1. INTRODUCTION

Each year Ofwat, the regulator for the water industry in England and Wales, reviews the overall performance of the 17 largest water and wastewater companies. It examines how well each company is doing in certain areas including leakage, customer satisfaction and pollution, and gives each company an assessment of Lagging, Average or Leading.

Click **here** for Ofwat's latest assessment.

The levels of service we have committed to for our customers are known as our performance commitments (PCs). In its review of 2021/22 performance Ofwat assessed 12 PCs - there were five areas where we hit or bettered our PCs and seven areas where we needed to improve to achieve them. As a result, we are one of six companies that were placed in the 'lagging behind' category and in March 2023 we published a clear action plan to strengthen our performance in these seven areas which were:

- Priority Services (Reach).
- Leakage.
- PCC (per capita consumption), or average water use.
- Interruptions to your water supply.
- CRI (compliance risk index), a water quality measure.
- Internal sewer flooding.
- Treatment works compliance (standards for discharging wastewater).

Our performance improved as a result and in our 2022/23 Annual Performance Report we were pleased to confirm that in two of the seven areas we were now achieving our PC, along with a PC pass for leakage in our Essex and Suffolk operating area.

As a result, in its assessment of 2022/23 performance published in September, Ofwat upgraded its assessment of NWL to 'Average'.

Ofwat's report also acknowledged a number of areas where we are performing strongly, for example we were number one in the industry for Customer Service (C-Mex), and also flagged as a 'Top Performer' for internal flooding and pollution.

OFWAT METRICS USED IN WATER COMPANY PERFORMANCE REPORT	2021/22	2022/23
Customer satisfaction (C-Mex) – a measure of customer service		
Priority Services (reach) – support for customers in vulnerable circumstance		
Leakage (Northumbrian Water (NW))		
Leakage (Essex & Suffolk Water (ESW))		
PCC (per capita consumption) – how much water the average household uses		
Supply interruptions (greater than 3 hours) – when the water supply is cut off		
Water quality (CRI)		
Mains repairs (burst pipes)		
Unplanned outage (a temporary loss of maximum production capacity)		
Internal sewer flooding (sewer flooding inside a property)		
Pollution incidents category 1-3		
Sewer collapses		
Treatment works compliance (environmental permits for treatment works)		

Source: NWL APRs. GREEN = A 'pass' in Ofwat;s WCPR, RED = 'fail' in WCPR. Note leakage counted as '1' metric.

Despite the improved assessment, we remain committed to achieving all our PCs, and as such we are publishing this updated version of our action plan to demonstrate how we intend to deliver further improvements in the remaining areas of our original action plan where we have not yet achieved our target. These are:

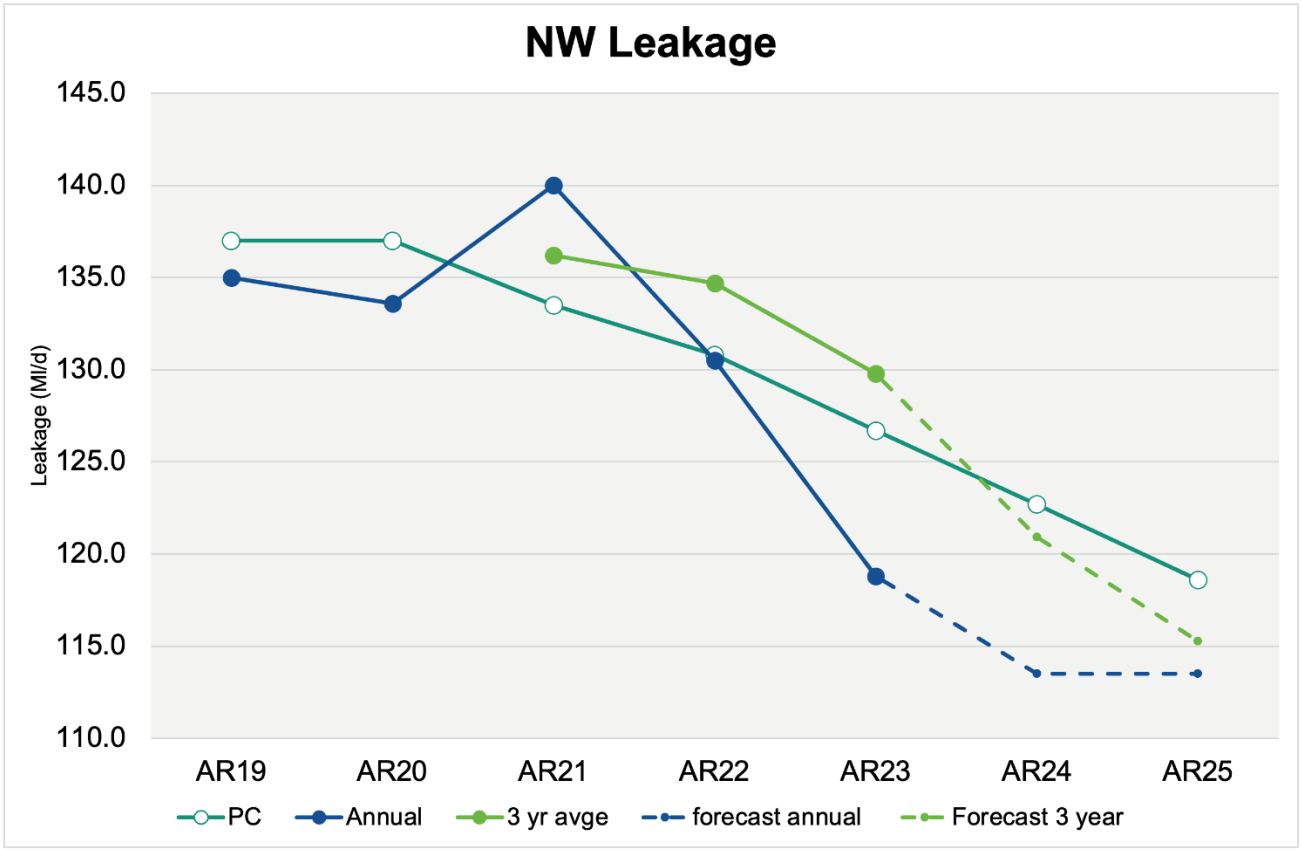
- Leakage (NW operating area).
- PCC (per capita consumption), or average water use.
- Interruptions to your water supply.
- CRI (compliance risk index), a water quality measure.
- Treatment works compliance (standards for discharging wastewater).

We elaborate on our plans to improve in each of these areas below:

2. LEAKAGE: NORTHUMBRIAN WATER OPERATING AREA

When we ask our customers to use water wisely, they want to know that we're also working hard to minimise how much water is lost through leakage. Ofwat set all water companies a target to reduce leakage from whatever their starting point was. Our leakage levels in Essex and Suffolk were already amongst the lowest in the country. This makes achieving further reductions more challenging as the remaining leaks become smaller, harder to find, and more expensive to fix, and a certain level of 'background' leakage is inevitable due to ongoing wear and tear of our water supply network.

We experienced a challenging year for leakage in 2020/21 - during Covid-19 lockdowns there were fewer leaks spotted and reported by customers, and we were also hit by extreme weather that caused lots of pipes to burst – a combination of cold winter weather and summer droughts. Ofwat assesses leakage performance using average figures over a three-year average. Our three-year performance still includes the effect of challenging year in 2020/21 and in NW, this will take longer to improve, but we have now hit our target for ESW by increasing find and fix resources. We expect our three-year average performance to be back on track by 2023/24 in our NW region.



Below we summarise the actions we are taking across all our operating areas to further improve our leakage performance, along with the root cause/issue which each action or group of actions seeks to resolve, and the expected performance benefit:

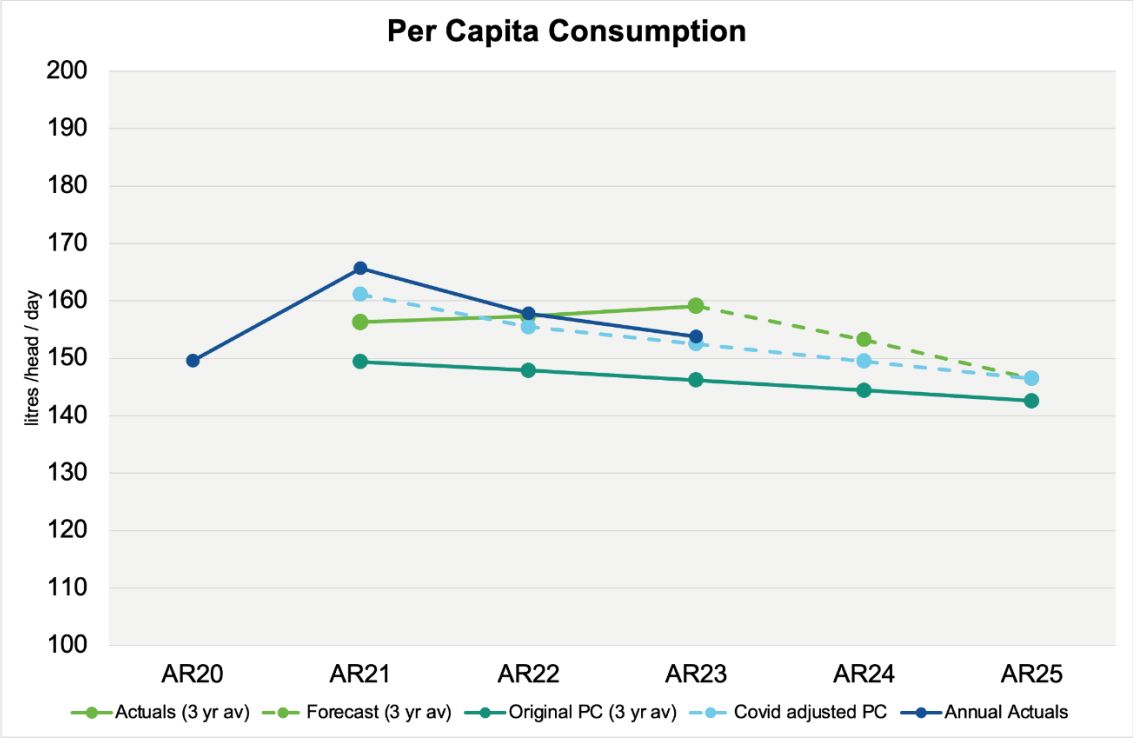
Actions to address underperformance	Root cause / issue	Target date	Progress	Expected benefit
Pressure management: We're working to identify new ways to manage water pressure using special valves and have begun pressure logging.	This seeks to prevent leakage due to bursts triggered by areas of our water network being operated at too high pressure.	31/03/2024	75% complete and on track	We are already achieving our target in ESW. In NW Our 2022/23 annual performance and corresponding annual forecast for 2023/24 are already sufficient to achieve our PC for the remainder of 200-25. The remaining actions are focused on consolidating the improvement delivered to date so that our 3-year average performance also improves - as opposed to delivering further improvement at this stage.
Minimise leakage repair times: To achieve our performance improvements we have recruited additional "find and fix" resource to minimise repair times.	These actions are all targeted at find and fix activity to ensure that this is adequately resourced and to ensure that this activity is as efficient and effective as possible to enable maximum leakage reduction with a finite resource pool to achieve current and future targets.	Ongoing	Resources secured and will continue indefinitely	
Optimise allocation of leakage detection resources: We are working on splitting the largest rural District Metered Areas (Supply Areas), to enable better identification of high leakage areas and improve the efficiency of allocation of leakage detection resources.		31/03/2024	50% complete and on track	
Better understand link between consumption and leakage: We are investing in studies to better understand the relationship between customer consumption and leakage enabling better targeted interventions.		31/03/2023	100% complete	
Improve logging of business customers: We have already begun to increase the number of permanently logged business customers to accurately account for consumption throughout the year. This allows greater targeting of actual leakage rather than chasing demand variations.		31/03/2024	100% complete as planned in Hartismere (ESW)	
Utilising innovation to improve effectiveness and efficiency of finding leaks: We are using innovations to improve the effectiveness and efficiency of leakage 'find' activities. These include targeted noise logging surveys, satellite surveys and creating digital twins of key network areas to pinpoint leaks. The rollout of smart metering		Ongoing	Work on innovations will continue indefinitely	

targeted at our water stressed areas will also support early identification of customer side losses				
Innovation – no dig technology: We are trialling a new no dig solution to repairing leaks – we have worked closely with a partner from the gas industry to develop a solution.		Ongoing	Trial 100% complete and used as business as usual	
Improved monitoring of trunk mains leakage: We have begun analysis work to better predict leakage from our larger pipes or trunk mains. This will be in place to really target investment in our trunk main assets over 2025-30.	This is preparatory work to deliver reductions in trunk mains leakage in 2025-30 to support further leakage reductions	2030	10% complete and on track	

