and a reduction from our annual forecast emissions during 2025-30 is agreed.

It will be challenging to reduce emissions whilst expanding services to a growing population and delivering a large environmental programme, all of which will increase operational requirements. We have implemented low cost opportunities which complement our land, renewable and bioresources strategies and are making progress against our carbon pledges in line with our science based targets. Our current performance and our involvement

in the development of these common PCs shows that we understand the importance of this performance area and how to set stretching and achievable PCLs in 2025-30.

As we made progress earlier than other companies to reduce our GHG emissions, for example by implementing renewables, there are fewer opportunities available to us in these performance commitments. The methodology[16] does not enable any change in process emissions to be recorded as it is linked to population equivalent and sludge produced volumes. It is also our understanding from the final methodology that the tCO2e benefit approved for net zero enhancement spend will amend our PCL for operational GHG emissions.

Ofwat has indicated that it will use a credible external valuation to value the ODI for these two common PCs. We suggest that the most suitable approach would be to base the ODI rates on the BEIS £/tCO2e 'low' carbon values. This matches the approach we propose for our bespoke PC on Embodied greenhouse gas emissions.

Water demand PCs – PCC, leakage, business demand
We recognise that Ofwat's approach to water demand at PR24 sees an umbrella approach to the three related PCs (leakage, PCC and business demand) and we agree that if implemented appropriately then this will provide scope for further innovation on water efficiency.

The information and assumptions made for leakage, per capita consumption and business demand PCs (the water demand PCs) will be consistent and based on the same water balance calculations. If any information is restated for one of the three PCs, we expect that the other PCs will also be restated if there are any consequential impact.

5.8.4 PR24_LEA – Leakage

Table 5-14: UUW Leakage - PCL overview: targets, measurement and reporting and incentive design

Leakage	**Units:**	Percentage reduction from 2019-20 baseline		**Reporting Period:**	Reporting Year	**PCL Type:**	Company Specific
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	10.8	14.8	17.3	19.6	21.7	23.8	49.4
Percentage point change from 2024-25		4.0	6.5	8.8	10.9	13.0	38.6
Proposed Enhanced Threshold		16.2	20.1	23.8	25.9	27.9	
Proposed Enhanced Cap		18.3	24.2	29.5	31.0	32.2	
Incentive Design:	Company Specific with enhanced incentive rate	**Incentive Rate (£m):**	£0.36	per Mega litres/day (Ml/d)			

Leakage, alongside PCC, forms the focal part of our AMP8 Water Resources Management Plan (WRMP). Our stretching leakage target builds on our strong AMP7 performance where we have delivered our lowest ever levels of leakage. Our leakage strategy is a transformation from "find and fix" to Dynamic Network Management, predicting and preventing leaks to drive continual improvement in our leakage performance. Our best value leakage plan focusses on asset health improvements (targeted mains renewal) and optimising the way in which we proactively manage the water network. Leakage and the wider water demand programme will therefore contribute to future reductions in operational greenhouse gasses as overall water demand and associated abstraction, treatment and distribution requirements are reduced.

We propose a stretching PCL that delivers a 23.8% reduction in leakage from the 2019-20 baseline, delivering 13.0% of this in 2025-30. Our proposed PCL sustains our projected rate of improvement over AMP7, but also incorporates the impact of the rapid advances we aim to make in leakage awareness, prediction and prevention. We continue to make best use of available technologies (including Dynamic Network Management), flexing our strategy and refining our approach to ensure that we can embrace the heightened level of innovation in this area. Our PR24 and WRMP leakage reduction strategy focuses on targeted mains renewal/replacement (using the insights we've gained from the additional network sensors we installed in AMP6 and AMP7) and smart metering to increase leakage detection efficiency, as well as supporting customer engagement and better understanding of

[16] Based on version 17 of the Carbon Accounting Workbook (CAW) as stated in the PC definition

customer-side leakage levels. Through these technologies and ways of working we aim to deliver this stretching performance improvement.

Our leakage plans for 2025-30 are consistent with our WRMP – reflecting the latest submission to our environmental regulator – and our existing commitment of halving leakage by 2050 from the levels seen in 2019/20. This is the second five year period of leakage reduction delivery on this WRMP journey and we are on track to deliver this next phase.

5.8.5 PR24_PCC – PCC (per capita consumption)

Table 5-15: UUW Per Capita Consumption (PCC) - PCL overview: targets, measurement and reporting and incentive design

Per Capita Consumption (PCC)	Units:	Percentage reduction from 2019-20 baseline		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	5.1	6.7	7.4	8.1	8.9	9.7	24.7
Percentage point change from 2024-25		1.5	2.2	3.0	3.8	4.5	19.6
Proposed Enhanced Threshold		12.2	13.9	14.3	14.7	15.1	
Proposed Enhanced Cap		110 l/p/d	110 l/p/d	110 l/p/d	110 l/p/d	110 l/p/d	
Incentive Design:	Company Specific with enhanced incentive rate	**Incentive Rate (£m):**	£2.57	per litres/person/day (l/p/d)			

We propose a PCL for the business plan period 2025-2030 aligned to our revised WRMP forecasts. As the measure is a company specific measure, we propose stretching performance between 2025 and 2030 which is set to ensure that we maintain a trajectory towards achieving longer term government targets for per capita consumption reduction of 110 l/p/d (litres per person per day) in the final year of the planning period, 2050.

Our plans to achieve this stretching level of performance include rolling-out water meters (including newer smart meter technologies) more widely, maximising customer engagement tools, developing new customer incentives and tariffs, working with industry and regulators to alter household appliance and plumbing rules and guidelines, supporting the setting of new standards for water efficient home building, and otherwise radically altering the way in which households consume water on a day to day basis.

The ongoing changes in demand patterns due to Covid-19 related impacts, such as on working locations, has introduced substantial uncertainty to future demands. We nevertheless have risen to the challenge of this impact on consumption, with substantial investment in individualised customer engagement campaigns, roll-out of water saving devices and an increased focus on identifying and resolving customer-side leakage. UUW is performing close to industry upper quartile on a three year rolling average basis, with annual performance in 2022/23 better than upper quartile positions following better than average recovery from the impacts of Covid-19 on water demand. As a result we are on track to achieve our AMP7 2024/25 annual target.

