Annual Pollution Incident Reduction Plan for 2026

Our approach to driving down pollution impacts on the environment

March 2026

United Utilities

Water for the North West

FOREWORD FROM OUR CHIEF EXECUTIVE OFFICER

Protecting and enhancing the water environment is one of our most important responsibilities.

We are fortunate that many of the most beautiful rivers, lakes and coastlines in England are here in the North West. They contribute hugely to the character of our region, and to the quality of life for our communities. United Utilities has a crucial role in safeguarding them for present and future generations.

Every day, our teams provide high-quality drinking water to around eight million people from Cumbria to Cheshire and carefully collect and treat wastewater before returning it to nature. We aim to do that reliably, compliantly, and to the highest standards – and most of the time we do exactly that.

However, we are always striving to be better. In this report we set out the progress we are making, while also acknowledging areas where we need to improve. Our ambition is to reduce pollution incidents by at least 30% between 2024 and 2030, and we have committed £109 million of dedicated funding for our pollution and spill reduction plans during that period.

The challenges we face are only getting bigger as climate change and population growth increase pressure on our networks. We are responding by building greater resilience into our systems and becoming more data-driven so that we can solve problems before they escalate, for example by avoiding the power outages or sewer blockages that contribute to so many incidents.

While our commitment is steadfast, we need to work with others to secure lasting progress. Whether it is working with farmers to manage agricultural run-off, with businesses to treat trade effluent, with urban planners to develop more sustainable drainage, or with customers to reduce blockages, we all have a part to play in protecting the water environment.

As this report shows, there is real momentum building but lots more to do – and we will continue to embrace our leadership role at the heart of that collaborative effort.

Louise Beardmore
Chief Executive Officer

> **"**
> ## Our ambition is to reduce pollution incidents by at least 30% by 2030*
>
> *Reduction is based on a 2024 baseline and adjusted for WIRI inflation.

Every pollution incident is one too many, and we share the concerns of our communities about the harm they can cause. That's why we are investing over £13 billion between 2025 and 2030 in the biggest upgrade of the North West water infrastructure for a century. More than half that investment is focused on wastewater – increasing treatment capacity, upgrading technology, and constructing more storm overflows to deliver the 60% reduction in spills we have committed to by 2030.

> **"**
> ## We are investing over £13 billion in our biggest infrastructure upgrade for more than a century

EXECUTIVE SUMMARY

Our Pollution Incident Reduction Plan is focused on preventing incidents wherever possible, and responding quickly and effectively when they do occur.

All the actions we committed to take in 2025 to drive down incidents are either fully delivered or on track, and these actions have started to produce results.

We are proud of our strong record in preventing serious pollution. In 2025, we did not experience any category 1 incidents (the most serious category). However, we were disappointed to experience two category 2 incidents and over 300 category 3 incidents. As of 15 January 2026, our total number of category 1–3 wastewater incidents for 2025 stood at 311, compared with the 347 in 2024. Due to regulatory timelines, some additional 2025 incidents are still pending final determination. Our aim is to reduce pollution incidents by 30% by 2030, compared with 2024.*

*Reduction is based on a 2024 baseline, and adjusted for WIRI inflation.

Note: source for industry average is **gov.uk/government/publications/water-and-sewerage-companies-in-england-pollution-incident-report-for-2016-to-2024/water-and-sewerage-companies-in-england-pollution-incident-report-for-2016-to-2024**

United Utilities serious pollutions

Legend:
- United Utilities category 1 pollutions
- United Utilities category 2 pollutions
- Industry average
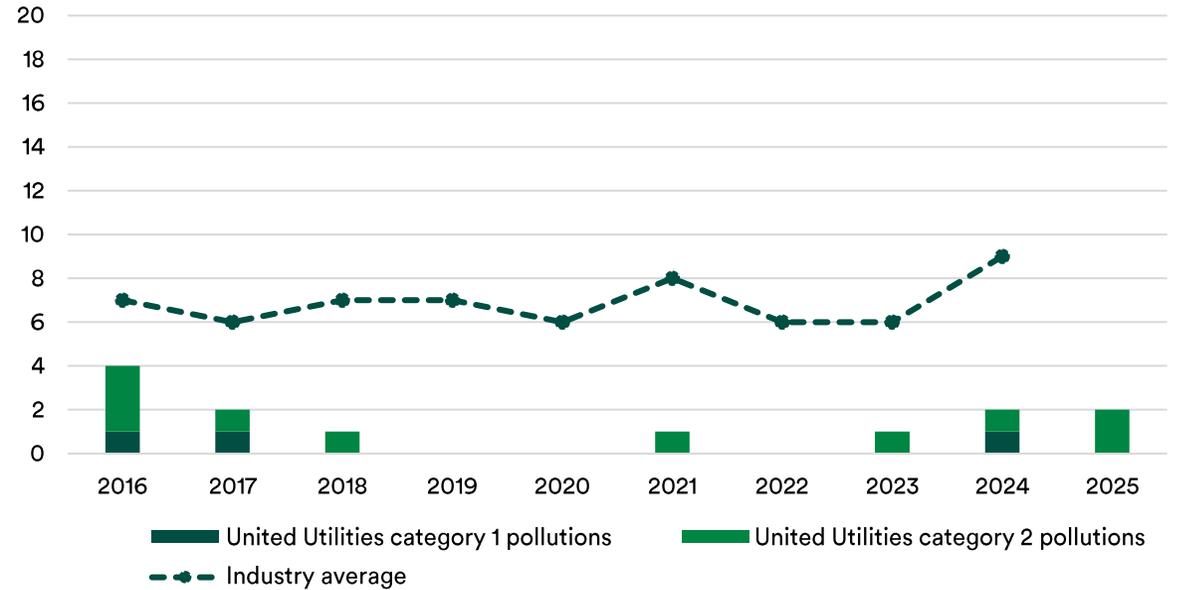
EXECUTIVE SUMMARY

Key areas of progress in 2025, and next steps for 2026 and beyond

Issue	Action	Result	Next steps
Asset performance	Increased preventative maintenance to avoid or solve problems before they become incidents.	26 pollution incidents prevented at wastewater treatment works and pumping stations in 2025	A new team will drive our metric of 100% preventative maintenance compliance at wastewater treatment works and storm overflows.
	Increased monitoring and AI analysis to detect potential issues, and react swiftly when incidents occur.	AI-triggered alerts have already helped prevent over 6,619 sewer blockages.	We are planning to install a further 10,000–15,000 sensors by 2030 to enhance monitoring across our wastewater network, adding to over 22,500 in place.
Incident response	Launched a dedicated, 24/7 Environmental Events Management Desk for more focused, co-ordinated handling of incidents and issues.	18 pollution incidents have been prevented due to this intervention so far.	In 2026, we plan to invest over £600k to make this team a permanent part of our operations.
	Commitment to proactive monitoring, transparency, regulatory compliance, and accountability.	93% of our pollution incidents were self-reported in 2025, up from 90% in 2024.	We will continue to strengthen our approach to proactive monitoring, transparency, regulatory compliance, and accountability to ensure sustained improvement.
	Site-specific improvement plans where incidents have occurred in the past, to prevent reoccurrence.	31% reduction in repeat pollutions in 2025.	Ambition to reach a target of zero repeat incidents.
Power outages	Power resilience programme to protect sites from outages.	Measures taken to increase resilience at 50 sites, contributing to the avoidance of 31 incidents of power failure that would have otherwise caused pollution incidents.	In 2026, remedial work is planned on power systems at approximately 200 sites and at least 40 will have battery storage systems delivered.
Blockages	Invested £6m inspecting and cleansing sewers to reduce blockages. Visited 1,142 food service establishments and supported installation of 323 pieces of grease-removal equipment to reduce fat build-ups. Stepped-up public awareness campaigns to reduce behaviours that contribute to blockages.	50 pollution incidents prevented by sewer monitoring and cleansing programmes. Prevented almost 2,000 tonnes of fats, oils, and grease from entering the sewer network. Research shows 82% customer awareness of 'what not to flush or pour' and 79% recall of our 'Stop the Block' campaign.	A series of targeted, hyper-local hotspot campaigns focused on areas with high blockage risks, plus support for the government's 'Simpler Recycling' campaign to encourage disposal of fats, oils, and grease in kitchen caddies.

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We are proud to be the appointed water and wastewater services provider for the North West of England.

Our services are essential for a healthy society and economy across a large, diverse, and vibrant region – from rural Cumbria and the Lake District to major urban areas such as Merseyside and Greater Manchester.

This variety creates a range of challenges and responsibilities across our network, from maintaining resilience in some of the UK's largest cities to protecting sensitive natural landscapes of international importance.

Every day we:

Supply around **1.8bn** litres of drinking water to around **8m** people	Collect **1.3bn** litres of wastewater and return it to nature via **583** treatment works	Operate and maintain **1,400** of aqueducts, over **43,000 km** of clean water pipes, and over **78,000 km** of sewers	Collect water in **184** reservoirs and manage **56,000** hectares of catchment land	Directly employ around **7,500** people and support thousands more in our supply chain

We work closely with local communities and partners to make sure our services remain reliable, affordable, and inclusive, especially for customers who may need extra support, and to protect and enhance our water environment, including 7,000 kilometres of rivers, 1,300 kilometres of coastline, and 25 recognised bathing areas.

Our long-term commitment is to help create a stronger, greener, and healthier North West.

CUMBRIA

LANCASHIRE

GREATER MANCHESTER

MERSEYSIDE

CHESHIRE

ABOUT UNITED UTILITIES | Delivering for customers and the environment

Our plan for the 2025–30 asset management period, known as AMP8, is designed to deliver significant long-term improvement in our performance for customers and the environment.

Priorities within the plan include:

- Over £13 billion of investment in our water and wastewater infrastructure – the biggest upgrade for more than a century

- Continued delivery of a safe, reliable, and affordable service to our customers while the upgrade takes place

- Better value for customers, through efficient delivery and responsible spending

- Building greater resilience to climate change, demand pressures, and operational risks

- Nurturing a skilled, inclusive workforce, including new roles created to strengthen environmental protection

Our focus on infrastructure, skills, operational resilience, and customer service will all support our drive for significantly improved environmental performance.

By 2030, our ambition is to reduce pollution incidents by at least 30%* as part of a long-term journey towards sustainably better rivers, lakes, and coastlines across the North West.

*Reduction is based on a 2024 baseline, and adjusted for WIRI inflation.

Our strategic priorities

Our six strategic priorities enable us to deliver our purpose – providing great water for a stronger, greener, and healthier North West.

HEALTHIER	GREENER	STRONGER
Deliver great service for all customers	Improve our rivers	Spend customers' money wisely
Provide a safe and great place to work	Create a greener future	Contribute to our communities

Read more about our purpose, strategic priorities and core values ❯

Our efforts to reduce pollution are intensifying, but so too is the scale of challenge.

We are facing more pressures on our water and wastewater networks from a variety of factors, including:

- Climate change leading to more extreme rainfall, storms, floods, and droughts
- Population growth increasing demand on drainage, sewer, and treatment capacity
- Urban development leading to more surface water entering sewers

We are responding by:

- Investing to improve the resilience of critical assets
- Adding more storage and treatment capacity
- Using better data and technology to predict and prevent problems
- Working with partners to promote sustainable drainage systems

Across our region, 54% of our sewer network is made up of combined sewers which receive both surface water and wastewater – much higher than the national average of 33%. This system, established over a century ago, is facing increasing pressure from population growth and more frequent extreme rainfall due to climate change. This is a particular challenge in growing urban areas such as Greater Manchester, where the population has increased by almost a tenth in the past decade.

That is why we are investing at record levels to increase the capacity and resilience of our infrastructure, while working with partners to promote more sustainable, nature-based drainage systems over the long term.

Reducing pollution is not just a short-term aim – it is a long-term commitment built into our strategy, investment plans, and purpose.

The North West population has grown by 8.5% in the past decade

Source: Office for National Statistics population estimates 2014–2024

The volume of rain falling on the wettest days each year has increased by 17%

Source: UK Met Office; rainfall on the UK's wettest days between 2008–2017, compared with 1961–1990

Strategic planning is crucial to delivering our environmental ambitions – providing clear roadmaps to follow, with transparent objectives against which we can be measured.

This document sets out our 2026 Pollution Incident Reduction Plan (PIRP) – an annually published improvement plan guiding how we reduce pollution incidents across our network. It sits within the reporting periods of our five-year asset management period (AMP).

We also produce a Drainage and Wastewater Management Plan (DWMP) – a 25-year strategic plan to ensure drainage and wastewater services continue to meet the needs of customers, communities, and the environment over the long term. This plan is reviewed and updated every five years.

These plans provide complementary frameworks for our work to improve environmental performance over the near, medium, and long terms. Together, they link strategy with delivery, ensuring that actions are evidence-led, future-focused, and measurable. Through these plans, we are shifting from reactive management to proactive, long-term environmental stewardship.

Drainage and Wastewater Management Plan

- Our latest DWMP, published in 2023, helped shape the wastewater priorities in our AMP8 investment programme, and laid the ground for a longer-term shift towards 'blue-green', sustainable drainage solutions over traditional 'grey' engineering infrastructure.