3. PCC (PER CAPITA CONSUMPTION) – HOW MUCH WATER THE AVERAGE HOUSEHOLD USES

Water is a precious resource and as we feel the effects of climate change, we're seeing drier summers meaning that saving water becomes more important. Saving water can also help customers to save money on energy bills (as well as water bills) as around 17% of an average heating bill is used to heat hot water[1]. All water companies have been working hard to encourage customers to use less water, but the Covid-19 pandemic saw us all using more water for hygiene reasons and a shift to home working meant more water use in the home. The PCC measure that Ofwat uses to assess performance measures household but not business consumption, meaning that the shift to home working has a particular impact on performance. Social distancing restrictions also meant we couldn't carry out our usual programme of water efficiency visits in our customers' homes or carry out planned smart meter installation programmes. As a result, we have not been able to deliver the reductions in PCC promised in our last Business Plan.

We expect an element of the impact of the pandemic on water consumption to be sustained indefinitely. We are ramping up our water efficiency activity significantly in the remainder of the 2020-25 period and delivered our programme in full in 2022-23. We are focusing on achieving targets - adjusted to allow for the sustained impact of the pandemic – by the end of 2024/25. We have recently written to Ofwat suggesting how such adjustments could be made.



Note: Forecast figures and adjusted targets (as shown by dashed lines) are illustrative only

[1] see How saving water at home can save energy - Energy Saving Trust

Below we summarise the actions we are taking to improve our performance, along with the root cause/issue which each action or group of actions seeks to resolve, and the expected performance benefit:

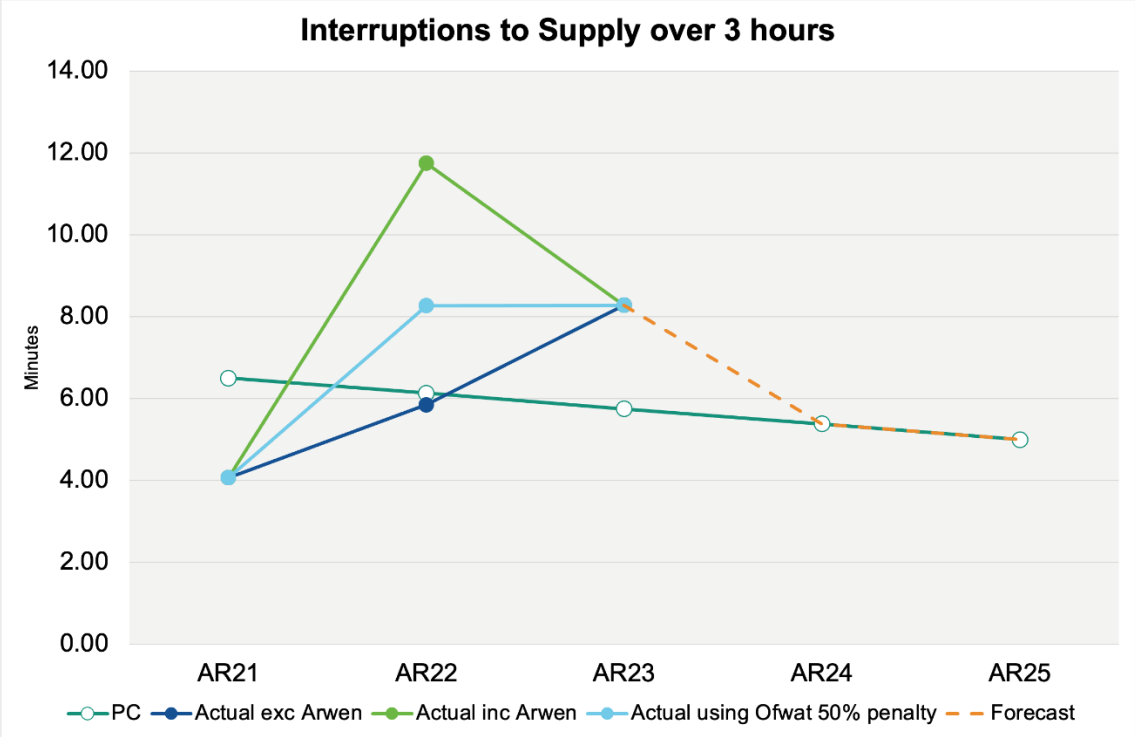
Actions to address underperformance	Root cause / issue	Target date	Progress	Expected benefit
Smart meter installation: Delivery of smart meter programme and action plan as set out at August 2021 meeting with Ofwat.	Aimed at tackling high water consumption and providing an incentive to reduce consumption.	31/03/2025	34% of original programme / 45% of revised programme	These actions are designed to work as a package. We are expecting a 4.7lpppd reduction in 3-year average PCC from 2022/23 to 2023/24 and a further 3.1lpppd reduction the following year.
Water efficiency programme 2022/23 to deliver: 4,000 home water and energy saving retrofit visits each saving c20 litres per property per day; 3,000 leaking toilet repairs each saving a minimum of 215 litres per property per day; visit 140 schools engaging 25 pupils in each session using The Ripple Effect; c13,000 bespoke water saving kits to homes; c20,000 online digital water efficiency engagements.	Aimed at tackling consumption levels / wasteful consumption of the highest consumers of water.	31/03/2023	100% complete	
Water efficiency programme 2023/24 and 2024/25 to deliver: 5,333 home water and energy saving retrofit visits each saving c20 litres per property per day; 3,500 leaking toilet repairs each saving a minimum of 215 litres per property per day; continue to develop the online resources for primary school teachers on The Ripple Effect and deliver in school visits; c12,000 bespoke water saving kits to homes; c40,000 online digital water efficiency engagements.	Aimed at tackling consumption levels / wasteful consumption of the highest consumers of water.	31/03/2025	33% complete / on track	
Suffolk NHH Water Efficiency: additional targeting of public toilets (leaky loos, dripping taps and urinal controls) and schools (audits, retrofits, and internal plumbing losses).	Aimed at tackling consumption levels / wasteful consumption in businesses.	31/03/2025	0% complete – all activity to be delivered in 2024/25.	