5.8.6 PR24_NHH – Business demand

Table 5-16: UUW Business Demand - PCL overview: targets, measurement and reporting and incentive design

Business Demand	Units:	Percentage reduction from 2019-20 baseline		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	2.5	4.0	4.9	6.1	7.2	8.3	14.1
Percentage point change from 2024-25		1.5	2.3	3.5	4.7	5.8	11.6
Proposed Cap		326.0 Ml/day	326.0 Ml/day	326.0 Ml/day	326.0 Ml/day	326.0 Ml/day	
Proposed Collar		365.8 Ml/day	362.6 Ml/day	358.1 Ml/day	353.8 Ml/day	349.6 Ml/day	
Incentive Design:	Company Specific	**Incentive Rate (£m):**	£0.36	per Mega litres/day (Ml/d)			

UUW proposes a PCL for the business plan period 2025-2030 in line with revised WRMP forecasts with this stretching performance set to ensure we maintain a trajectory towards achieving longer term government targets for business demand reduction.

We believe that changes in the volume of water used by a small number of very large users has the potential to materially alter performance against this measure in a way which is wholly outside of company control. A methodology for accounting for these high impact situations should be considered, as they are not related to the impact of investment or company action to reduce business demand. If they are not excluded then we propose that the penalty collar should be set at a rate to account for these high impact situations.

Water efficiency for businesses is primarily the responsibility of the retailer, but as wholesalers we can have indirect and direct influence on non-household consumption. However, given the indirect nature of much of our control and the relative newness of this innovative PC, we agree with Ofwat that a cap and collar should apply. We propose a relatively tighter collar to reflect the indirect nature of our control accompanied by a less restrictive cap to allow for future innovation in this developing performance area and market.

5.8.7 PR24_POL – Total pollution incidents

Table 5-17: UUW Total Pollution Incidents - PCL overview: targets, measurement and reporting and incentive design

Total Pollution Incidents	Units:	Number of incidents per 10,000 km sewer length		Reporting Period:	Calendar Year	PCL Type:	Common
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	16.03	16.03	15.69	14.80	13.79	12.02	10.70
UUW Performance Target (incidents)	124	124	124	117	109	95	
Improvement from 2024-25		-	2.1%	7.7%	14.0%	25.0%	33.3%
Annual Improvement		-	2.1%	5.7%	6.8%	12.8%	
Proposed Enhanced Threshold		13.96	13.54	13.16	12.65	12.02	
Proposed Enhanced Cap		4.40	4.05	3.29	2.66	1.39	
Incentive Design:	Indicative with enhanced incentive rate	**Incentive Rate (£m):**	£1.78	per number of incidents per 10,000 km sewer length			

Reported annually on a calendar year basis. For example, 2025-26 value will be based on the calendar year 2025

We put a lot of hard work into improving our performance on pollution, as we know it is a priority for customers and stakeholders. We are the leading company and have made great improvements over the past few AMPs. Our

ambition is to maintain the leading position throughout AMP8. We will deliver a further 25.0% improvement in AMP8, targeting frontier performance in 2030, pushing the projected industry frontier position forward. The water industry strategic environmental plan (WISER) sets out the government's environmental expectations for the water industry. We are aware of the ambition for a 30% improvement as set out in the WISER. However, as frontier, we believe our targeted performance improvement of 25.0% is stretching and goes beyond current best performance. We propose a PCL based on historical industry data sets, in line with the projected upper quartile (and EPA reporting methodology version 9), in order to encourage the continued improvement in pollution incidents that has been achieved in the initial years of AMP7.

We have used the historical performance data published by Ofwat to calculate stretching performance for this PC. This in itself is evidence of stretch because we are aware that there are proposed upcoming changes which could significantly impact future reporting and measurement of pollution incidents, and which if enacted now, would stretch the upper quartile of performance even further. For example, proposed changes in regulation, categorisation and awareness of pollution events are likely to increase the number of category 1-3 pollution incidents recorded within a year and lead to a deterioration of the industry upper quartile position. The main pressures on the upper quartile position include: revision of the EA's operational instruction 16 02; improvements in storm overflows/retrospective spill reporting; and, roll-out of additional monitoring and increased situational awareness. The PCL accounts for risk of incidents related to environmental factors such as increased rainfall, but does not account for any such future changes. The factors outlined above are likely to lead to a deterioration of this current upper quartile position.

We have proposed a stretching target for AMP8 based on existing regulatory guidance[17] and using historical data published by Ofwat. We will report performance in AMP8 against this existing regulatory guidance and the PCLs set by Ofwat at Final Determination. If the Environment Agency guidance changes within the AMP8 period then the targets and methodology to categorise pollution incidents will remain aligned to this existing regulatory guidance and the PCLs set at Final Determination.

We are one of the sector leaders on environmental performance, as evidenced by our performance on pollution where we see the benefits of our Pollution Incident Reduction Plan (PIRP). We have recently published our second PIRP[18], a plan endorsed by our Board who regularly reviews pollution performance and monitors delivery of it to ensure it's on track. We are:

- Delivering sector frontier performance on pollution incidents, having reduced overall pollution by a third since the start of the AMP;
- Leading the sector for reducing serious pollution incidents (Category 1), achieving zero in 2022/23 and in three of the last four years;
- We have the best performance on the common pollution performance commitment (Category 1 to 3) and have held this leading position for the last two years; and,
- Sharing our work with others, and learning from others, because it is important to us. In February 2023, we hosted the water sector's first Pollution Summit to share best practice on measures being taken by companies to reduce the frequency of pollution events.

Our robust pollution reduction plan[19] details our approach to driving down pollution incidents including our investment in Dynamic Network Management (DNM) telemetry using real time information from the network to identify potential issues before they cause pollution. As well as DNM we ensure effective maintenance of assets, alarm management, responding quickly when we are aware of an incident to protect the environment and having a robust reporting procedure to ensure we understand the root cause of pollution when it does happen, so steps can be put in place to prevent a reoccurrence.

[17] The existing regulatory guidance is: EPA v9; Recording and categorising water industry self-reported pollution incidents 16_02 v6; and, the current version of the Common Incident Classification Scheme (CICS)

[18] unitedutilities.com/globalassets/z_corporate-site/responsibility-pdfs/pollution-incident-reduction-plan-2023.pdf

[19] unitedutilities.com/corporate/responsibility/environment/Reducing-pollution

5.8.8 PR24_SPL – Serious pollution incidents

Table 5-18: UUW Serious pollution incidents - PCL overview: targets, measurement and reporting and incentive design

Serious pollution incidents	Units:	Number of serious pollution incidents		Reporting Period:	Calendar Year	PCL Type:	Common
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proposed Enhanced Threshold	Two years with zero incidents						
Incentive Design:	Indicative with reward gateway (Proposed)	**Incentive Rate (£m):**	£1.14	per number of serious pollution incidents			

Reported annually on a calendar year basis. For example, 2025-26 value will be based on the calendar year 2025

UUW performance has improved significantly for serious pollution incidents, achieving zero for 2020 and 2021 and a forecast performance of zero incidents in 2024 and 2025. Our current performance shows that we understand the importance of this performance area and how to deliver on it in AMP8.