- Development has begun on DWMP28, with a draft due November 2027, aimed at driving a more integrated approach across drainage, flooding, and environmental protection.

- There will be strong emphasis on innovation and collaboration, working with partners including the Environment Agency and local authorities to meet the challenges of climate change, population growth, and urban development.

- Our DWMPs will continue to form a core evidence base for future investment cycles, including AMP9 (2030–35).

Read our DWMP23 >

Pollution Incident Reduction Plan

- Our PIRP aims to keep us focused on the highest-impact actions to reduce pollution incidents.

- From 2026, the PIRP will be reviewed, updated, and published annually in line with Environment Agency requirements.

- Annual updates will track performance, identify emerging risks, adapt to lessons learned, and allow us to scale-up interventions which prove most effective.

- Our PIRP analyses pollution incident trends and root causes, and aims to bring together operational, technical, and cultural actions to drive improved performance.

- A key focus is improving how we prevent incidents, and how we detect, respond to, and recover from problems when they happen.

- Our PIRP aims to embed learning and accountability across our business, and build trust and transparency with customers, regulators, and stakeholders.

How our PIRP and our DWMP align

Our DWMP sets out catchment-based priorities and investment needs to improve network resilience and environmental performance over the next 25 years. These priorities are already starting to be translated into delivery through AMP8 (2025–30), which includes major programmes to upgrade wastewater treatment works and improve storm overflow performance. Our PIRP measures annual progress in areas where performance needs to improve more rapidly, helping us meet regulatory expectations in the near-term while keeping us on track to deliver our longer-term ambitions.

ABOUT UNITED UTILITIES | Delivering local solutions in a simpler, smarter, better way

We know every part of the North West has different characteristics and needs.

That's why we created county-specific plans for:

CUMBRIA **LANCASHIRE** **MERSEYSIDE** **GREATER MANCHESTER** **CHESHIRE**

We have engaged with local customers and stakeholders to shape our plans for each county, addressing the things they told us matter most.

To deliver these tailored plans at pace, we have mobilised our teams into county delivery squads, driving more local ownership and accountability. Many of our PIRP actions will be delivered by these county teams to ensure solutions are fit for purpose.

This is a step change from our previous regional approach to planning, and we are confident it will lead to better outcomes for customers and the environment.

MAKING OUR OPERATIONS

✓ **Simpler Smarter Better**

In 2025, we launched our biggest ever transformation programme – Simpler, Smarter, Better. Developed by our operational teams, it is changing our organisational culture and ways of working to deliver more efficient and effective outcomes.

Fit for future operating model
Simpler, more flexible operations that respond to demand

Maintenance excellence
World-class asset performance and reliability

Capacity and demand plan
Optimised planning and resource allocation

Right person, right place, right time
Improved technology and processes for our teams

Performance culture
Clearer expectations and accountabilities

Data-driven operations
Better use of data, alarms, and proactive monitoring

Make versus buy
Stronger in-house capabilities and commercial partnerships

Power and chemicals
Smarter use of power and chemicals to boost efficiency and resilience

Pollution incident frequency, seriousness, and causes

In this section, we provide clear information about the frequency and seriousness of the pollution incidents caused by UU's assets in 2025. We also provide details of how performance has been reported. You will find a simple overview of what we mean by 'pollution incidents', how we report them, and the recent regulatory changes that affect this reporting.

We also outline how the Environment Agency's Environmental Performance Assessment (EPA) measures our performance.

How we have developed this PIRP

We have built on the strong foundations of our previous PIRP, using what we have learned to refresh and strengthen our approach. This new plan reflects our commitment to go further and faster in improving our pollution performance.

We have ambitious goals and challenging targets to reduce pollution incidents. For serious pollution incidents, we are focused on achieving zero. For total pollution incidents, we are committed to delivering a 30% reduction by the end of 2030, based on our 2024 baseline.

We have continued to focus our efforts on understanding root causes, improving asset maintenance, driving innovation, and increasing training and learning at every step. This learning has shaped our new plan, developed with insight from subject matter experts across our operational, customer-facing, communications, reporting, and regulatory teams. We believe our plan seeks to enhance our performance across every aspect of pollution, from how we engage with customers and respond to incidents quickly and effectively right through to how we report to our regulators and other interested parties.

To build this plan, we held workshops with colleagues across the business, drawing on their practical experience, as well as the insights our data gives us. This combination has helped us design projects and actions that will make a meaningful difference.

Environmental stewardship – our role

We are committed to taking a leading role in the water industry on environmental performance. As expectations from customers and regulators continue to grow, we are stepping into this next phase with a stronger focus on environmental stewardship. We recognise how precious the water environment is, and we work every day to protect it and make a positive difference. While we are proud of the progress we have made, we know there is more we can and will do.

What environmental stewardship means to us

The careful and responsible management of our assets that impact water courses in the North West	Being seen by customers and stakeholders as trustworthy so they are confident in what we do	Seeking to improve water quality with our effluents from wastewater treatment where possible	Always acting quickly when things go wrong, responding appropriately and working to mitigate any damage caused so there are no lasting effects	Reporting transparently on our performance	Delivering on the commitments set out in this Pollution Incident Reduction Plan

Background

Data basis, assumptions, and limitations

For the purposes of this document, and to ensure publication ahead of the statutory deadline of 1 April 2026 set by the Environment Agency, performance data and supporting insight reflect our position as of 15 January 2026. Performance information remains subject to change pending completion of the Environment Agency's regulatory decision-making process and the conclusion of all associated appeals.

Throughout this document, we refer to 311 wastewater pollution incidents and 52 water pollution incidents as our unverified 2025 performance position. The 311 wastewater incidents comprise:

- 287 incidents closed on NIRS, the Environment Agency's pollution incident reporting system.

- 24 incidents submitted by United Utilities as category 3, which remain unreconciled by the Environment Agency and are therefore still open on NIRS.

In addition, there are outstanding incidents where categorisation is yet to be reviewed or confirmed by the Environment Agency.

What is a pollution incident?

A pollution incident is the unauthorised discharge of a substance to the environment. Incidents can be categorised depending on the severity of impact. The Environment Agency publishes a document which sets out this definition and provides a description of the different categories of classification. We have also provided a short description of the categories on page 17 of this document.

Common Incident Classification Scheme (CICS) | Environment Agency ❯

Wastewater pollution incidents

The majority of our pollution incidents occur from our wastewater network, which is more than 78,000 kilometres in length. As well as sewers, we have 2,794 network sewage pumping stations and 565 wastewater treatment works that can experience failures and risks wastewater entering the watercourse.

A high proportion of our sewers are combined sewers, which is a single pipe system that collects both wastewater from homes and businesses and rainwater or surface water from roads and roofs. During heavy rainfall, these combined sewers can become overloaded, leading to overflows from combined sewer overflows (CSOs) of untreated storm water (sometimes known as spills) into rivers or other water bodies.

Not every spill is considered a pollution incident. During heavy rainfall, our permits allow us to release some wastewater into rivers. The large volume of rainwater naturally dilutes the wastewater, which helps reduce its impact on the environment. We know this is an issue people care deeply about, and we are taking action. By 2030, we are committed to upgrading 437 storm overflows and cutting the number of spills by 50%.

Read more about our storm overflow improvement work ❯

Clean water pollution incidents

Although less common, we remain vigilant to the risks of our clean water assets causing pollution incidents. Each year, we have approximately 32,000 burst pipes, and during these bursts there is a risk that treated drinking water can escape and be released into a watercourse. The sheer force and volume of the water can risk disturbing the soils or riverbeds and the sediment impacts can cause a pollution. Additionally, if pipes taking untreated raw water to treatment sites burst, this can also cause a pollution incident.

Treatment chemicals like chlorine, while essential for disinfecting drinking water, could also harm aquatic life if entering watercourses through clean water pipe bursts.

How do we respond to pollution incidents?

Through our extensive network of monitors and sensors, we can increasingly predict when a pollution incident may be about to take place and act quickly to prevent, detect, respond, investigate, and report appropriately.

This data, and how we use it, is constantly evolving and helps us to prioritise actions, informing how we respond to get the maximum effectiveness from our resources to protect the environment. As we develop our use of technology and artificial intelligence capability, we will continue to improve our accuracy in predicting future pollution incidents leading to more preventions and faster responses.

Our ambition is to have zero serious pollution incidents, and we recognise every pollution incident is one too many. Our post-incident processes are rigorous in understanding and investigating what went wrong as well as putting actions in place to avoid repeat incidents. This insight continues to inform our investment plans.

Regulatory changes from 2026

New guidance

The Environment Agency ('the agency') published new guidance on 15 October 2025, entitled Guidance for Reporting and Assessing Water Industry Regulation Incidents ('WIRI guidance'). This replaces the agency's 16_02 Operational Instruction and sets out how water companies are expected to report and record pollution incidents.

The guidance came into effect on 1 January 2026. The agency's update is intended to provide greater transparency around water company pollution performance.

What will be different?

The implementation of the new guidance will lead to some changes. The most significant of these changes will be:

- An increase in the apparent number of pollution incidents from:
  – the removal of category 4 'no impact' claims for incidents that have reached a water body;
  – the additional reporting of dry day spills; and
  – the application of a stricter bar on the assessment of third-party interference.

- A standardisation of sampling practices by specifying parameters and distances that should be sampled for; and

- Companies will be required to produce action plans to support duplication claims for dry day spills.

Alongside the revised guidance, the agency has also released an updated methodology for the Environmental Performance Assessment (EPA) covering 2026–30. Future assessments of water company environmental performance will use eight metrics to determine an overall star rating, ranging from 1 (worst) to 5 (best).

Although numbers and RAG ratings for total pollution incidents will still be included in the EPA, it will not contribute to the star rating. Rather, this data will be collected over two years to allow performance to be re-baselined to support target setting in 2028, at which point total pollution incidents will again count towards the star rating. More information about EPA can be found on page 17.

How are water companies preparing/responding?

Water companies are integrating the new requirements of the WIRI guidance into their practices.

We are already working to meet and exceed the new requirements. Beyond 2026, we await further clarity on how the government reforms set out in the Environmental Improvement Plan 2025 and related legislative actions will reshape sector governance. In the meantime, we are focussed on driving improvements for the benefit of the environment.

Regulatory changes from 2026

What will the performance impact be?

The changes will increase the number of reported pollutions. However, we do not expect the changes to the WIRI guidance to have a significant reporting impact on the classification of the most serious (category 1 and 2) incidents.

The wide use of new technology, such as Event Duration Monitoring, will identify more incidents. Therefore, the Environment Agency do expect us to record more of these events. We will see a significant increase in the number of recorded category 3 incidents, as water company pollution incidents will no longer be eligible for classification under category 4. Instead, going forwards all incidents will be classified as category 3 if pollution has reached the watercourse.

Water and sewerage companies: EPA methodology for 2026 to 2030 | GOV.UK ❯

Environmental Performance Assessment (EPA)

Our overall performance and impact on the environment is closely monitored by the Environment Agency. In 2011, the agency introduced the Environmental Performance Assessment (EPA) to compare performance between water companies and across years across seven metrics, three of which are related to pollution incidents. Since then, we have performed better than the EPA target for total pollution incidents in nine of the 15 years. We are disappointed to have exceeded the target in the past three years, although our record on serious pollutions remains among the best in the industry.

Our overall performance, including category 1–3 pollutions, has been impacted by an increased frequency of storm conditions and the fact we have installed more monitoring to alert us to incidents which previously may have gone unnoticed. We have learnt a lot and are committed to working at pace to meet the growing challenge from climate change, population growth, and other external factors. Although we have not achieved our EPA target this year, and know we have more to do, we are proud of the efforts being made across our organisation to improve performance over the long-term. Our focus on reducing pollutions is greater than ever, and we are confident we have the right plans to get our overall performance back to industry leading. As can be seen in the graph opposite, our total number of incidents in 2025 was 311 (unverified pending Environment Agency confirmation of 2025 performance – see page 13). Over the next pages we further explain and explore this performance.

Serious pollution incidents (sewerage and water supply assets) Category 1 and 2 pollution incidents	Total pollution incidents Category 1, 2 and 3 pollution incidents	Self-reporting of pollution incidents The percentage of category 1, 2 and 3 pollution incidents self-reported by a water company to the Environment Agency

Environment Agency guidance categorises pollution incidents based on their impact. We use these categories when tracking performance and setting targets, and they are referred to throughout this plan:

CATEGORY 1 Major, serious, persistent, and/or extensive impact or effect on the environment, people and/or property	CATEGORY 2 Significant impact or effect on the environment, people and/or property	CATEGORY 3 Minor or minimal impact or effect on the environment, people and/or property	CATEGORY 4 Substantiated incident with no impact

As mentioned on page 15, from 2026, pollution category definitions change, meaning category 4 incidents will only relate to incidents that are reported which we then investigate and can evidence to be an incident that was flagged but was found to be nothing significant or of interest.