4. INTERRUPTIONS TO THE WATER SUPPLY OVER THREE HOURS

At times our customers will experience an interruption to their water supply. This can be because we need to carry out planned repairs to the network and we can warn customers about this in advance. On other occasions, supplies will be interrupted unexpectedly, for example if a pipe bursts.

We have a strong track record in relation to interruptions performance, and across the 2015-2020 period were consistently one of the leading companies. Our underlying performance remains strong; however, we are seeing an increase in incidents caused by severe weather, and these incidents are impacting our performance.

Our 2021/22 performance was adversely impacted by extensive power cuts during Storm Arwen in November/December 2021 – an event which was classified as a Civil Emergency. As such we proposed to Ofwat that most of the impact of this storm should be excluded from our performance figures, however Ofwat only agreed to an exemption for 50% of the impact. Subsequently our 2022/23 performance has also been impacted by a severe freeze/thaw event in December 2022. We expect our 2023/24 performance to be close to target.



Our action plan to improve performance is described further below. Given that it is severe weather events which are currently having the greatest impact on our performance, it is those actions which enable us to maintain temporary supplied during incidents which we expect to be most beneficial.

Actions to address underperformance	Root cause / issue	Target date	Progress	Expected benefit
Pressure management: We're working to identify new ways to manage water pressure using special valves and have begun pressure logging.	This seeks to prevent leakage due to bursts triggered by areas of our water network being operated at too high pressure.	31/03/2024	75% complete and on track	These actions are designed to work as a package. Based on this package of work we're forecasting a 2m8s reduction in 2023/24 and a further 23s reduction in 2024/25.
Post interruptions reviews: We continue to conduct detailed post event reviews to establish root cause and remedial actions to limit impact.	This action seeks to prevent of any shortfalls identified in previous interruptions responses.	Established and ongoing	100% complete	
Network support units: We have invested in localised network support units to maintain supply during events.	This action seeks to minimise time customers are without supply during an incident whilst a permanent fix is made.	Established and ongoing	100% complete	
Training and communications: We are reinforcing routine operational briefs to focus on the importance of minimising customer impact during events. We are also continuing to roll out scheduled training for all network operatives to ensure correct network operation, to minimise interruptions to supply.	This action seeks to prevent any loss of focus from our operational teams on minimising outages.	Established and ongoing	100% complete	
Innovation – MowBis: We have worked hard to develop an innovative solution to deliver temporary pressurised water storage to small numbers of properties. These are now regularly deployed in our southern region and mean we are tackling the challenge of individual property interruptions more effectively. We are looking at opportunities to scale up the investment and potential deployment of these.	This action seeks to minimise time customers are without supply during an incident whilst a permanent fix is made.	Established and ongoing	100% complete	