The target of zero serious pollution incidents applies to both water and wastewater companies (unlike total pollution incidents). This is more achievable for water only companies (according to historic data), due to the parameters of the reporting methodology and how it applies to companies that have more assets with a potential pollution risk.

We propose an enhanced incentive for wastewater companies that achieve zero serious pollution incidents for two consecutive years. This gateway is based on historic performance of wastewater companies, which demonstrates that it is rare for wastewater companies to achieve two consecutive years of zero serious pollution incidents. Whilst sector performance has improved significantly since 2011, there is a clear need for wastewater companies to improve further. The addition of this positive financial incentive to the Serious Pollution PC aims to achieve that.

Proposed changes to the EPA methodology could have an impact on categorisation of pollution incidents and pollution performance reported under the PCs. Whilst this will have a greater impact on the total pollution incidents PC, it may also make achieving any PCL – set on historical performance data – more stretching to achieve. This should be considered when assessing the stretch of the zero PCL and our proposal for a reward for companies who record two consecutive years of zero serious pollution incidents.

5.8.9 PR24_DPC – Discharge permit compliance

Table 5-19: UUW Discharge permit compliance - PCL overview: targets, measurement and reporting and incentive design

Discharge permit compliance	Units:	Percentage Compliance		Reporting Period:	Calendar Year	PCL Type:	Common
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	98.93	100.0	100.0	100.0	100.0	100.0	100.0
Improvement from 2024-25		1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
Percentage point change from 2024-25		1.1	1.1	1.1	1.1	1.1	1.1
Proposed Deadband		99.0	99.0	99.0	99.0	99.0	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£2.88	per percentage non-compliance			

Reported annually on a calendar year basis. For example, 2025-26 value will be based on the calendar year 2025

To accompany the 100% compliance PCL for this environmental measure, we propose the inclusion of a common industry deadband for the business plan period 2025-2030. We believe this is necessary to align it with the environmental regulator's current Environmental Performance Assessment (EPA) methodology (version 10) and mitigate the risk to compliance from external factors outside of company obligations.

Setting the PC with a deadband at 99.0% would be consistent with the Environment Agency's stretching targets for 4 star EPA status and would represent coherence with what the EA considers to be industry leading performance. Alignment of this PC with the Environmental Performance Assessment Version 10 Discharge permit compliance (numeric) measure, the deadband should be set at 99.0% compliance which is categorised as 'Green' in EPA. We also note that Discharge Permit Compliance is a core metric for EPA and that 99.0% compliance is a pre-requisite to companies achieving 4 star status, even if all their other metrics are green. Historic evidence shows that this is an upper quartile level of performance which is accepted by the EA. As the responsible environmental regulator, we consider that the EA is well placed to be able to judge top tier performance on this measure and we consider that Ofwat's approach should embrace this.

We also highlight in section 5.6.6 the potential for companies to be penalised more than once, through four other PCs, for a discharge permit compliance failure. Such double counting of penalties should be corrected by excluding the multiple impacts from the five PC definitions: Discharge permit compliance; Serious pollution incidents; Total pollution incidents; River water quality; and, Bathing water quality.

5.8.10 PR24_BWQ – Bathing water quality

Table 5-20: UUW Bathing Water Quality - PCL overview: targets, measurement and reporting and incentive design

Bathing Water Quality	Units:	Percentage score		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	61.8	61.8	61.8	61.8	61.8	63.0	66.4
Improvement from 2024-25		-	-	-	-	1.9%	7.4%
Percentage point change from 2024-25		-	-	-	-	1.2	4.6
Proposed Cap		67.5	67.5	67.5	67.5	68.7	
Proposed Collar		56.1	56.1	56.1	56.1	57.3	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£1.64	per percentage score			

The proposed PCL of 1.9% increase from 2024/25 performance is based on an improvement of one bathing water by one classification by the close of AMP8. The improvement in the number of bathing waters from the current classification – excluding those bathing waters that are already excellent quality and cannot improve any more – is 2%. This is an ambitious target as UUW has no drivers in AMP8 to improve classification of bathing waters and we therefore aim to deliver it from base expenditure. The PCL level goes beyond our improvement programme in AMP8 where we are targeting some improvement schemes and spill frequency reduction, however modelling results do not predict a step change in performance as a result of this investment. To ensure our target is stretching, the PCL is set assuming the improvement of one bathing water by one classification in AMP8. This is the equivalent of removing the current "poor" classification at one bathing water. This is beyond the AMP8 enhancement investment plan.

5.8.11 PR24_RWQ - River water quality (phosphorus)

Table 5-21: UUW River water quality (phosphorus) - PCL overview: targets, measurement and reporting and incentive design

River water quality (Phosphorus)	**Units:**	Percentage reduction in phosphorous		**Reporting Period:**	Calendar Year	**PCL Type:**	Company Specific
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	3.65	15.01	15.33	20.90	21.01	21.25	88.74
Percentage point change from 2024-25		11.36	11.68	17.25	17.36	17.60	85.09
Proposed Cap		17.56	17.86	23.27	23.38	23.61	
Proposed Collar		12.46	12.78	18.53	18.64	18.89	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£0.000661	per kg of phosphorus reduced			

Reported annually on a calendar year basis. For example, 2025-26 value will be based on the calendar year 2025

We present ambitious performance levels for this new PC which are based on further stretching our existing levels of outperformance against permit levels. Our proposed PCL is therefore based on our commitment to continue to remove 37.52% more phosphorus than permits require, at sites where permit concentrations are set at 0.5 mg/l and above. In addition we are proposing a stretch to remove an additional 0.5% from all our sites with new and tightened P permits. This will be delivered by optimising treatment processes on our wastewater treatment sites and through the exploration of novel technologies and working practices. We think this level of performance is deliverable, yet ambitious, and plan to pursue such performance improvements by further improving sludge management across our asset base. Further stretch is also proposed in our PCLs by including a further reduction of phosphorus to be delivered via partnership catchment schemes. For example, our plans include the delivery of nine of the WINEP solutions through catchment solutions – an ambitious and stretching proposal. The PCL profile is based on our WINEP programme, using regulatory dates as the basis.