Pollution incidents and EPA target to date

Count of incidents and EPA threshold

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Incidents	315	324	208	214	175	172	169	181	205	143	137	126	216	347	311
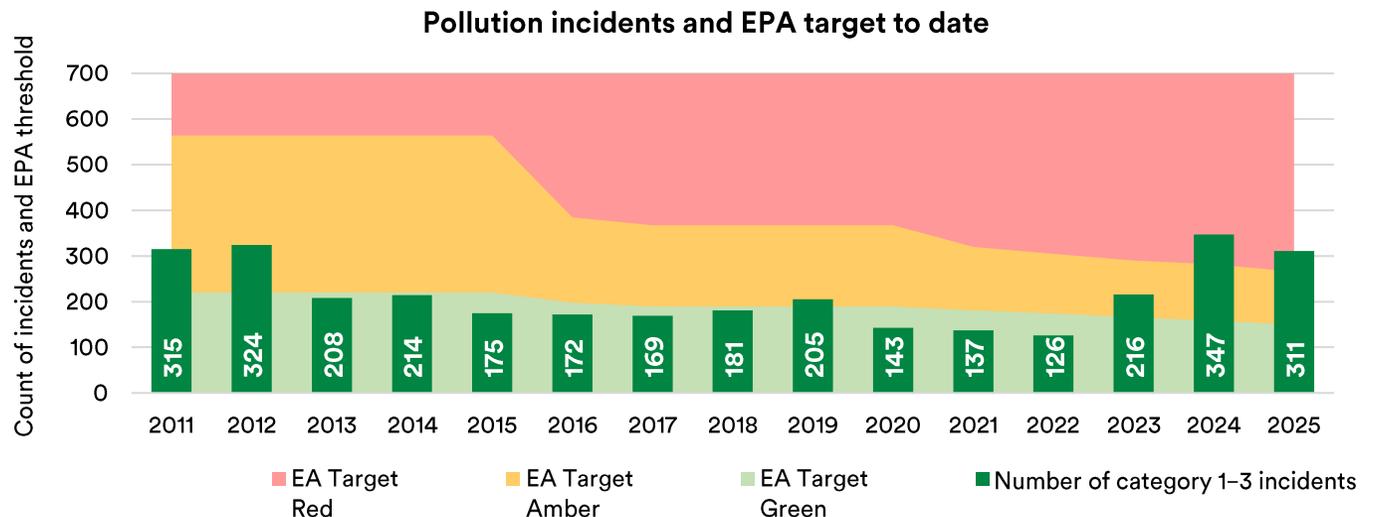
Legend:
- EA Target Red
- EA Target Amber
- EA Target Green
- Number of category 1–3 incidents

Self-reporting performance

We take our responsibilities seriously and we are committed to being open about how we perform.

We have a strong track record for self-reporting, with high performance throughout the AMP7 period, and we are continuing that strong performance into AMP8. As the chart shows, we consistently meet the EPA green threshold, demonstrating our commitment to doing the right thing and maintaining high standards.

Yearly overall self-reporting performance
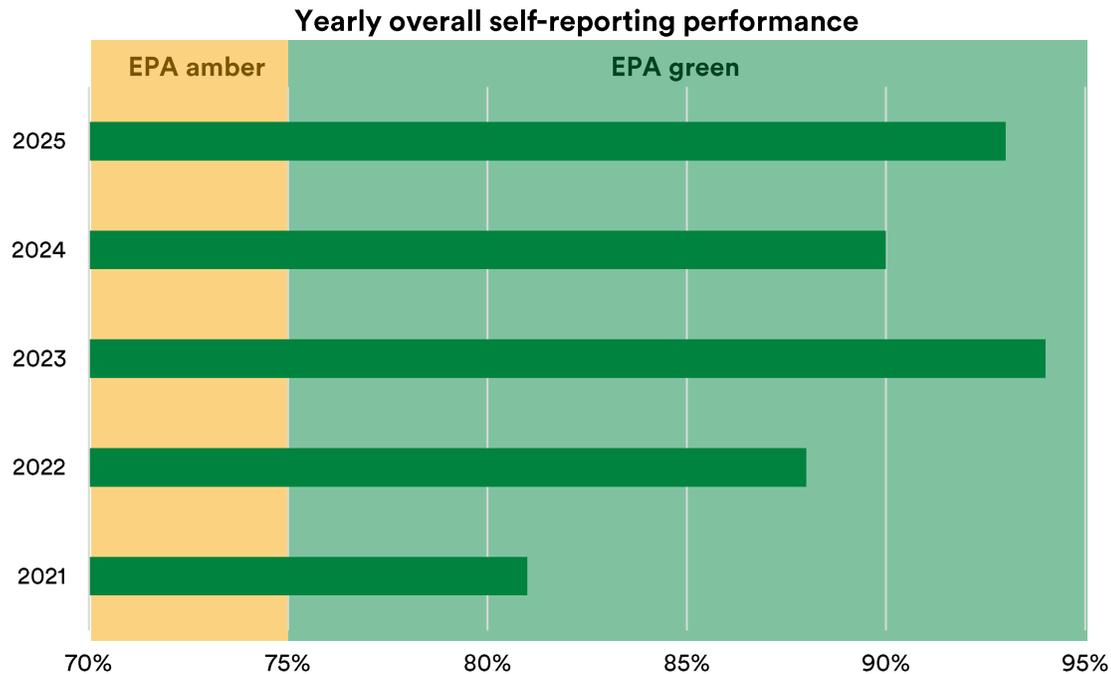
In previous PIRPs our actions for improving our self-reporting have focussed on improving transparency and strengthening environmental compliance by ensuring pollution incidents are identified and reported quickly and accurately. This includes enhanced monitoring of wastewater networks and treatment works, better staff training, improved operational controls, and the use of real-time data systems to detect failures early. By increasing the level of self-reporting, we continue to demonstrate stronger accountability to our regulators and customers, and crucially it supports faster incident response. We are proud to see a further improvement in our 2025 self-reporting performance to 93%.

This has been further supported through the introduction of our Environmental Events Management desk in 2024, which now has overall responsibility for overseeing and triaging potential incidents reported as pollution incidents, taking appropriate action to mitigate the situation whilst reporting transparently and escalating where necessary. This team operate 24/7, 365 days a year. You can read more about the desk and the benefits being delivered on page 19.

We are committed to keeping everyone in our business clear about their responsibilities. Through regular internal communication campaigns, we continually reinforce what's expected from our teams so they can play their part in maintaining high standards.

We also keep reviewing and improving our internal processes to drive even better performance. We are proud of what we have achieved so far and are determined to maintain our industry-leading standards throughout AMP8 and beyond.

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Self-reporting performance

CASE STUDY | Environmental Events Management

On 14 April 2025, we launched the Environmental Events Management Desk to create a single, reliable point of contact for any potential wastewater pollution incident. Thanks to its success, we expanded the service on 4 August 2025 to cover all types of water pollution.

Our dedicated team is available 24/7, 365 days a year. Their purpose is simple: to take ownership of every reported pollution concern, assess the situation quickly, take the right actions to minimise any impact, and keep you informed with transparent reporting and escalation when needed.

The benefits we are seeing so far:

| 18 pollution incidents have been prevented due to this intervention so far | Greater transparency and better-quality real-time information to support post-incident investigations | Positive feedback from stakeholders | Improved self-reporting performance and providing a quick response |

Building on the strong results we have seen so far, we know this way of working must play a key role in our future efforts to reduce pollution incidents. In 2026, we plan to invest over £600k to make this team a permanent part of our operations. We will also be investing more than £500k in an enhanced process, training and technology for this team, giving us stronger oversight and governance to support accurate reporting and better-informed decisions to prevent, detect, respond to, investigate, and report incidents effectively.

The impact of climate change and storms

Climate change and an increasing frequency of severe storms significantly heightens the risk of pollution, particularly across our wastewater systems.
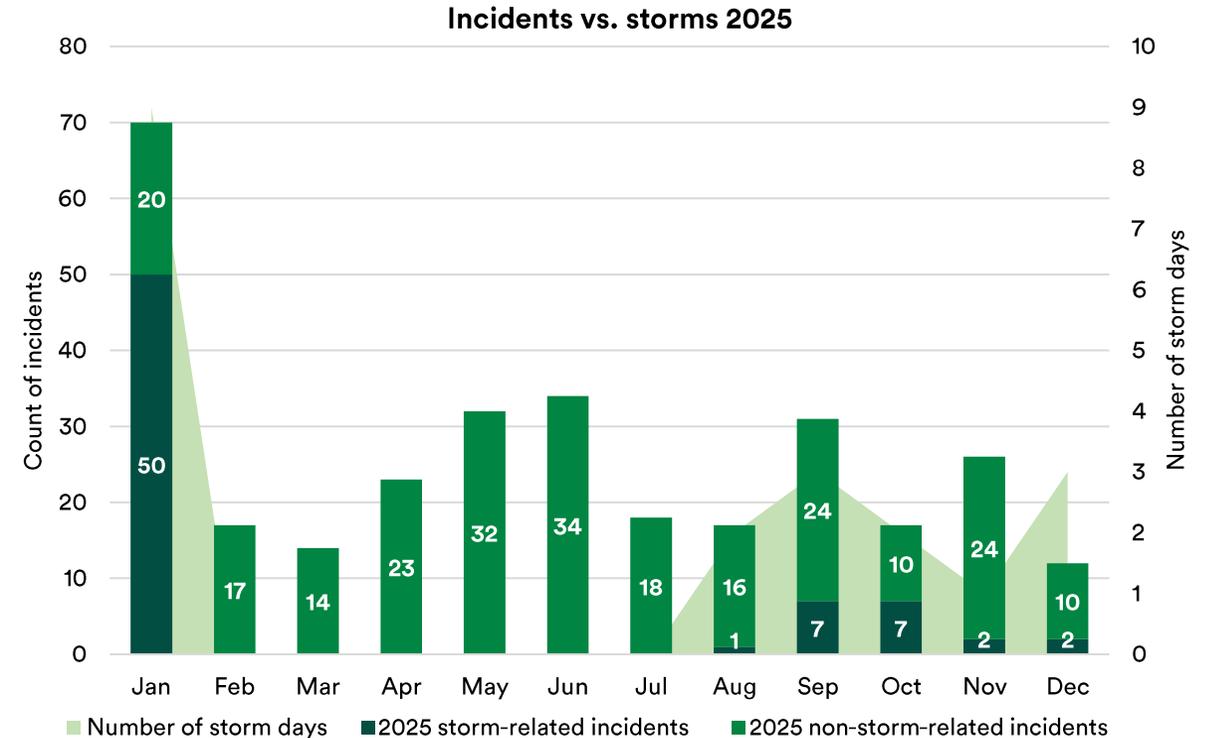
Extreme rainfall events and freezing temperatures followed by rapid thawing and prolonged dry periods puts additional pressure on sewer networks and treatment works. Storm-related power interruptions and physical damage to infrastructure are also increasing and further elevate the risk of uncontrolled releases.

In 2025, 12% of our total wastewater pollutions for the year happened during Storm Éowyn in January 2025 and were mostly due to interruptions in the power being supplied to us. In total, the UK suffered six named storms last year (storm Eowyn, Floris, Amy, Benjamin, Claudia and Bram) and the data shows how storms have a significant impact on our pollution incident numbers.

Prior to 2023, any pollution incidents related to a named storm were deemed as a matter beyond our reasonable control and therefore we reported them differently. From 2023 onwards, regulations changed and all pollution incidents due to power failure or storm-related issues are now included in our reported numbers. This has had a significant impact on our reported performance. The dark green bars in the chart to the left show how many incidents were storm related in 2025.

We recognise this as a challenge we must overcome and are investing heavily in building the resilience of our asset base to cope with periods of extreme weather. Through the work we have done in 2025, we have avoided 31 incidents of power failure that would have otherwise resulted in a pollution incident, and we are confident on the benefits our plan will deliver across the remainder of AMP8.

Incidents vs. storms 2025

Legend: ■ Number of storm days ■ 2025 storm-related incidents ■ 2025 non-storm-related incidents

Total power pollutions 2025	**66**
Total category 1–3 pollutions 2025	**311**
% of power-related pollutions 2025	**21%**

Total power pollutions 2024	**66**
Total category 1–3 pollutions 2024	**347**
% of power-related pollutions 2024	**19%**

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Frequency and seriousness of pollution incidents in 2025

Ofwat pollution incident performance commitment levels (PCLs)

As part of its environmental outcomes' expectations over 2025–30, we have significant pollution incident reduction targets, and we are fully committed to delivering against this challenge. Both the total pollution incident PCL and the serious incident PCL apply to us, and our targets are shown in the tables below.

In 2025, we have not met the target of zero serious incidents, and we have exceeded our performance commitment target of 194 category 1–3 incidents, but we are within our category 1–3 pollution incident collar of 325.

Having historically performed strongly on our total pollution targets, and despite reporting an improved performance in 2025 in comparison to 2024, we are disappointed not to have met all our targets on pollution incidents in 2025. This is an area we are committed to improving on. We remain confident we have the right overall plan and are focused on delivering actions to reduce the number of pollution incidents.

Pollution incidents as reported under the performance commitment and the EPA will significantly increase from 1 January 2026 due to these methodological and definition changes. Pages 15 and 16 explain these changes in more detail. We welcome acknowledgement by both Ofwat and the Environment Agency of the impact of the change. It will look like the number of pollution incidents has increased – however the guidance creates greater transparency in the way water companies record and report pollution incidents.