5. WATER QUALITY COMPLIANCE (CRI)

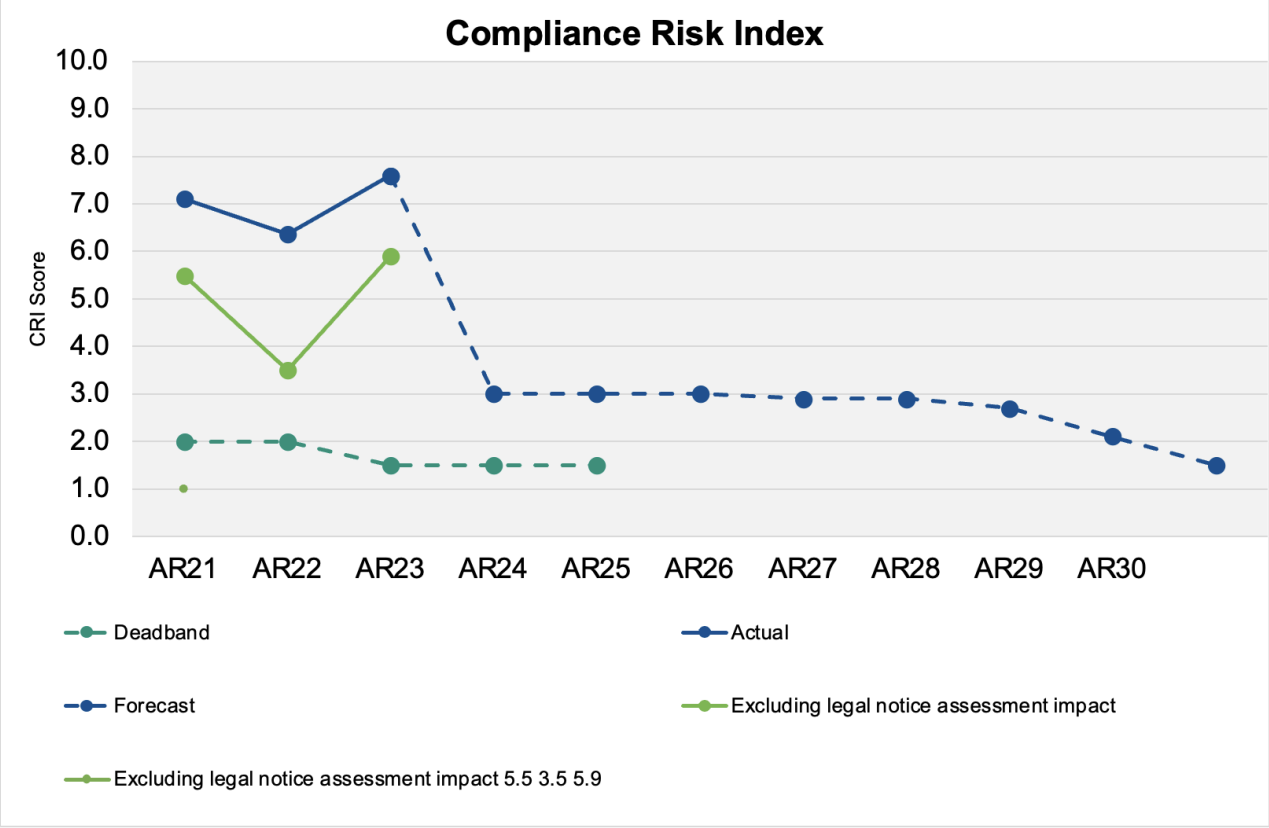
The Drinking Water Inspectorate (DWI) is the regulatory body responsible for drinking water quality and assesses performance using a Compliance Risk Index (CRI) score.