We assume that any non-compliance with permits would be captured through the Discharge Permit Compliance (DPC) common performance commitment, and financially penalised only once, through the ODI related to DPC. We highlight in section 5.6.6 the potential for companies to be penalised more than once, for example if the River water quality PCL extends beyond the discharge permit limits for phosphorus. If we fail to achieve our phosphorus permit target, this would result in a failing treatment works incurring an ODI underperformance penalty through the Discharge Permit Compliance PC (a penalty only measure) and result in underperformance against the River water quality PC. The non-compliance should only be captured in the River water quality (RWQ) PC measurement, and our PCLs have been proposed based on this assumption. We therefore do not propose a deadband for this RWQ measure, as we presume it will be taken account of via the design of the DPC measure. We should not incur an ODI penalty for achieving our permit levels, and have set our RWQ PCL using this assumption.

5.8.12 PR24_SOF - Storm overflows

Table 5-22: UUW Storm overflows - PCL overview: targets, measurement and reporting and incentive design

Storm overflows	Units:	Annual Average number of spills (regional)		Reporting Period:	Reporting Year	PCL Type:	Company Specific (proposed)
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	29.21	26.20	25.60	24.20	22.40	19.60	8.50
Improvement from 2024-25		10.3%	12.4%	17.2%	23.3%	32.9%	70.9%
Annual Improvement		10.3%	2.3%	5.5%	7.4%	12.5%	
Proposed Cap		18.34	17.92	16.94	15.68	13.72	
Proposed Collar		34.06	33.28	31.46	29.12	25.48	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£1.29	per annual average number of spills			

We are committed to delivering a step change in reducing the need to use storm overflows. We have already made significant progress in reducing the average number of spills, and we are committed to going further with the largest environmental improvement programme we will have ever delivered, in AMP8. There is a particular challenge in the North West that we face in achieving this ambition due to the unique operating circumstances in the region but we are committed to achieving the reductions customers and stakeholders want to see.

UUW proposes a company specific PCL which reflects our ambition to significantly reduce storm discharges to the environment. Against the Ofwat spill measure (which includes an operability adjustment) we are setting a stretching target of a 32.9% performance improvement. This compares to a 26.8% performance improvement without an operability adjustment. Our plan will deliver a sustainable average spill frequency of 19.6 by 2030 – a significant improvement from our current baseline of 49.73 spills[20]. This builds on and consolidates the reductions already delivered since 2020, leading to a reduction between 2020 and 2030 of 61%. In supplementary document, *UUW64 WINEP Overflows* we present compelling evidence outlining our historical investment decisions and current operating environment which all have a direct impact on our storm overflow performance. This is further supplemented in supplementary document *UUW30 - Performance commitments technical document* by compelling evidence as to why a company specific PCL is the only appropriate approach to setting performance levels which account for UUW's unique operating circumstances including the legacy design and configuration of infrastructure, the frequency and intensity of rainfall in the North West and the large number of combined sewers in the wastewater network.

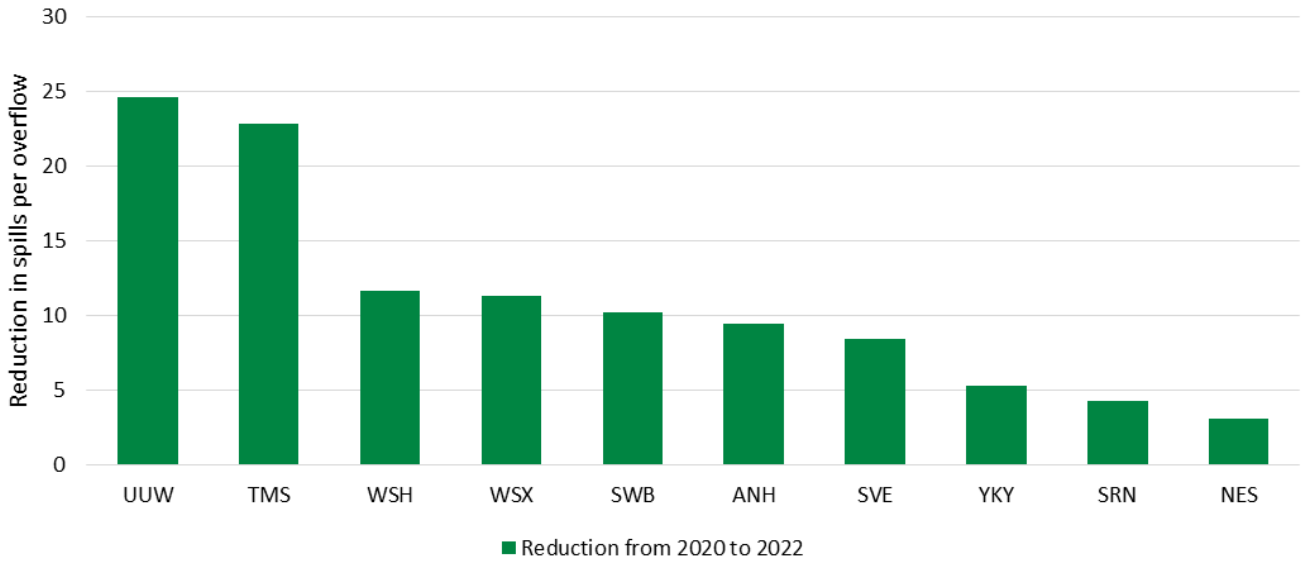
We welcome new legislation which changes the way companies can approach improvements to storm overflows, moving away from the traditional assessment of harm and cost benefit analysis to focus on reduction in spill frequency, in addition to harm. Due to past legislative drivers, UUW has had the highest spill frequency in the industry, meaning that it will take significantly more for us to achieve a level playing field in this performance area.

Whilst our current operations comply with our legal requirements and obligations we know that customers and stakeholders want us to go further and faster – operationally we are doing everything that we can to reduce the use of storm overflows. Our AMP8 plan builds on our present Better Rivers[21] commitment to delivering at least a one third sustainable reduction in the number of spills recorded from our storm overflows by 2025 compared to the 2020 baseline. We believe that our plan will deliver the biggest spill reduction across the water industry in AMP8, targeting 437 storm overflows and investing over £3bn in the delivery of improvements to achieve this plan, and aligning to the regulatory framework of 10 (or less) spills by 2050. Our significant progress so far on reducing the average number of spills, compared to the progress of other companies, can be seen in Figure 5-4.