We await further clarification on targets for total pollutions for 2026 and beyond following ongoing consultation with Ofwat following Water Industry Regulation Incidents (WIRI) and Environmental Performance Assessment (EPA) regulation changes that were introduced from January 2026. Early indications are that this will become a comparative measure between water and wastewater companies.

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Serious pollution
The total number of category 1 and 2 pollution incidents recorded in a calendar year

Incidents	2025	2026	2027	2028	2029
PCL	0	0	0	0	0

Total pollution
The number of wastewater category 1–3 pollution incidents recorded in a calendar year

Incidents	2025	2026	2027	2028	2029
PCL	194	Under review by Ofwat	Under review by Ofwat	Under review by Ofwat	Under review by Ofwat
Cap	N/A	N/A	N/A	N/A	N/A
Collar	325	Under review by Ofwat	Under review by Ofwat	Under review by Ofwat	Under review by Ofwat

PCL	Performance commitment level target set by Ofwat
Cap	No further reward possible beyond this level
Collar	No further penalty possible beyond this level

Frequency and seriousness of pollution incidents in 2025

Every pollution incident we have is one too many. In 2025, 86% of our pollutions took place on our wastewater asset base. This is symptomatic of the additional risk and challenge our wastewater operations present by way of operating an open collection system (vulnerable to external influences). When something goes wrong, we act quickly to mitigate and prevent pollution incidents whilst taking time to understand the cause and, most importantly, to put firm actions in place to reduce the risk of reoccurrence.

These action plans are owned and delivered by our county operational teams and are impartially reviewed and audited to ensure the teams do what they say they will, in the timescales they have committed to. We have a good understanding of our root causes and continue to review our internal processes and invest in the skills of our people to continuously improve how we carry out our root cause as we recognise this is fundamental in informing our future plans, that will keep driving ongoing performance improvements.

WATER

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	8
February	0	0	6
March	0	0	3
April	0	0	5
May	0	0	3
June	0	0	2
July	0	0	4
August	0	0	10
September	0	0	2
October	0	0	2
November	0	0	6
December	0	0	1
Total	0	0	52

WASTEWATER

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	70
February	0	0	17
March	0	0	14
April	0	0	23
May	0	0	32
June	0	0	34
July	0	0	18
August	0	1	16
September	0	0	31
October	0	0	17
November	0	1	25
December	0	0	12
Total	0	2	309

WHOLE ASSET BASE

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	78
February	0	0	23
March	0	0	17
April	0	0	28
May	0	0	35
June	0	0	36
July	0	0	22
August	0	1	26
September	0	0	33
October	0	0	19
November	0	1	31
December	0	0	13
Total	0	2	361

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Note: Whilst we operate assets in England and Wales, there were no incidents in our Welsh operating area.

Frequency and seriousness of pollution incidents in 2025

FOUL SEWERS

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	3
February	0	0	2
March	0	0	5
April	0	0	3
May	0	0	5
June	0	0	2
July	0	0	1
August	0	0	4
September	0	0	1
October	0	0	1
November	0	0	2
December	0	0	0
Total	**0**	**0**	**29**

COMBINED SEWER OVERFLOWS

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	9
February	0	0	7
March	0	0	3
April	0	0	7
May	0	0	5
June	0	0	3
July	0	0	5
August	0	1	5
September	0	0	5
October	0	0	4
November	0	0	4
December	0	0	2
Total	**0**	**1**	**59**

RISING MAINS

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	1
February	0	0	1
March	0	0	1
April	0	0	3
May	0	0	2
June	0	0	2
July	0	0	0
August	0	0	0
September	0	0	3
October	0	0	3
November	0	0	1
December	0	0	0
Total	**0**	**0**	**17**

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Frequency and seriousness of pollution incidents in 2025

WASTEWATER PUMPING STATIONS

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	35
February	0	0	4
March	0	0	3
April	0	0	1
May	0	0	8
June	0	0	15
July	0	0	6
August	0	0	4
September	0	0	14
October	0	0	4
November	0	0	11
December	0	0	4
Total	**0**	**0**	**109**

WASTEWATER TREATMENT WORKS INC. STORM TANKS

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	21
February	0	0	3
March	0	0	1
April	0	0	9
May	0	0	12
June	0	0	12
July	0	0	6
August	0	0	3
September	0	0	8
October	0	0	5
November	0	1	7
December	0	0	5
Total	**0**	**1**	**92**

SURFACE WATER SEWERS AND ASSOCIATED OUTFALLS

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	1
February	0	0	0
March	0	0	1
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	1
Total	**0**	**0**	**3**

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Frequency and seriousness of pollution incidents in 2025

STORM TANKS (PART OF SEWER NETWORK)

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total	**0**	**0**	**0**

WATER DISTRIBUTION NETWORK

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	8
February	0	0	5
March	0	0	3
April	0	0	5
May	0	0	3
June	0	0	1
July	0	0	4
August	0	0	9
September	0	0	2
October	0	0	2
November	0	0	5
December	0	0	0
Total	**0**	**0**	**47**

WATER TREATMENT WORKS

Month	Category 1 pollution incidents	Category 2 pollution incidents	Category 3 pollution incidents
January	0	0	0
February	0	0	1
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	1
July	0	0	0
August	0	0	1
September	0	0	0
October	0	0	0
November	0	0	1
December	0	0	1
Total	**0**	**0**	**5**

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Causes of serious pollution incidents (category 1 or 2) by asset type in 2025

We are proud of our strong track record in preventing serious pollution, and every year we work hard to achieve zero incidents.

In 2025, we achieved zero category 1 serious pollutions. However, we did experience two category 2 incidents, and we are disappointed not to have met our EPA target of zero for serious pollutions.

The incidents detailed below caused a significant deterioration in water quality through elevated levels of pollutants and breached our environmental quality standards. We take these failings seriously and thorough investigations have taken place to inform our future improvement plans. We have taken on board all learnings and are already putting them into action to prevent anything similar from happening again. We know there is more to do, and we are working incredibly hard to achieve our goal of zero serious pollution incidents going forward.

Event number	Reported date and time	Location	UU county area	Seriousness	Asset type	Immediate cause	Root cause
2422159	23/08/2025 11:53	Barnoldswick	Greater Manchester	Category 2	Combined Sewer and Associated Outfalls	Collapse	Deterioration of asset. Issue occurred during proactive maintenance of sewer lining – sewer lining was required due to pipe damage
2442394	12/11//2025 16:00	Rossall	Lancashire	Category 2	Wastewater Treatment Works inc. Storm Tanks	Collapse	Deterioration of asset

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.
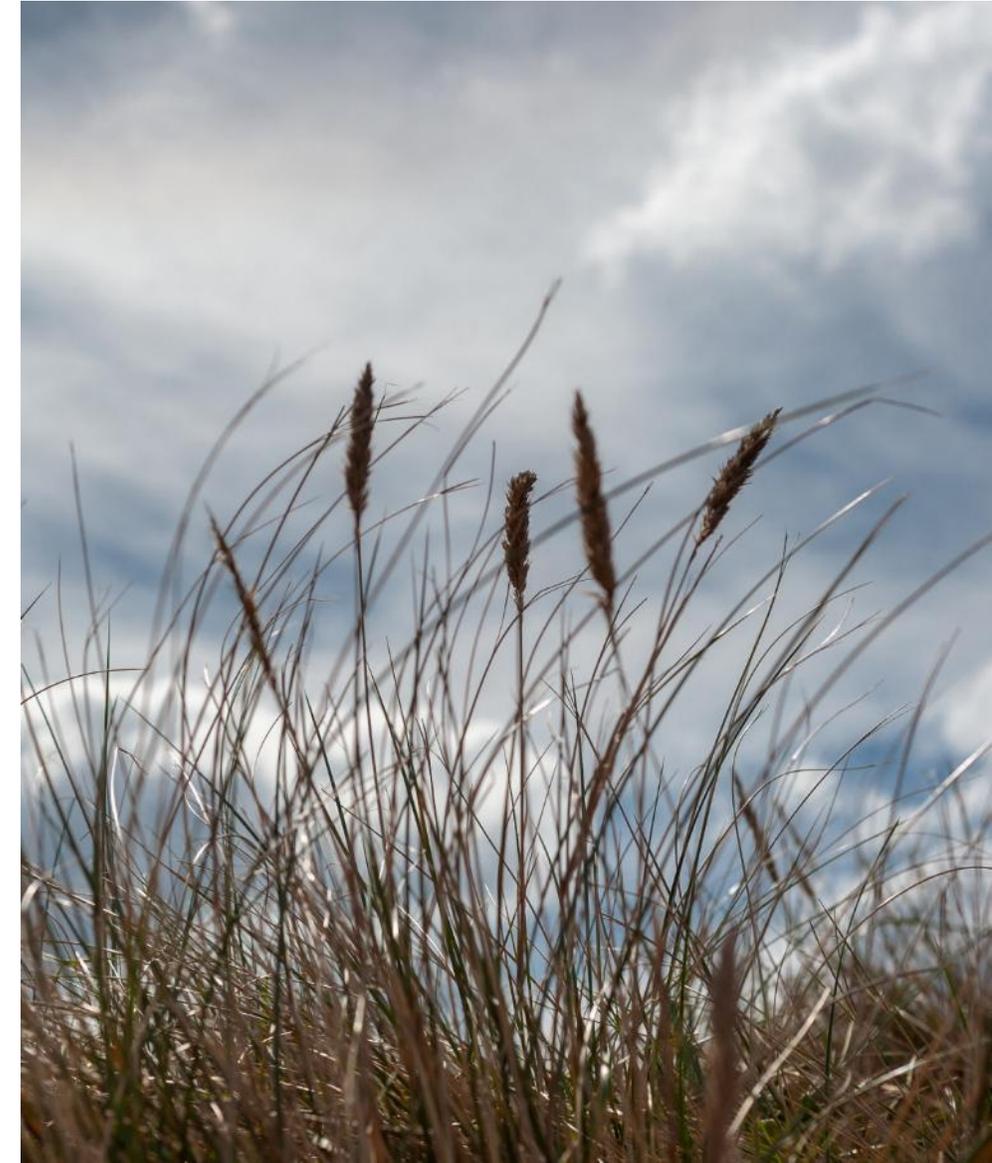
Causes of category 3 pollution incidents by asset type in 2025

In 2025, 30% of our pollution incidents were caused by failures at our wastewater pumping stations, and 25% occurred at our wastewater treatment works. We continue to focus on improving the resilience and performance of these high-risk assets, and we are encouraged to see a reduction in incidents at these sites between 2024 and 2025.

We also recognise that our combined sewer network accounted for 17% of incidents in 2025, and this remains a key area of focus for us. This is a particular challenge across our region, where the proportion of these incidents is higher than in other parts of the country. You can find more detail on the actions we are taking to address this in section 3 of this document.

Further analysis of our category 3 pollution incidents across our entire asset base shows the majority are driven by equipment failure (28%), blockages (22%) and power failures (16%) with hydraulic inadequacy and burst-related failures also contributing significantly. This shows that most issues stem from the condition and resilience of our assets, rather than one-off operational events.

As part of our post-incident reviews, we spend considerable time identifying the immediate, fundamental reason an incident or problem occurred. Our action plans focus on tackling these root causes to prevent issues from reoccurring. The tables opposite set out these primary causes, rather than the immediate contributing factors.

We are focusing our pollution reduction plan on the areas that make the biggest difference, making our assets more reliable, preventing blockages before they happen, boosting power resilience and fixing hydraulic challenges. This means our investment is directed where it will have the greatest impact for customers and the environment.

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Whole asset base pollution incidents		Number of category 3 pollution incidents	Proportion of category 3 pollution incidents (%)
Asset type	Wastewater Pumping Stations	109	30%
	Wastewater Treatment	92	25%
	Combined Sewer and Associated Outfalls	59	16%
	Water Distribution Network	47	13%
	Foul Sewers	29	8%
	Rising Mains	17	5%
	Water Treatment	5	1%
	Surface Water Sewer and Associated Outfalls	3	1%
	Storm Tanks	0	0%
	Total	**361**	**100%**
Immediate cause	Equipment Failure	100	28%
	Blockage	78	21%
	Power Failure	59	16%
	Burst – Water	44	12%
	Hydraulic Inadequacy	35	10%
	Rising Main Burst	19	5%
	Collapse	13	4%
	Investigation Only	4	1%
	Water – Equipment Failure	4	1%
	Distribution Main Burst	2	1%
	Unauthorised Discharge	2	1%
	Contaminated Surface Water	1	0%
	Total	**361**	**100%**
Root cause	Deterioration of Asset	99	27%
	Power Failure – Third Party	55	15%
	Sewer Misuse (FOG/RAG)	55	15%
	Weather/Increased Demand	49	14%
	Electrical Failure	42	12%
	Mechanical Failure	24	7%
	Soft Blockage/Silt	16	4%
	Defect	11	3%
	Tree Roots	6	2%
	Generator Failure	2	1%
	Third-Party Damage	2	1%
	Total	**361**	**100%**

Causes of category 3 pollution incidents by asset type in 2025

We are pleased to see that in 2025 the number of incidents at our wastewater treatment works and pumping stations fell, a clear sign that the actions we have taken across these assets are making a positive difference (see section 3 for more detail). Our post-incident investigations help us understand exactly what caused each pollution incident, including any contributing factors. These insights directly shape our planning and investment decisions, making sure our pollution reduction plans target the right risks and strengthen the most vulnerable parts of our water and wastewater systems.