Our CRI score in 2021 was 6.36 followed by 7.63 in 2022 - against a target of 0 with a penalty applying to any scores higher than 2.00 (called a 'penalty deadband').

While none of the failures have had an impact on public health, this score nonetheless places us towards the lower end of industry performance, and we are taking the need for improvement very seriously.

In the 2020-25 period we are investing £149m in improvements, this includes an additional £70m of investment approved by our Board. We expect further investment to continue in 2025-30.

Our full programme of improvement has been agreed with the DWI, and we are on track with the delivery targets that the DWI has set for us. This programme is focused on capital investment in our water supply systems, and investment of this scale takes time to deliver – however for 2023 we are already forecasting a significantly improved CRI score of 3.00.



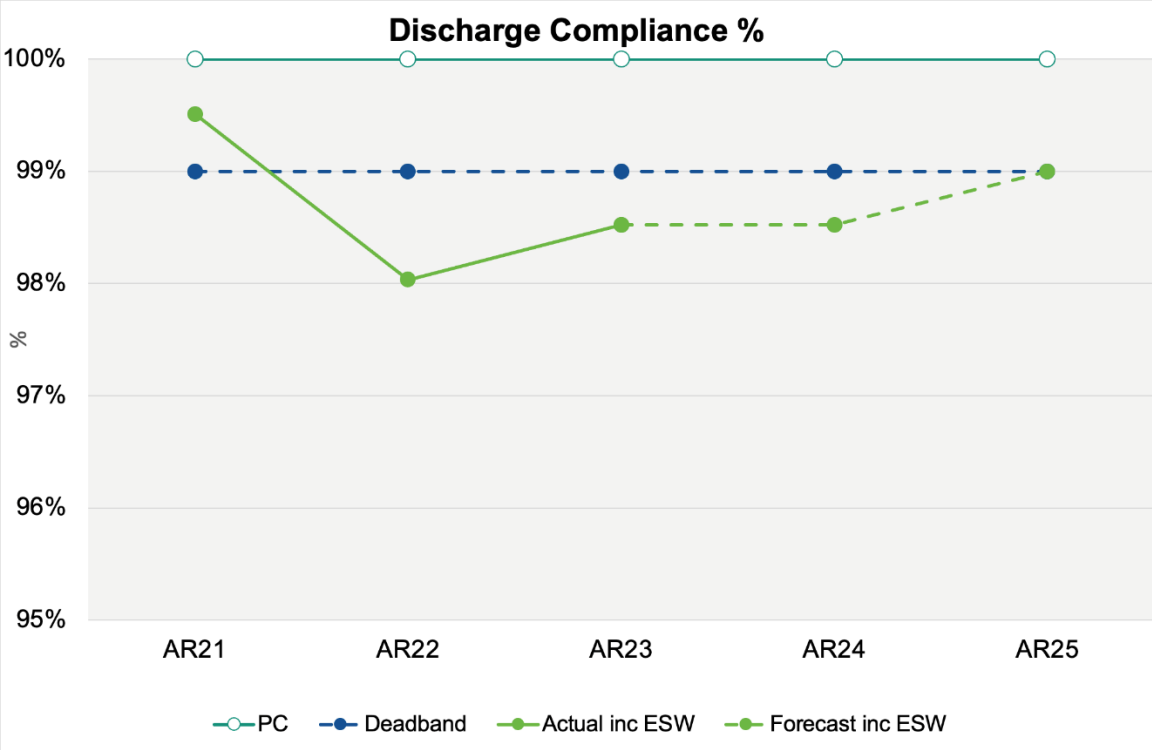
Below we summarise the actions we are taking to improve our performance, along with the root cause/issue which each action or group of actions seeks to resolve, and the expected performance benefit:

Actions to address underperformance	Root cause / issue	Target date	Progress	Expected benefit
Transformation programme stream 1: process tanks and service reservoirs	This seeks to identify and address and water quality risks present in a limited number of process tanks and treated water storage.	31/03/2025	On track. To the end of October 2023, 70 of 118 tanks (59%) have been completed and removed from the legal notice, and a further 28 are in the process of being inspected or are awaiting a final completion report. We expect any outstanding tanks inspections to be complete by March 2025.	These actions are designed to work as a package. We are forecasting a 4.6 score reduction in our CRI score for 2023 (to c3.00) and are expecting to hold this steady in 2024.
Transformation programme stream 2: Haz Rev audits	This seeks to identify and ultimately resolve all site-specific water quality hazards.	31/03/2025	All 49 water treatment works have now been audited under the programme making the original action complete. We have currently completed around 21% of the actions identified and the majority will be completed by 2030 with just a limited number of named complex solutions likely to be delivered in the period 2030-35.	
Transformation programme stream 3: documentation and process improvements	This seeks to address any shortfalls in documentation or operating procedures which could impact upon water quality.	31/03/2025	On track. This is currently 80% complete and remains on track for delivery by March 2025. A critical review of operating procedures has taken place and a quality management framework developed around it. The work is now being linked through to operator competency schemes and will be validated through embedment checks.	

6. TREATMENT WORKS DISCHARGE COMPLIANCE (NORTHUMBRIAN WATER ONLY)

The Environment Agency (EA) sets strict standards for wastewater discharged into rivers, estuaries and the sea from water companies and industry. These environmental permits are set individually for each of our 205 sewage treatment works (STWs) and Water Treatment Works (WTWs) in consideration of what is required to protect water quality and ecology. Compliance is assessed by water samples being taken throughout the year.

The target is for 100% of our 205 works to be compliant and a penalty applies below 99% (the 'penalty deadband'). We narrowly missed our target in 2021 and 2022 resulting in 98% and 98.5% compliance. Three works have already failed their targets so far in 2023 placing our year-to-date performance at 98.5%. We are aiming to get performance back on track (i.e., 99% or better) in 2024.



Our Action Plan is set out below and focuses on addressing any known compliance risks at our sites along with strengthening our compliance monitoring and controls.

Our ultimate aim is zero failures. This will be challenging but is important in meeting our environmental purpose and to meet our objective to be a 4* company in the Environment Agencies' Environmental Performance Assessment (EPA).

Actions to address underperformance	Root cause / issue	Target date	Progress	Expected benefit
Address known risks: by putting in place interventions at sites with one or more individual sample fails. Sherburn WWTW due 2024. Lanchester WWTW due 2025.	This seeks to address any risk of a reoccurrence of sample failures at these sites.	31/03/2025	Delivery of schemes on track. Sherburn 90% complete and Lanchester 30% complete.	These actions are designed to work as a package. We are expecting them to result in 1 fewer site failing in 2024 (or a 0.5% improvement in the overall metric) placing us within the penalty deadband.
Strengthen compliance controls: including further improving visibility and scrutiny of compliance data, via a new 'compliance hub', including data from retailers to facilitate trade effluent management.	This seeks to address any lack of visibility of compliance risks	31/12/2024	60% complete and on track.	
Further improvements identified by Root Cause Review: A further review has identified a number of areas where we can reinforce our systems and processes to improve performance. These include: • Asset condition / asset interventions. • Additional in-process monitoring. • Improved root cause information recording / data gathering. • Review of business process between operations and maintenance. • Review of work priorities. • Review of asset resilience and redundancy. • Additional resources. • Quarterly update on progress to ELT.	This seeks to ensure that all opportunities to further improve our business processes in relation to this metric are taken.	This will be an ongoing programme of continuous improvement which will continue indefinitely.	This will be an ongoing programme of continuous improvement with many of the changes continuing indefinitely Improvements delivered so far include: - Existing known risks to be addressed as above. Any other known risks to be assessed and prioritised for investment in line with our business process. -Installed additional turbidity and temperature monitors at high risk sites. -Introduced new root cause investigation process. -Improved sample points at WTW where root cause highlights an issue. -Recruiting two extra employees to support new root cause investigation process. -Introduce revised governance process with monthly review by ELT.	

7. BOARD ENGAGEMENT

We have reviewed our approach to this action plan with our Board, including specifically.

1. Progress made against our original Action Plan published in March 2023.
2. The scope of this new action plan – i.e., the performance commitments it will focus on.
3. The performance improvements that we expect our Action Plan to achieve on each performance commitment.

Regular progress updates will be provided to both our Executive Leadership Team (ELT) and Board, comprising:

- Monthly performance updates to ELT, including specific scrutiny of the 12 metrics focused on in Ofwat's Water Company Performance Report.
- Quarterly performance scorecard updates to Board, which specifically includes details of performance against our regulatory target for the same 12 metrics, along with a progress narrative.