[20] Based on Ofwat methodology – 2022/23 data reported in business plan data table OUT5.77

[21] Further evidence of the work that we have undertaken in AMP7 to improve performance can be found in our Better Rivers report, published April 2023 unitedutilities.com/globalassets/documents/corporate-documents/united-utilities-better-rivers-report-2023.pdf

Figure 5-4: Reduction in average number of spills 2020-2022



Source: EDM Annual Returns

UUW recognises that the PCL for this measure needs to take into account the benefits that will be delivered though the base totex programme and the WINEP. The base programme will deliver gradual improvements in performance, focused on avoiding maintenance or operational failures; while the enhancement programme will deliver a step change in performance, in line with Government's long term ambition for spill reduction. To ensure that UUW is delivering the best benefit in AMP8 our enhancement programme targets high priority and high spilling storm overflows. In addition we are challenging our delivery expectations and promoting early delivery of our storm overflow reduction programme in AMP8 to enable early delivery against the regulatory date, this is in addition to the benefits that we will see as a result of early investment in our storm overflow programme agreed by Ofwat in April 2023. Early delivery of our WINEP enhancement programme is reflected within our storm overflow reduction plan (SODRP) and AMP8 performance commitment. The PCL goes beyond our ambition to deliver the largest enhancement programme we've ever seen early and sets an even more ambitious delivery target. This will promote innovation to driver spill reduction improvements from base expenditure as soon as possible.

5.9 Outcome: Asset Health

5.9.1 Overview

Ensuring that we invest in our assets, maintaining healthy and resilient networks for today and in the future is of paramount importance to customers. There are three common performance commitments which support this outcome. A summary of our performance ambitions for each of these measures is provided below, including the PCL and why it is stretching. In the PR24 final methodology, Ofwat guided that each asset health PC would likely have a cap and collar asymmetrically set at +0.25% and -0.5% RoRE, respectively. We have applied this guidance and propose caps and collars on this basis. Further detail on each PC within this outcome is set out in supplementary document *UUW30 - Performance commitments technical document.*

5.9.2 PR24_MRP – Mains repairs

Table 5-23: UUW Mains repairs - PCL overview: targets, measurement and reporting and incentive design

Mains Repairs	Units:	Number of repairs per 1,000 km of mains		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	106.5	106.5	106.5	106.4	106.4	106.4	89.3
Improvement from 2024-25		0.0%	0.0%	0.1%	0.1%	0.1%	16.1%
Proposed Cap (0.25% RoRE)		92.6	92.5	92.5	92.5	92.4	
Proposed Collar (-0.5% RoRE)		134.4	134.3	134.3	134.3	134.2	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£0.37	per number of repairs per 1,000 km of mains			

UUW recognises that mains repairs can be disruptive and reducing the requirement to repair mains is part of our longer term strategy to transition from “find and fix” to Dynamic Network Management (DNM), predicting and preventing leaks to drive continual improvement in our leakage performance and water network asset health. We therefore propose a highly stretching company specific PCL that targets what we calculate to be upper quartile performance over AMP8 using historical data sets. Our proposed PCL sustains our projected rate of improvement over AMP7, allowing us to build upon the advances we have made and plan to make in 2020-25.

This PCL will require us to drive further utilisation of our systems thinking approach to intelligent networks, through the use of Dynamic Network Management. This helps to resolve issues before customers are even aware of them. We will continue this proactive approach despite the additional stretch it places on our leakage performance. For further explanation of this relationship between mains repairs and leakage, see Figure 5-1

5.9.3 PR24_UNO – Unplanned outage

Table 5-24: UUW Unplanned outage - PCL overview: targets, measurement and reporting and incentive design

Unplanned outage	Units:	Percentage of peak week production capacity		Reporting Period:	Reporting Year	PCL Type:	Common
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	2.34	0.65	0.58	0.52	0.46	0.41	0.21
Improvement from 2024-25		72.2%	75.2%	77.8%	80.3%	82.5%	91.0%
Proposed Cap (0.25% RoRE)		0.00	0.00	0.00	0.00	0.00	
Proposed Collar (-0.5% RoRE)		3.21	3.15	3.08	3.03	2.98	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£4.06	per percentage of peak week production capacity			

We propose a common PCL for this measure based on our assessment of forecast upper quartile performance for 2025-30 using historical datasets. Our Unplanned Outage performance targets submitted for AMP8 represent an extremely ambitious objective. In order to align with a forecast upper quartile position, performance commitment levels will improve by 72.2% from our forecast 2024-25 position to 2025-26. We aim to sustain this industry leading position, with continued significant performance improvements, throughout AMP8. To achieve this, our proposed targets represent a further reduction in unplanned outage of 36.9% throughout the remaining duration of AMP8.

These targets are predicated on the continuation of raw water quality as an allowable exclusion for this PC. We are concerned that, if the exclusion is not retained for AMP8, then the impact of raw water quality issues will disproportionately affect Northern, surface water fed companies. The removal of exclusions proposed in the PR24 methodology would deteriorate performance by approximately 2%. This is because, as a predominantly surface water fed company, our water sources can suffer from a wider range of variability in aesthetic quality. Such effects do not impact groundwater sources by their nature, but upland sources are prone to large swings in

surface water quality due to various factors including algal blooms and geosmin. These effects are unpredictable and largely outside of management control.

The historic solution to managing this issue (and protecting customers from water quality issues) has been through the management of our integrated water supply system. Where an issue is identified with a particular water source, then we take the source out of use and provide customers with an alternate water supply through the network, before they're aware of an issue. This active decision to cease using a particular source means we can manage the customer experience of aesthetic water quality and provides them with the quality of water that they expect. This strategy was recognised as a legitimate approach through the previous unplanned outage PC definition, which excluded outages that were enacted on the basis of raw water quality.

Removal of the exclusion would mean that we would face double jeopardy on both the Water Quality Contacts and Unplanned Outage PCs. In the event of a raw water quality issue we would face penalties whatever our course of action. If we chose to close the works and provide supplies from elsewhere, we would be penalised under this asset health measure (even though the decision to close the works was not driven by asset health.) Alternatively, if the works was left in service then we would be penalised on the basis of water quality and the elevated levels of water quality contacts. Our proposal is made on the basis that Ofwat reinstates the exclusion, noting that closure of a works based on poor quality raw water is not representative of an asset health failing. Rather, it is a valid strategy to protect the quality of customers' water supplies.

Alternatively, if raw water quality is not permissible as an allowable exclusion within the PC definition, we would propose company specific PCLs for this measure to account for the major difference in scale of challenge associated with raw water quality for companies with different water source types.