The table below shows how many category 3 pollution incidents occurred on each type of asset in 2025, along with the root causes. This helps us pinpoint where the highest risks sit, understand what went wrong, and ensure our improvement plans focus on the areas that will deliver the biggest benefits.
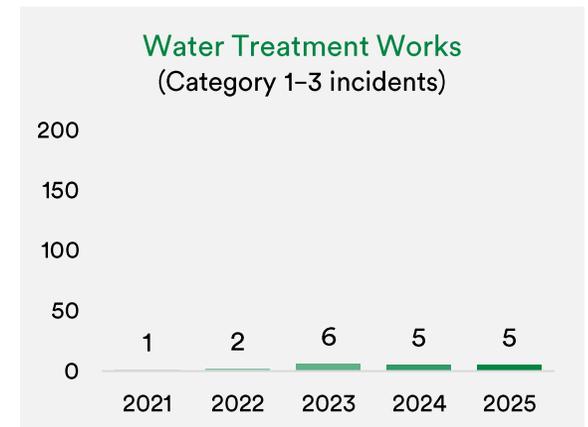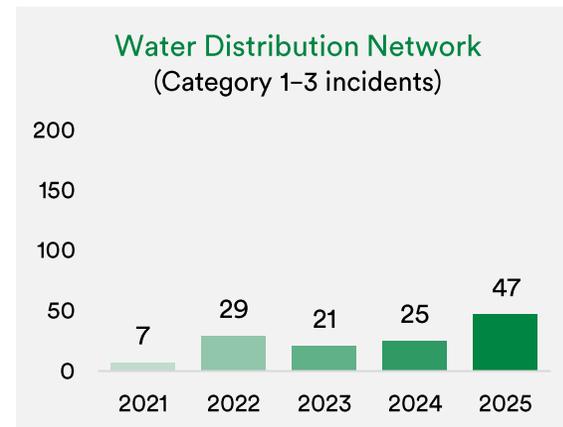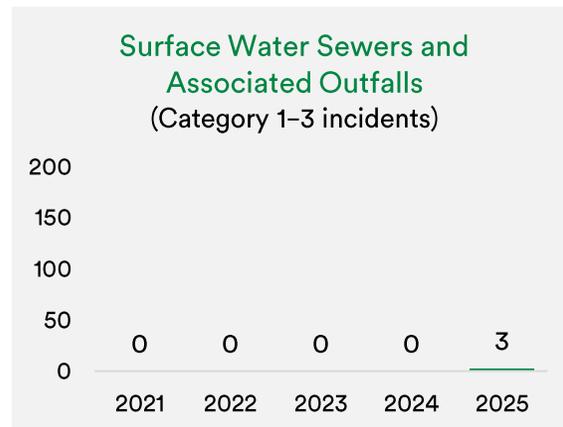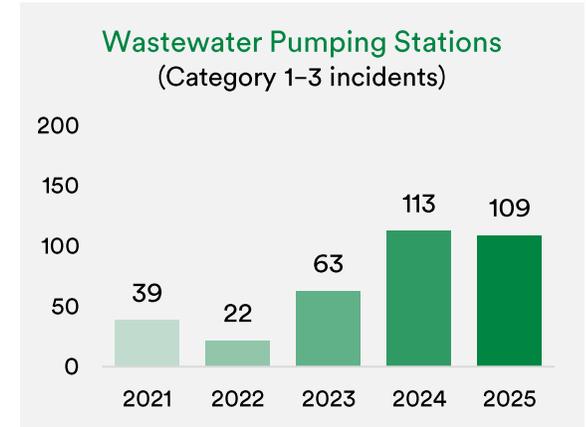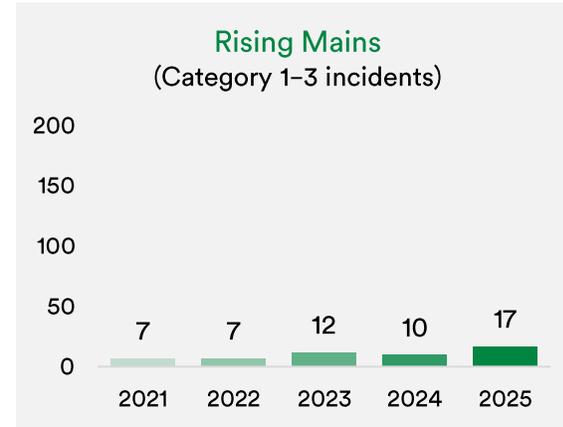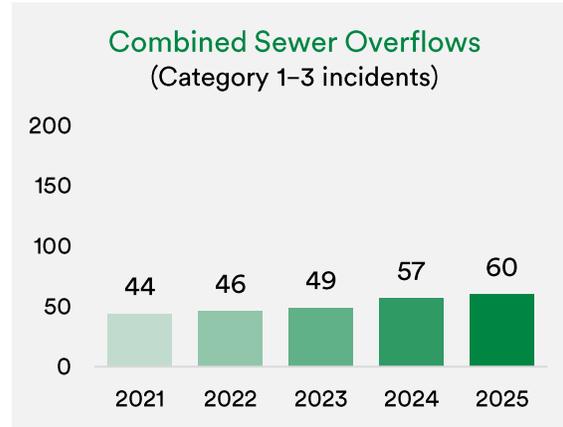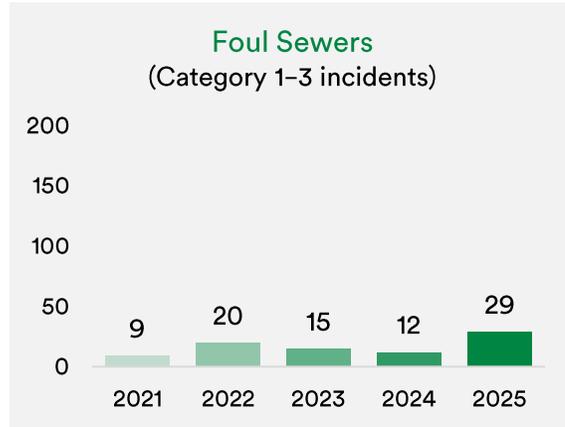
Root cause	Foul Sewers		Combined Sewer Overflows		Rising Mains		Wastewater Pumping Stations		Wastewater Treatment Works inc. Storm Tanks		Surface Water Sewers and Associated Outfalls		Storm Tanks		Water Distribution Network		Water Treatment Works	
Damage – Third Party	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	1	2%	0	0%
Deterioration of Asset	7	24%	8	14%	15	88%	13	12%	15	16%	0	0%	0	0%	44	94%	5	100%
Electrical Failure	0	0%	0	0%	1	6%	20	18%	20	22%	0	0%	0	0%	0	0%	0	0%
Generator Failure	0	0%	0	0%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%	0	0%
Mechanical Failure	0	0%	3	5%	0	0%	20	18%	0	0%	0	0%	0	0%	1	2%	0	0%
Power Failure – Third Party	0	0%	0	0%	0	0%	31	28%	24	26%	0	0%	0	0%	0	0%	0	0%
Power Failure – UU	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%
Sewer Misuse (FOG/RAG)	11	38%	24	41%	1	6%	6	6%	10	11%	3	100%	0	0%	0	0%	0	0%
Soft Blockage/Silt	4	14%	7	12%	0	0%	2	2%	4	4%	0	0%	0	0%	0	0%	0	0%
Tree Roots	5	17%	2	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Weather/Environmental/Increased Demand	2	7%	15	25%	0	0%	14	13%	18	20%	0	0%	0	0%	1	2%	0	0%
Total	**29**	**100%**	**59**	**100%**	**17**	**100%**	**109**	**100%**	**92**	**100%**	**3**	**100%**	**0**	**0%**	**47**	**100%**	**5**	**100%**

Note: The data presented throughout this document was extracted on 15 January 2026. Due to regulatory timelines, a number of 2025 incidents were still under reconciliation or pending final determination through the regulatory appeals process at that time.

Pollution incidents by asset type

Our core activities cover each stage of the water cycle. These graphs show how pollution incidents have been broken down by asset type over the last five years. We monitor this closely and use what we learn to guide our daily work and investment decisions, helping us continually improve and reduce pollution across the region.

Foul Sewers
(Category 1–3 incidents)

Year	Incidents
2021	9
2022	20
2023	15
2024	12
2025	29

Combined Sewer Overflows
(Category 1–3 incidents)

Year	Incidents
2021	44
2022	46
2023	49
2024	57
2025	60

Rising Mains
(Category 1–3 incidents)

Year	Incidents
2021	7
2022	7
2023	12
2024	10
2025	17

Wastewater Pumping Stations
(Category 1–3 incidents)

Year	Incidents
2021	39
2022	22
2023	63
2024	113
2025	109

Wastewater Treatment Works
(Category 1–3 incidents)

Year	Incidents
2021	38
2022	31
2023	77
2024	156
2025	93

Surface Water Sewers and Associated Outfalls
(Category 1–3 incidents)

Year	Incidents
2021	0
2022	0
2023	0
2024	0
2025	3

Water Distribution Network
(Category 1–3 incidents)

Year	Incidents
2021	7
2022	29
2023	21
2024	25
2025	47

Water Treatment Works
(Category 1–3 incidents)

Year	Incidents
2021	1
2022	2
2023	6
2024	5
2025	5

SECTION 2:

The steps taken to maintain the system

In this section we explain our pollution reduction strategy and our ambition to reduce pollution incidents. We set out our progress against each of the measures by asset type from our 2025 PIRP.

Our pollution reduction strategy

Our learning from previous AMPs, and the insight from the first year of AMP8, is allowing us to strengthen and expand our pollution improvement plan.

We have several key workstreams that we are confident will deliver real, measurable reductions in pollution incidents:

✓ Driving forward our power-resilience programme, targeting a major reduction in the 30% of pollution incidents linked to power loss.

✓ Rolling out monitors, alarms and sensors across our network so we can detect emerging issues early and act before they become problems.

✓ Exploring how we can confidently use artificial intelligence to predict issues, risks and failures, helping us prevent pollution incidents before they occur.

In 2025, we published our plan containing 16 PIRP initiatives and interventions. We have provided a full update on each of these on pages 34 to 44. In this year's PIRP, we have grouped our ongoing, current and new interventions by asset type, which you can find in section 3. As we learn more, we will continue to develop and strengthen our approach throughout AMP8, publishing an updated plan every year. We will also report openly on how well our interventions are working and share any new trials or innovations we are testing (see page 94 for more details about the assurance activities that support our reporting).

The expected effectiveness of the interventions and initiatives is categorised in this key:

Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Pollution reduction strategy		
County-based PIRPs	**Centrally-led interventions**	**Leverage Operational Intelligence**
Place-based plans created and owned by county operational teams with local knowledge and experience to drive maximum benefit in key focus areas. These plans inform our investment plans to ensure we are spending money wisely.	Interventions, such as our ambitious power resilience programme and dynamic monitoring and sensor programmes, will be coordinated and delivered by central teams, who will keep the local operational teams informed on the improvements which will benefit local teams.	Providing tools and technology for generation of insight to county teams, driving pollution benefits. Use of situational awareness, real-time data and analytics to optimise our ability to 'Prevent, Detect, Respond, Investigate and Report'.

Our PIRP ambition

We have set ourselves ambitious targets for AMP8, challenging ourselves to achieve our ambition through our actions.
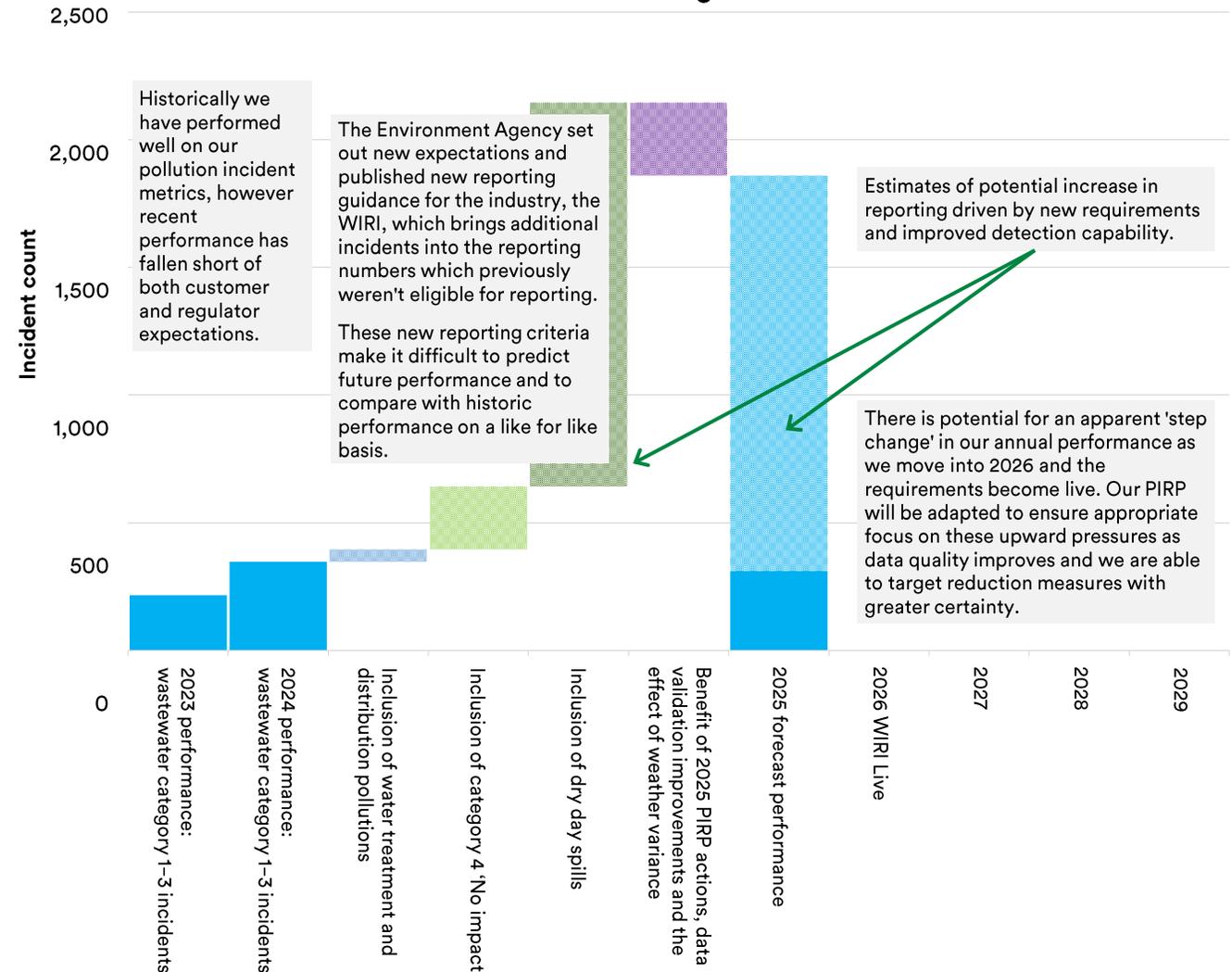
Our plan is designed to keep improving as we learn more and work hard to reduce the environmental impact of our assets. Between 2025 and 2030, we are committed to cutting pollution incidents by 30% compared with our 2024 baseline on a like for like measurement basis. The glidepath on the following page shows the scale of the challenge, breaking down incidents across categories 1 to 4 and illustrating the additional impact of dry-day spills. From 2026, many of these dry-day spills will be counted as pollution incidents because of changes to regulation (see pages 15 and 16). As future reporting requirements become clearer, the figures shown may be updated.

Our performance in 2025 showed an improvement on our 2024 baseline, which is encouraging, but we know there is still more to do to reach our ambition of at least a 30% reduction in incidents by 2030.

Extreme weather has caused major power outages in recent years, and we have seen the impact this can have on our wastewater assets and pollution performance. In response, we have strengthened our focus on our power resilience programme and are confident this will continue to deliver benefits. We have also introduced a 24/7 Environmental Events Management desk to give our operational teams real-time support and ensure the right mitigation actions are taken quickly.

Alongside this, we are improving how we plan for and respond to extreme weather. Our Dynamic Network Management programme continues to grow, giving us better intelligence on what is happening across our network so we can act earlier and report transparently to the agency.
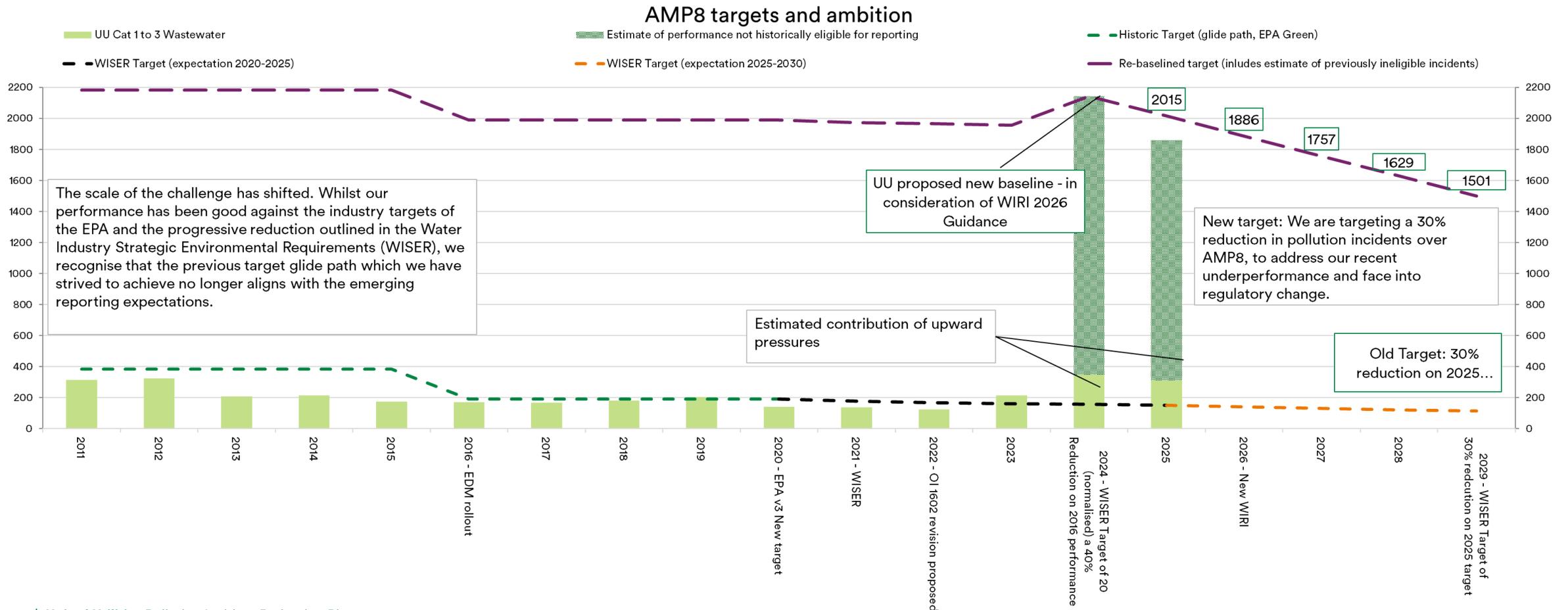

Upward pressures of customer expectation and regulatory landscape change

Historically we have performed well on our pollution incident metrics, however recent performance has fallen short of both customer and regulator expectations.

The Environment Agency set out new expectations and published new reporting guidance for the industry, the WIRI, which brings additional incidents into the reporting numbers which previously weren't eligible for reporting.

These new reporting criteria make it difficult to predict future performance and to compare with historic performance on a like for like basis.

Estimates of potential increase in reporting driven by new requirements and improved detection capability.

There is potential for an apparent 'step change' in our annual performance as we move into 2026 and the requirements become live. Our PIRP will be adapted to ensure appropriate focus on these upward pressures as data quality improves and we are able to target reduction measures with greater certainty.

Our PIRP ambition

The glidepath below shows our ambition and the targets we are working towards.
We know we have a lot to do and believe our plan faces into the challenge ahead.
As future reporting requirements become clearer, the figures shown may be updated.

AMP8 targets and ambition

The scale of the challenge has shifted. Whilst our performance has been good against the industry targets of the EPA and the progressive reduction outlined in the Water Industry Strategic Environmental Requirements (WISER), we recognise that the previous target glide path which we have strived to achieve no longer aligns with the emerging reporting expectations.

UU proposed new baseline - in consideration of WIRI 2026 Guidance

New target: We are targeting a 30% reduction in pollution incidents over AMP8, to address our recent underperformance and face into regulatory change.

Estimated contribution of upward pressures

Old Target: 30% reduction on 2025…

Progress against our 2025 action plan

In 2025, we published our last PIRP, in line with our statutory duty. We will review, update and publish our plan annually going forward. To ensure impartial auditing we will continue to commission Jacobs, a third-party company, to carry out an external verification audit (see page 94 for further details). On the following pages, we explain which assets have been impacted by which measure. We provide a description of the action we set out to achieve, an update on this action, and an indication of the number of pollution incidents that have been prevented as a result of the action.

We have also identified the root cause or causes we are seeking to address through each action in our plan, and how this links to our Drainage and Wastewater Delivery Plan (DWMP). For ease of reference, we have provided a summary of the 2025 measures and status of the delivery of the associated actions.

Asset	Measure	Delivery status of measure	See page
Wastewater Treatment Works and Wastewater Pumping Stations	Resilience to mains power fails	We have delivered the agreed scope	35 and 36
	Maintenance Excellence approach for repeat pollution sites	We have delivered the agreed scope	35 and 36
Wastewater Pumping Stations	Last in Line (LiL) site surveys and optimisation	We have delivered the agreed scope	37
	Dynamic Network Management point programme (pumping stations)	Actions ongoing	37
Surface Water Sewers and Associated Outfalls	Misconnections (when wastewater from homes is inadvertently connected to surface water sewers instead of a foul or combined sewer)	Actions ongoing	38
Foul Sewers, Combined Sewer Overflows and Surface Water Sewers and Associated Outfalls	Customer awareness and engagement campaigns – Household customers	We have delivered the agreed scope	39 and 40
	Awareness and engagement campaigns – Food Service Establishments	We have delivered the agreed scope	39 and 40
Foul Sewers and Combined Sewer Overflows	Dynamic Network Management linear programme (pipes)	We have delivered the agreed scope	41
	Network cleansing	We have delivered the agreed scope	41
Water Distribution Network	Water main rehabilitation programme	Actions ongoing	42
	Water main pressure reduction	We have delivered the agreed scope	42
Whole asset base	External expert water quality assessments	Actions ongoing	43 and 44
	Mitigation kits (for reducing the impact of pollutions)	We have delivered the agreed scope	43 and 44
	Zero repeat pollution incidents (root cause investigation improvements)	We have delivered the agreed scope	43 and 44
	Data literacy academy training	We have delivered the agreed scope	43 and 44
	Wastewater role-specific pollution training for all Wastewater assets/ Water pollution training for all Water assets	We have delivered the agreed scope	43 and 44

Wastewater Treatment Works and Wastewater Pumping Stations

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Wastewater Treatment Works and Wastewater Pumping Stations	Resilience to mains power failures	Sites at high risk of having pollution incidents due to mains power failures or power dips have interventions and mitigation put in place to make them more resilient. The interventions are a combination of events where there is a drop in voltage in the electricity supply network (also known as brown outs), surge protection devices (SPD's), Uninterruptable power supply (UPS), generator hook up points, Battery Energy Storage Systems (BESS) and Diesel Generators. As a standard, the intention is for all sites to have brown out relays, UPS and SPDs.	We are carrying out a major programme to review wastewater treatment sites and pumping stations, focusing first on those that historic data shows are at highest risk. As we have progressed, we have strengthened our approach. We have updated our operating model, refined how we prioritise risk, and introduced dedicated resource to oversee and coordinate delivery across the programme. **Surveys:** In 2025, we have now completed individual power-resilience surveys at 180 sites. Additional power supplies have been installed at 50 of these sites (for example surge protection, generator etc.), the remaining 130 will be prioritised for action during 2026. **Upgrades:** We have developed a tailored, risk-based decision-making framework to make sure every site gets the right solution rather than relying on a one-size-fits-all approach. For example, 29 sites have already had uninterrupted power supply upgrades and surge-protection devices installed. For the highest-risk locations where full resilience is needed, we have surveyed – or have plans to survey – 96 sites as potential candidates for battery energy storage systems (BESS). We have already ordered 11 units, which will start being installed from January 2026. This programme reflects the scale of our commitment to reducing pollution risks and increasing resilience against climate change, extreme weather and the pressures this brings to our network.	31 incidents prevented	Power failure third party, power failure UU, electrical failure and generator failure. These upgrades help our equipment keep running during short power cuts and protect it from sudden electricity surges, making our sites more resilient.	We know that power failures contribute to around 20% of our pollution incidents, and we are taking firm action to address this. As part of our DWMP, we are assessing how well our sites can cope with power outages and identifying improvements across the "4Rs": resistance, reliability, redundancy, and response and recovery, so our assets stay resilient in the future. Due to the timescales to develop the DWMP, the findings from these assessments will be available in future PIRP reports.	We have delivered the agreed scope

Wastewater Treatment Works and Wastewater Pumping Stations

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Wastewater Treatment Works and Wastewater Pumping Stations	Maintenance Excellence approach for repeat pollution sites	Preventative Maintenance compliance improvements will be based on pollution avoidance benefit. We do this by carrying out in-depth checks on our equipment, reviewing any assets that regularly cause problems, and ensuring the right spare parts are available when they are needed (these are sometimes known as precision maintenance asset health checks, bad actors and defect elimination reviews).	In 2025, we focused on the equipment most likely to cause repeat issues at our wastewater treatment works and pumping stations. To support this, we created a pollution maintenance dashboard that gives teams clear visibility of planned, in-progress and completed maintenance at these key sites. We carried out proactive asset-health checks and embedded our updated maintenance strategies across the business. We also introduced performance improvement plans, boosted awareness of preventative maintenance, and provided coaching supported by our maintenance specialists. This approach has increased the amount of preventative and predictive maintenance we complete, enabling us to identify and fix issues before equipment fails. We also continued to resolve defects through our Asset Condition Management process. Over the last 12 months, this work has delivered strong results: • Preventative maintenance yield (% of maintenance work that is preventative) increased from 2.25% to 7.48%, a growth of 5.23 percentage points. • Defects identified through preventative maintenance increased from 90 in January 2025 to more than 400 by November 2025. • Predictive kit compliance for FSEs improved by 25%.	26 incidents prevented	Asset defect, deterioration of asset and soft blockages/silt.	Preventative maintenance will be a central part of our next DWMP (in line with the new requirements), supporting our drive to meet our long-term pollution-reduction ambitions.	We have delivered the agreed scope