5.9.4 PR24_SCO – Sewer collapses

Table 5-25: UUW Sewer collapses - PCL overview: targets, measurement and reporting and incentive design

Sewer collapses	**Units:**	Number of collapses per 1,000 km of sewer length		**Reporting Period:**	Reporting Year	**PCL Type:**	Company Specific
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	13.07	12.94	12.80	12.67	12.54	12.41	11.32
Improvement from 2024-25		1.0%	2.0%	3.0%	4.0%	5.0%	13.4%
Proposed Cap (0.25% RoRE)		7.42	7.29	7.16	7.03	6.89	
Proposed Collar (-0.5% RoRE)		23.97	23.84	23.71	23.57	23.44	
Incentive Design:	Indicative	**Incentive Rate (£m):**	£1.71	per number of collapses per 1,000 km of sewer length			

UUW recognises that sewer collapses can be highly disruptive to customers' lives. We therefore propose a stretching performance commitment level that targets a 5.0% reduction in sewer collapses over the course of AMP8. Our proposed PCL sustains our projected rate of improvement over AMP7, allowing us to build upon the advances we have made in proactive collapse detection and prevention. The position from which we will launch in AMP8 has been enabled by the deployment of our Dynamic Network Management (DNM) initiative and the installation of over 17,000 in-sewer monitors across 64 key strategic drainage areas. By applying these machine learning capabilities, this network of sensors 'learns' normal flow signatures and detects deviations from the baseline to alert us to deterioration in the network. In this way, we have been able to increase proactive collapse detection and reduce reportable reactive collapses. The position from which we will launch in AMP8 has therefore been enabled by a step change in our operating model and, as such, achieving a further significant improvement should be seen as extremely stretching. It will require continued underlying transformation of our operating model, driving efficiencies through expansion of DNM to improve detection of defect development and applying artificial intelligence to automate and accelerate the coding of CCTV imagery.

UUW considers that company-specific PCLs are appropriate for this performance area. We consider that industry performance trends are difficult to interpret because before 2020/21 (AMP7) there were large inconsistencies in the reporting methodology adopted by different companies. Whilst direct comparison to other companies is

therefore difficult, we strongly believe that achieving a 5.0% decrease in collapses over the course of AMP8 – entirely from base expenditure – demonstrates a stretching but potentially achievable ambition.

5.10 Bespoke Performance Commitments

5.10.1 Overview

The bespoke Performance Commitments that we include in our business plan reflect Ofwat's June 2023 feedback on our 14 April 2023 Early Submission. We carefully considered Ofwat's feedback and as a result have withdrawn four of our early submission bespoke PCs ("Water without worry", "Slow the urban flow", "Lead pipe replacement for deprived areas" and "What not to flush") and introduced a bespoke PC on reducing embodied greenhouse gas emissions. We have also improved our proposals and compelling evidence to support the other two early submission bespoke PCs which we include in our submission here. These improvements have included those made as a result of further engagement with customers and stakeholders, including YourVoice, the independent customer challenge group.

The feedback we received on our final business plan bespoke PCs and how we have addressed it is detailed in Table 5-26. For both previously submitted bespoke PCs, about Windermere and non-household customers, we received feedback from Ofwat that we had provided insufficient evidence of benefits in our early submission. In this business plan submission we have therefore significantly improved how we signpost to our extensive customer research results evidencing support for improved performance in the areas covered by these bespoke PCs.

Table 5-26: Summary table of proposed bespoke performance commitments, Ofwat's feedback on them and how we have addressed the feedback in this submission

PR24_EGG – Embodied greenhouse gas emissions		
Ofwat bespoke PC criteria	**Feedback received from Ofwat**	**How we have addressed the feedback in this submission**
	"[…] we strongly encourage more companies to come forward with bespoke PCs focused on incentivising reductions in embedded GHG emissions. In doing so, we encourage companies to develop targeted approaches that are linked to external verification and accreditation standards. "	We have introduced this bespoke PC following Ofwat's feedback to the industry on the early submissions. We propose a targeted approach linked to external standards also employed by the common PCs on operational GHG.

PR24_WIN – Wonderful Windermere		
Ofwat bespoke PC criteria	**Feedback received from Ofwat**	**How we have addressed the feedback in this submission**
Local circumstances: geology and unique catchment.	"We also consider that improvements to the overall health of the lake will be funded through the accelerated infrastructure delivery project scheme to reduce the frequency of storm overflow discharges in the Lake Windermere catchment."	Environment Agency analysis (Reasons Not Achieving Good RNAG status under the WFD) shows that the health of Windermere is not solely attributable to water companies and, where it is attributable to companies, it is not storm overflow discharges that dominate. It is correct that improvements to storm overflows (through the accelerated infrastructure projects) and to wastewater treatment works (through the WINEP) will deliver environmental improvements in Windermere, but this will not be sufficient to restore Windermere to its full health. Other sources of phosphorus must be addressed if such an outcome is to be achieved. This bespoke PC is therefore focused on leveraging our expertise to help everyone involved in the local catchment to act together to improve the health of Windermere. Harnessing the expertise that UUW has developed in wastewater treatment and innovative network management, UUW will apply this within the Windermere catchment to drive improvements that customers and communities expect to see. We have six storm overflows that can impact Windermere. In contrast, there are over 80 permitted discharges (non-water industry) either into Windermere or a tributary and approximately 1,800 private septic tanks within the catchment, all owned and operated by someone other than UUW. We are of course very pleased to be able to undertake work – including that which was approved through the accelerated investment process – to reduce the use of UUW's storm overflows. This will act to improve the health of the lake by reducing spills. However, set against the significant number of non-UUW assets and discharge points around Windermere, this action alone is unlikely to be sufficient to drive the significant improvements that customers, communities and key stakeholders want to see for the lake and its water quality.
	Other PC overlap - River water quality, Bathing water quality, Storm overflows	We have further considered these overlaps in the design of our bespoke PC, as we did in our early submission and explain in this submission further how the design of the bespoke PC ensures that there is no significant overlap with these common PCs.

PR24_IBA – Improving water bill affordability for socially important non-household community groups		
Ofwat bespoke PC criteria	**Feedback received from Ofwat**	**How we have addressed the feedback in this submission**
Local circumstances and company-specific circumstances: affordability and income deprivation combined with projected significant 2025–30 bill increases.	Output focus - we consider that this measure is focused on the delivery of outputs rather than an outcome.	This PC aims to deliver a basket of interventions which should have the overall impact of improving water bill affordability for the targeted customer groups. Targeting this on an output based approach is the simpler way to address such issues when dealing with separated retail and wholesale markets, whilst maintaining the ultimate customer benefits.
	Other PC overlap – Leakage, Business demand	We have taken account of the overlap with the Business Demand PC in the design of the bespoke PC ODI. We do not consider the overlap with leakage to be significant in the outcome of this PC and have therefore not adjusted the PC measurement or ODI rate for any such overlap.