Wastewater Pumping Stations

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Wastewater Pumping Stations	Last in Line (LiL) site surveys and optimisation	LiL survey programme prioritisation is based on pollution risk across the region. LiLs will be surveyed to determine current system performance, capture any missing data and raise any appropriate remedial works required for example Valve replacement or upgrading pumps.	Surveys – We committed to surveying 26 sites but completed 37 surveys in total in 2025. Surveys completed have significantly increased maintenance compliance across these key assets. Improvements – We have identified numerous pollution risks which unmitigated could result in pollution or increased spills, which have been prioritised for intervention. • All sites have had pollution sample maps updated. • Permit checklist completed. • We have started to update detailed site contingency plans (including a comprehensive tanker management plan to reduce the impact of any site failure). To date, 157 remedial work orders have been raised, of which 44 are identified as having a pollution risk. We have completed 14 of these with the programme of works continuing into 2026.	We are working to better understand how our actions are helping to reduce pollution incidents.	Blockages in pumps, pump failure and telemetry failure.	Condition data from LiL surveys will be incorporated into the assessment of non-infrastructure asset health that will form part of the DWMP. This will allow us to identify the future investment required to prevent pollution events from LiL pumping stations.	We have delivered the agreed scope
Wastewater Pumping Stations	Dynamic Network Management point programme	We are installing new monitoring equipment to help us spot issues earlier and reduce the risk of pollution. This builds on our existing DNM analytics, meaning we only need to fit the device and bring the data online. We are also expanding monitoring at high-risk wastewater pumping stations to give our teams better visibility and faster alerts.	We have now completed our analysis for phases 1 to 3 of the programme: • Phase 1: We identified 41 sites where monitoring is missing and there is a clear risk of pollution at the asset. • Phase 2: We identified 119 pumping stations that don't have a direct overflow on site but could still create pollution issues on the local network. • Phase 3: We identified 366 additional sites where we can upgrade existing signals and improve how we monitor performance. Throughout 2025, we have successfully completed 21 of the 41 Phase 1 sites, and work on the remaining locations will continue into 2026. We have also begun early activity for both Phase 2 and Phase 3, carrying out pre-site work to move these upgrades forward.	We did not see incident prevention benefits in 2025, but the improvements we have made put us in a strong position to start delivering results in 2026.	Blockages in pumps, pump performance overall, asset deterioration and rags build-up.	We are strengthening how we monitor key assets, and this will be one of the tools we use in our DWMP approach to help us reach our long-term pollution targets.	Actions ongoing

Surface Water Sewers and Associated Outfalls

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Surface Water Sewers and Associated Outfalls	Misconnections (when wastewater from homes is inadvertently connected to surface water sewers instead of a foul or combined sewer)	Customer engagement and catchment investigations to identify and reduce drainage misconnections.	We are committed to tackling this challenge. Our approach includes: **Customer engagement:** We investigate every new reported contaminated surface water outfall, and will continue to work closely with homeowners, providing guidance and support to help them correct misconnections. Education is key, many people simply don't know their plumbing can be causing a pollution. During AMP7, we surveyed over 25,000 properties to identify sources of misconnections. **Trade engagement:** We are teaming up with local training colleges and industry groups to boost awareness among trade apprentices, such as plumbers. At Preston College, for example, we are running a pilot where we are helping to embed drainage misconnections directly into its training programmes. **Collaboration:** We join forces with water companies, industry groups and regulators to promote the national 'Connect Right' campaign and drive wider action. **Innovation and technology:** By using data analytics and mapping tools, we can target problem areas more effectively and prioritise action where it matters most. We are looking to share more open data, including known contaminated surface water outfall locations and their associated catchments to better inform customers of where these problems are, and what they can do to help resolve them.	Zero UU incidents prevented. (The impact is seen in a reduction in third-party incidents.)	Resolving misconnections – to do the right thing for the environment.	Our DWMP will include an assessment of the number of Reasons for Not Achieving Good Status (RNAG) attributed to discharges of urban/highway runoff and misconnections that will not be remedied through investment. We will use this data to outline the actions required by local residents to support the delivery of the plan, including the removal of misconnections. Due to the timescales to develop the DWMP, the findings from these assessments will be available in future PIRP reports.	Actions ongoing

Foul Sewers, Combined Sewer Overflows and Surface Water Sewers and Associated Outfalls

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Foul Sewers, Combined Sewer Overflows and Surface Water Sewers and Associated Outfalls	Awareness and engagement campaigns – household customers	Awareness and engagement campaigns to educate and inform household customers how 'flushing and pouring' behaviours can create sewers blockages with the aim to reduce the risk of sewer flooding and pollution incidents.	Over the last 12 months, we have delivered a series of campaigns designed to engage and educate household customers on how to reduce blockages by encouraging responsible disposal of personal hygiene products, including wet wipes and period products, and cooking fats, oils and grease. **Regional campaigns:** We delivered three waves of the 'Stop the Block' campaign (Feb, Jun, Oct), raising customer awareness across the region about the impact of disposing of wet wipes and cooking fats, oils and grease responsibly. Using adverts on radio, TV on-demand, YouTube, digital channels and social media to reach our customers, research shows strong impact: unprompted awareness among a representative sample of our customer base of 'what not to flush or pour' at 82% and campaign recall at 79%. **Targeted campaigns:** We delivered a series of blockage hotspot and pollution incident reduction campaigns in areas where there is a high incidence of blockages. Target locations included Cheadle, Chorley, Runcorn, St Helens and Tarvin. Multi-channel communications activities included email, leaflet drop, social media, school visits, community events. **Demographic campaign:** We launched the 'Change the Cycle' campaign to raise awareness of responsible period product disposal (Sep-Nov 2025). Our own research highlights a segment of customers who regularly report flushing period products. We deployed a multi-channel campaign to reach the target audience (women aged 30-55 years), using adverts on TV on-demand, YouTube, digital channels, social media along with toilet door posters in bars/restaurants. Post campaign research showed a small increase in awareness and campaign recall. **Seasonal campaign:** During December 2025, we delivered a campaign to remind customers to dispose of festive cooking fats, oils and leftover foods in the bin to avoid FOG blockages.	We are working to better understand how our communications activity is influencing a reduction in pollution incidents.	Customer behaviour of flushing wet wipes and period products and disposing of cooking fats, oils and grease into the sewer network.	As blockages are one of the main causes of pollution incidents, with 45%* linked to what customers flush and pour down toilets/drains, we monitor where blockages occur across our network. Our DWMP will build on this by analysing past hotspots and other relevant data to predict future risks. This will help us target the most effective actions, including improving customer understanding of 'what not to flush/pour'. *Based on the whole asset base	We have delivered the agreed scope

Foul Sewers, Combined Sewer Overflows and Surface Water Sewers and Associated Outfalls

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Foul Sewers, Combined Sewer Overflows and Surface Water Sewers and Associated Outfalls	Awareness and engagement campaigns – Food Service Establishments	Food Service Establishments (FSEs) will be better informed about pollution incidents and how to prevent them by following best practice for grease management and prevent cooking fats, oil and grease from entering the sewer network.	During 2025, we have continued working with FSEs to help them manage cooking fats, oils and grease responsibly. Through our partnership with ECAS (a company that specialises in managing environmental compliance), we supported businesses by visiting sites after incidents and carrying out proactive checks as part of targeted awareness campaigns in blockage hotspot areas. These visits helped businesses choose the right grease-removal equipment, use it correctly and keep it well maintained. Over the year, we visited 1,142 sites and supported the installation of 323 pieces of grease-removal equipment. This prevented an estimated 2,042 tonnes of fats, oils and grease from entering the sewer network. By reducing avoidable blockages and related call-outs, this work also delivered an operational saving of £1.831m.	We are working to better understand how our actions are influencing a reduction in pollution incidents.	FSE disposal of cooking fats, oils and grease into the sewer network.	Blockages are one of the main drivers of pollution incidents. We monitor where blockages occur across our network, and our DWMP will build on this by analysing past hotspots and other relevant data to predict future risks. This will help us target the most effective actions, including improving FSEs understanding of 'what not to flush or pour'.	We have delivered the agreed scope

Foul Sewers and Combined Sewer Overflows

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Foul Sewers and Combined Sewer Overflows	Dynamic Network Management Linear Programme	We are continuing our programme to cut pollution incidents by installing monitors at locations we know carry a higher pollution risk.	Our three-point plan brings together strategic insight and local intelligence to target the highest-risk areas: • Top-down strategic analysis to pinpoint where pollution risks are greatest. • Rapid action after new incidents, including installing new monitors to prevent repeat issues. • Local intelligence from county teams to highlight emerging risks on the network. We have also completed analysis to identify dual manholes located within 50 metres of a watercourse. This work will guide a programme to survey these sites, proactively clear blockages, and install new monitors where needed. The programme of work started in January 2026.	30 incidents prevented	Blockages, sewer misuse, deterioration of asset	Enhanced monitoring of linear assets will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	We have delivered the agreed scope
Foul Sewer and Combined Sewer Overflows	Network Cleansing Programme	We are proactively cleaning our wastewater sewer network so we can remove blockages before they cause problems for customers or the environment.	During 2025, we successfully inspected and cleansed 442 km of sewers across our network as part of our serviceability programme. We focus this work where it is needed most – areas with previous pollution incidents or near misses – so we can prevent problems before they affect customers or the environment. We invested around £6m in 2025, and the progress we have made this year will form the foundation for even more improvement throughout the rest of AMP8.	20 incidents prevented	Blockages, sewer misuse, deterioration of asset	Sewer cleansing will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	We have delivered the agreed scope

Water Distribution Network

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Water Distribution Network	Water main rehabilitation programme	We will be replacing and upgrading our highest-risk water mains.	Mains renewal (also known as mains rehabilitation/replacement) is a vital part of our strategy for improving the performance and resilience of our water network during AMP8 and beyond, helping us deliver: • Lower leakage • Fewer burst mains and faster repairs • Fewer water supply interruptions • Improved water quality To ensure progress, we have a Price Control Deliverable (PCD) requiring us to deliver at least 863 km of mains renewal during AMP8, with annual targets set for each year of the period. Each county has developed its own priority list of water mains for renewal – using risk modelling, operational insight, and known areas of poor condition – to ensure investment is focused where it brings the greatest benefit. In 2025, we delivered around 50 km of mains renewal, representing approximately £12m of investment. Once these schemes are fully delivered, we expect them to reduce burst-main repair jobs by around 282 per year, improving network reliability for customers.	We are working to better understand how our actions are helping to reduce pollution incidents.	Asset deterioration and asset defects.	N/A – the DWMP is our long-term strategic plan for managing wastewater and drainage. This particular element sits outside the scope of the plan	Actions ongoing
Water Distribution Network	Water main pressure reduction programme	We are reviewing pressures across our water network to help reduce the risk of bursts and leaks.	We have created a new function specifically focusing on water pressure strategy. This team reports into the Water Demand Director and has the remit to optimise the pressures in the water network to support: • Protection of water resources • Leakage reduction • Repairs to burst mains (mains repairs) improvements • Water supply interruptions improvements As part of this work, we are delivering advanced remote-control capability to manage pressures in line with the strategy, balancing operational requirements with positive customer experience. In 2025 we have seen success in this area with average water network pressures currently at a historic low and 61% of the remote-control units have been installed and optimised.	We are working to better understand how our actions are helping to reduce pollution incidents.	Asset deterioration and asset defects.	N/A – the DWMP is our long-term strategic plan for managing wastewater and drainage. This particular element sits outside the scope of the plan.	We have delivered the agreed scope