5.10.2 PR24_EGG – Embodied greenhouse gas emissions

Table 5-5-27: UUW Embodied greenhouse gas emissions- PCL overview: targets, measurement and reporting and incentive design

Embodied greenhouse gas emissions	**Units:**	Percentage reduction from baseline (tCO2e)		**Reporting Period:**	Reporting Year	**PCL Type:**	Company Specific
	AMP7			**AMP8**			**LTDS**
	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**2049-50**
UUW Performance Target (Units)	N/A	0.00	0.00	0.00	0.00	0.00	-
Proposed Cap		N/A	N/A	N/A	N/A	70.00	
Incentive Design:	External market valuation	**Incentive Rate (£m):**	£0.000130	per percentage reduction from baseline (tCO2e)			

In response to Ofwat's June 2023 feedback on bespoke PCs we propose a bespoke PC aiming to reduce embodied greenhouse gas emissions. This was a bespoke PC which we carefully considered in advance of Early Submission but chose not to include as we were not persuaded that it suitably met Ofwat's criteria for bespoke PCs. We support the reporting and monitoring of embodied emissions, in an effort to track and ultimately reduce them. Such processes are relatively immature therefore we propose a mechanism which recognises this level of maturity over 2025-30. Ultimately, we see this bespoke PC, and those proposed by other companies, as a means to discover what works best in this performance area and will create the best common PC for AMP9.

Our bespoke PC targets the reduction of embodied greenhouse gas emissions in terms of 'cradle to build' lifecycle stages, linked specifically to AMP8 non-infrastructure WINEP projects that will be delivered through the enterprise model. It will incentivise UUW to work collaboratively with our supply chain partners to achieve this embodied greenhouse gas emissions reduction.

It will measure against a baseline formed of the PR24 preferred solutions at final determination (subject to further review), versus actual emissions based on what has actually been built by our supply chain. It would therefore incentivise us to innovate and create lower embodied emissions solutions than what was originally planned at PR24.

Due to the immaturity of the measurement of embodied emissions globally, we propose that whilst we would report on our progress annually, the measure would be financially incentivised in 2029/30 only. This allows for reporting and measurement systems to sufficiently mature and should ensure that customers would only pay for outperformance that is well-measured and understood.

The PCLs we propose are stretching and ambitious due to the significant maturity required (including with supply chain partners) to ensure consistent and accurate measurement, management and reporting of 'actual emissions' on the capital programme. In addition, the projects currently being reviewed to inform the baseline are both large and complex, requiring UUW and supply chain partners to collaborate and innovate in new ways. Finally, using PR24 solutions to inform the baseline may be considered stretching due to the high level design and inherent assumptions and therefore risk associated with the solutions.

We propose that this bespoke PC should be outperformance only and have the same ODI rate as that for the Operational GHG common PCs.

5.10.3 PR24_WIN – Wonderful Windermere

Table 5-5-28: UUW Wonderful Windermere - PCL overview: targets, measurement and reporting and incentive design

Wonderful Windermere	Units:	Kg of phosphorus removed (cumulative from end of AMP7)		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	0.0	9.5	38.0	38.0	57.7	77.4	-
Proposed Cap		1,899.9	1,899.9	1,899.9	1,899.9	1,899.9	
Proposed Collar		0.0	0.0	0.0	0.0	0.0	
Incentive Design:	Triangulated valuation	Incentive Rate (£m):	£0.009531	per Kg of phosphorus removed			

As the largest lake in England, Windermere is a nationally significant water body often referred to as the 'jewel in the crown' of the Lake District. With UNESCO world heritage status, receiving around 7 million visitors per year and contributing over £750 million to the local economy, Windermere is an iconic site that customers, communities and stakeholders alike expect to be leading in water quality. In keeping with this unique environment, UUW has invested significantly to reduce phosphorus and nutrient inputs from assets, and we have currently met our long-term target for phosphorus reduction in this catchment as set by the Environment Agency.

Phosphorus is cited by the Environment Agency as one of the reasons for Windermere not achieving the statutory target of 'good' ecological potential. In conjunction with the effects of climate change, including a temperature increase of +1.5°c over the past 50 years, water quality in Windermere is not to the standard expected by customers and communities, and more needs to be done to address this. According to Environment Agency data, more than 60 per cent of the phosphorus in Windermere comes from a range of sources, including inputs from over 80 permitted discharges (non-water industry) into Windermere (or its tributaries) and approximately 1,800 private septic tanks within the catchment. These assets are dispersed across a largely rural catchment, are often unidentified and less commonly monitored compared to diffuse phosphorus inputs. Through this performance commitment, we will harness our expertise to act as a catchment convenor and work in partnership to target phosphorus reduction by driving solutions in hotspot areas, taking an evidence-based approach to where interventions will deliver greatest improvements.

To achieve this we are targeting our actions and have developed a stretching PCL based upon a combination of interventions including (but not limited to): sharing operational best practice with operators of private treatment works; support for monitoring, sampling and analysis of private discharges to the catchment; support for citizen science initiatives; intensive online monitoring on key point source assets, as well as in-network monitoring to track changes in water quality; strategic water quality monitoring of the mere and its tributaries; localised engagement with key partners to promote positive behaviours; and, support of land management practices to reduce agricultural runoff. Although we have a strong partnership in place with Love Windermere to address Windermere's particular catchment challenges, with some activity currently underway, the incentivisation offered by the bespoke PC mechanism will mean we can act in this area at scale and with speed to help tackle this local issue. As such, we are setting ambitious PCLs, in an area where there are limited statutory obligations to act but where we want to address evident local needs and priorities.

We have received support for this bespoke PC proposal from our Love Windermere partners – including the partnership chair, the Environment Agency – after discussing our proposals with them.

5.10.4 PR24_IBA – Improving water bill affordability for socially important non-household community groups

Table 5-30: UUW Improving water bill affordability for socially important non-household community groups - PCL overview: targets, measurement and reporting and incentive design

Improving bill affordability for socially important non-household community groups	Units:	Number of groups receiving water efficiency audits, etc		Reporting Period:	Reporting Year	PCL Type:	Company Specific
	AMP7			AMP8			LTDS
	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2049-50
UUW Performance Target (Units)	N/A	333	333	333	333	333	-
Proposed Cap		3,059	3,059	3,059	3,059	3,059	
Proposed Collar		-	-	-	-	-	
Incentive Design:	Triangulated valuation	**Incentive Rate (£m):**	£0.001340	per number of groups receiving water efficiency audits, etc			

Affordability challenges are a common and repeated concern raised by customers. In establishing current concessionary charges arrangements for schools and key non-household community groups we engaged extensively with stakeholders and customers on which groups are most in need of support to pay for water charges. Joint Ofwat/CCW research identified that addressing bill affordability challenges is a top priority for customers[22]. These results align with our own research looking at water customer priorities in the North West[23]. This measure seeks to address these concerns for socially important non-household customers, providing enhanced support for the 2025–30 period. After 15 years of average customer bills that will have (overall) fallen in real terms by 20 per cent, bills are projected to increase over the 2025–30 period, representing a marked change.

We propose this PC to target water efficiency and other customer-facing interventions at socially important non-household community groups. It aims to ensure that efforts to reduce water demand also deliver high social benefit by supporting lower charges for non-household community groups that are least able to meet the cost of rising charges, beyond the support already offered to them through the existing concessionary tariffs. Additional affordability support measures are needed in the North West. For households it is established that North West levels of income deprivation are the highest in England, with 60 of the 100 most deprived English neighbourhoods in the North West[24]. In addition the impacts of cost of living related inflation on schools and socially important non-household community groups has been substantial. For example the Education Policy Institute has built on IFS analysis to identify a growing real terms gap in the costs schools face and the funding they are likely to receive per pupil[25].

We propose ambitious and stretching PCLs for this bespoke PC recognising that whilst we have some activity currently underway in this area, it is the financial incentivisation offered by the bespoke PC mechanism which will mean we can go further, faster, in 2025-30. Our PCLs are ambitious as we seek to significantly ramp up activity with these particular non-household groups, in areas where we have limited statutory obligations to act but want to act to address local needs and priorities. The PCLs we propose, as well as associated leakage reduction and business demand reduction PCLs, will be set in line with activity levels and demand reduction targets set out in UUW's revised draft Water Resources Management Plan. This ensures that the PCL will be aligned with stretching government and regulatory demand reduction targets that form the basis of this statutory planning exercise.

This PC has some overlap with leakage and business demand common PCs, as noted by Ofwat in its June 2023 feedback. To prevent duplication of incentivisation, the associated marginal benefit rate for the bespoke PC has

[22] 'Understanding customers' preferences for Performance Commitments at PR24', CCW, 11 April 2022, ccwater.org.uk/research/understanding-customers-preferences/

[23] unitedutilities.com/globalassets/z_corporate-site/about-us-pdfs/p107-customer-priorities/final-report.pdf

[24] English Indices of Deprivation 2019 - gov.uk/government/statistics/english-indices-of-deprivation-2019

[25] Education Policy Institute 'Current estimates of school funding pressures' epi.org.uk/publications-and-research/current-estimates-of-school-funding-pressures/

been adjusted to remove incentives already covered by common PCs. In this submission, we have used the indicative rates published by Ofwat June 2023. We expect that these will be updated for final marginal benefit and ODI rates in final determinations.

5.11 The balance of risk and return

5.11.1 Introduction

We believe that the contribution of ODIs to the balance of risk and return strikes a fair balance between cost, performance and ambition for 2025-30, with sensible progress towards long terms needs in a low regrets fashion. We have applied Ofwat's guidance as described in the PR24 final methodology on how to assess the balance of risk return and where our overall ODI package sits within this.

5.11.2 RoRE range

The bulk of the ODI financial impact is expected to be produced by Ofwat's common PCs and the related ODIs which Ofwat will determine the value of. At this stage, the final value of these financial incentives is not yet known. Using the latest information available from Ofwat on this – Ofwat's indicative ODI rates provided to companies in June 2023 – adding in the expected performance and financial incentivisation on our proposed bespoke PCs and our assumptions for the ODI rates for the operational GHG and Biodiversity common PCs, we expect that the financial impact of UUW's entire ODI suite will be within Ofwat's guidance of +/- 1 to 3% of RoRE for each of the aggregated Water (WR and WN+) and Wastewater (WWN+ and BR) RoREs.

This is on the basis of the average AMP8 notional RoRE on a 2022/23 price base. We note that data table RR30 uses nominal RoRE in its calculations. We have used consistent real 2022/23 price bases for both ODI returns and regulated equity when making our RoRE calculations and calculating the potential ranges presented here. We have also assessed RoRE split by the Water (Resources and Network Plus) and Wastewater (Network Plus and Bioresources) so as to be able to assess customer protection against the aggregated sharing mechanism.

We note the incongruity of this comparison, the indicative ODI rates having been calculated based on 2022/23 regulated equity and then compared to AMP8 regulated equity in RR30. UUW is proposing a significant PR24 investment programme which it is expected will significantly increase the RCV over the course of 2025-30, and therefore the average AMP8 regulated equity. This has not been factored into Ofwat's indicative ODI rates, and therefore any subsequent change to ODI rates has not been reflected in our assessment of likely RoRE ranges.

As noted in section 5.6.1, Ofwat's common PCs present a significant downside skew from the outset, through a combination of penalty only PCs, the broad removal of collars, deadbands and exclusions, and the insistence that PCDs are penalty only. It is therefore imperative that Ofwat sets appropriate PCD designs and incentive values, alongside setting appropriate performance targets (for example, by adopting our proposed approach to setting 'environmentally adjusted' sewer flooding targets). These downside skews, including the significant skew posed by PCDs should form part of Ofwat's holistic assessment of risk. We note that PCDs are currently absent from the RoRE assessment in RR30 and expect that these should form a key part of Ofwat's risk assessment when determining performance levels, ODI rates and deliverables, to ensure that companies receive a fair and balanced level of risk in their determinations.

On the basis of our RoRE assumptions using RR30, we do not expect Ofwat's aggregated sharing mechanism to be employed. We do however support the use of this mechanism to protect customers and companies against excessive ODI rewards or penalties. We led the industry on this at PR19 with our proposals for a similar sharing mechanism, protecting customers and shareholders, and have this in place for AMP7. We are proposing a similar mechanism for AMP8, whereby if RoRE outperformance translated into dividend distributions that were much higher than forecast in the plan, customers would receive shared benefits. Chapter 9 provides more details regarding the overall balance of risk and return in our proposed PR24 business plan.

We support the application of symmetrical RoRE ranges and continue to propose that the symmetrical ranges Ofwat proposes to apply for PCs related to customer service and environmental outcomes should also be applied for asset health PCs. This should ensure companies are sufficiently incentivised to take action to improve performance.