Whole Asset Base

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Whole Asset Base	External expert water quality assessments	For pollution incidents that may be serious, we bring in external specialists to help us investigate. Their expertise ensures we understand the true environmental impact so we can respond in the right way.	When we come across an incident where the severity is not clear, we bring in our agreed water-quality partners; Adler and Allen, APEM or Ricardo, to carry out specialist sampling.\n\nIn 2025, we used this support 15 times. The decision to deploy them is made after our internal triage and review process.	N/A – this measure helps us categorise incidents accurately and make sure we take the right action to reduce any environmental impact. It does not play a role in pollution prevention.	Any root cause that can negatively impact a pollution to watercourse.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.\n\nThis particular element sits outside the scope of the plan,	Actions ongoing
Whole Asset Base	Mitigation kits	We will roll out mitigation kits across all county hubs to support faster, more effective responses and minimise the impact of any pollution.	Mitigation vehicles and equipment are held by our operational teams and deployed whenever possible to help prevent or reduce the impact of pollution incidents. In 2025, we invested a further £40,000 in 500 spillage-prevention kits, which include inflatable absorbent flood barriers and magnetic drain covers designed to contain sewage, prevent its spread, and stop it reaching water courses. Together with the equipment purchased in previous years, these kits give our operational teams the tools they need to respond quickly, proactively, and effectively to mitigate pollution incidents.	The kit has been used in the prevention of 10 incidents.	An enabler that helps us tackle all immediate root causes.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	We have delivered the agreed scope
Whole Asset Base	Zero repeat pollution incidents	When a pollution incident happens, we act quickly to investigate the cause and put measures in place to prevent it from happening again in the same place.	Each pollution incident is reviewed, and if it is identified as a repeat incident at the same site or asset, it undergoes a detailed investigation. The county team then produces an Action Plan to address the root cause and ensure the solution removes the risk of further incidents. In 2025, we identified 75 repeat incidents and produced Action Plans for 74. One is under review for an action plan to be produced. Where appropriate, these plans are shared with the Environment Agency, and all plans are monitored internally to track progress and ensure actions are completed within agreed timescales.	N/A – we saw a 31% improvement in repeat incidents between 2024 (109 repeats) and 2025 (75 repeats). Although this can not be proven as a direct result of this initiative, the intervention has been an enabler.	An enabler that helps us tackle all immediate root causes.	Our DWMP will support the ambition of zero repeat pollution incidents, undertaking an assessment of historical and future pollution performance in order to identify priority locations for investment.\n\nDue to the timescales to develop the DWMP, the findings from these assessments will be available in future PIRP reports.	We have delivered the agreed scope

Whole Asset Base

Asset type	Measure	Description of actions	Scale of actions	Impact of measures (category 1–3 incidents prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Delivery status of the measure
Whole Asset Base	Data Literacy Academy training	We partnered with the Data Literacy Academy to give our teams practical training that builds confidence with data. This helps our people make faster, smarter interventions and processes.	We invested £165,000 in a programme to build the data skills of key colleagues, giving them the confidence to understand, analyse and turn information into meaningful action that improves our pollution performance. Around 150 people are taking part in the training, split into two cohorts. Each group completes 16 hours of live learning, supported by four post-module assessments and self-serve learning materials to help them apply their new skills in day-to-day work.	N/A – this measure supports accuracy of incident root cause analysis and overall reporting and ensure we take appropriate action to limit environmental impact. It does not support pollution prevention.	Gaps in data literacy skills enabling successful translation of data to action.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	We have delivered the agreed scope
Whole Asset Base	Wastewater role-specific pollution training for all Ww assets/Water pollution training for all Water assets	**Wastewater:** We give people training that is tailored to their role, so they know exactly how to prevent pollution, spot issues early, respond quickly, and report or investigate incidents when they happen. **Water:** We have introduced new pollution training for our water operations teams to help them understand their role in protecting the environment; covering pollution prevention, early detection, rapid response, investigation, and reporting.	Mandatory training will be completed by specific role-based employees to help upskill our front-line teams through tailored learning, including e-learning, classroom sessions and on the job training.	N/A – we use this measure to build a clearer understanding of what's happening on our sites so we can spot issues early and understand their causes. This helps us take the right action quickly, reduce environmental impact, and prevent pollution by reducing the risk of human error.	Human error and misunderstanding of the cause and what action is required.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element sits outside the scope of the plan.	We have delivered the agreed scope

Progress against our 2025 action plan

Throughout 2025, we delivered a wide range of improvements across our treatment works, pumping stations, sewers, and customer-facing services.

This included major power-resilience upgrades at sites most at risk of failure, large-scale investigations into misconnections, extensive public education campaigns, improvements to preventative maintenance, surveys at high-risk pumping stations, enhanced digital monitoring, and proactive sewer cleansing. Alongside this operational work, we strengthened our capability by expanding training, building data-literacy skills, and improving how we diagnose and mitigate issues. We also committed to annual updates, independent third-party auditing, and full alignment with the upcoming Drainage and Wastewater Management Plan (DWMP).
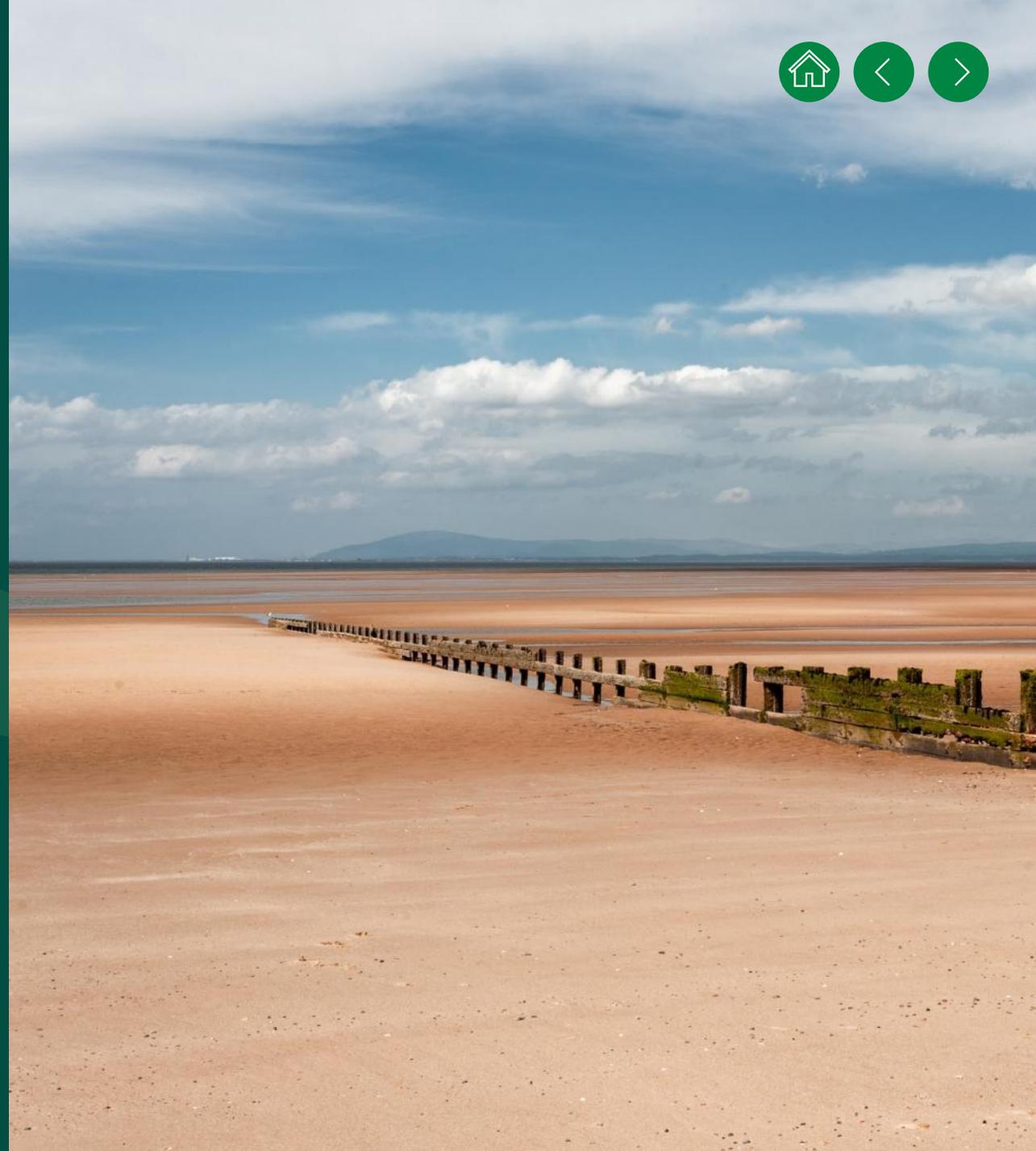
Overall, the 2025 programme delivered measurable progress in preventing pollution and increasing the resilience of our network. Upgrades to power resilience, rectifying misconnections, better FOG management, customer campaigns, and proactive asset maintenance all helped reduce operational risks and prevent incidents before they occurred. We also invested in new data tools, training, and external expertise to improve how we identify the root causes of incidents and respond more effectively. Many of these initiatives will continue into 2026 and beyond, particularly where long-term benefits depend on multi-year improvements or evolving data insights. The 2026 plan sets the foundation for meeting longer-term pollution-reduction targets and building a more reliable and environmentally responsible wastewater and water network.

SECTION 3:
Planned additional measures

In this section we set out our plans for each asset type that we have additional measures for. This includes details for new measures and for those identified in previous PIRPs that are still being implemented or that have outstanding actions.

SECTION 3: Planned additional measures

In this section we set out our planned pollution reduction actions, broken down by asset type. Each section provides an overview of the asset type and a summary of the risks from that asset type. We provide a root cause analysis exploring the reasons that asset can create a pollution incident. This analysis includes a sunburst diagram which shows the root causes and immediate causes for each asset failure. We have also set out the measure that we are planning to take to resolve or reduce the numbers of pollution incidents by asset type.

For ease of reference a summary of these actions can be seen in the table below. Some of these will be fully delivered in 2026, and others will continue to deliver until the final delivery date, (progress on these will be reported in the PIRP each year), delivery dates can be found in the detailed descriptions later in this section. Consequently, it should be noted that not all the benefits associated with actions that span multiple years will materialise in 2026.

Asset type/Measure	Air value maintenance	Customer engagement	Dual manhole surveys and upgrades	Enhanced incident response	Enhanced proactive wet well cleaning programme	Implementation of proactive cleaning and maintenance	Improve root cause analysis techniques	Management of clean water discharges	Manual analysis of telemetry data	Power resilience improvements	Pressure calming	Remedial capital asset improvements	Scour valve management	Screens maintenance	Smart valve installation	Staff training (asset type specific)	Telemetry installation	Use of predictive analytics	Enhanced asset health intelligence	Enhanced maintenance capability	Enhanced pollution risk assessment	Enhanced stormwater storage capacity	Inlet works blockage prevention	Pump optimisation programme	Reduce drainage misconnections	Storm tank operability	Targeted asset class maintenance
Foul Sewers		✓																	✓								
Combined Sewer Overflows		✓	✓	✓		✓						✓					✓		✓		✓						
Rising Mains	✓								✓																		
Wastewater Pumping Stations					✓					✓		✓							✓	✓				✓			✓
Wastewater Treatment Works inc. Storm Tanks				✓		✓				✓		✓		✓					✓	✓			✓	✓		✓	✓
Surface Water Sewers and Associated Outfalls		✓																							✓		
Storm Tanks						✓																				✓	
Water Distribution Network	✓								✓		✓	✓			✓	✓		✓	✓								
Water Treatment Works				✓		✓	✓	✓		✓		✓		✓		✓	✓	✓	✓		✓						✓
Whole Asset Base				✓			✓											✓	✓								

Column group heading (columns 19–27): **United Utilities' bespoke measures**

Foul Sewers

OVERVIEW

Our sewer network stretches more than 78,000 kilometres, carrying wastewater to our treatment works. Foul sewers play a vital role in safely carrying wastewater to our treatment works. We continue to invest in monitoring, maintaining and upgrading this vital infrastructure so we can provide a reliable service, reduce environmental impacts and better manage the increasing pressures from climate-related rainfall.

RISKS

Foul sewers pose pollution risks when they block or overload. These risks can be amplified by sewer misuse (wet wipes, FOG etc), ageing infrastructure, combined sewer systems, climate change (flooding and inundation) and urban density. Proactive maintenance, monitoring and enhancement are essential for us in mitigating these risks and we are working hard to improve the visibility, insight and intelligence we must ensure we avoid environmental impact as much as possible.

Other risks and impacts we face include misconnections to foul sewers where surface water or industrial flows have been inadvertently connected to our sewers and pose greater risk, especially during rainfall. Misconnections are common in urban areas and legacy developments and, although we proactively carry out inspections and correction programmes, many incidents are caused by a third-party misconnection.

ROOT CAUSE ANALYSIS

Most of the pollution incidents in our foul sewers are caused by sewer misuse, soft blockage and tree roots. By analysing the root cause of this we can understand and develop a suite of measures to help us address what is driving the issue. This analysis can be seen in the sunburst diagram on the following page.

Whilst we are addressing blockage removal through focused programmes of work, (proactively using monitors to find and clearly before any impact can be seen), we also need to address the root causes. Clearly addressing sewer misuse is key for this. Fats, oils and greases (FOG) poured down kitchen drains are a major cause of blockages, especially from Food Service Establishments (FSEs). Also, when customers flush anything other than the 3Ps – Pee, Poo and (toilet) Paper – into the sewers, this creates problems because the system is not designed to handle products such as wet wipes and period products which together with FOG can build up and form fatbergs.

ACTIONS

We now have around 23,000 monitors installed across our sewer network and pumping stations. These give us real-time insight so we can spot issues early, respond faster and prevent more incidents. We are continuing to improve how we use existing monitors to deliver interventions and to help influence behaviours, and we are committed to installing even more monitors in AMP8 to strengthen our data, intelligence and decision-making. This work is supported by the actions outlined below (and on the table on the next page), which will seek to address the root cause of pollution incidents from foul sewers.
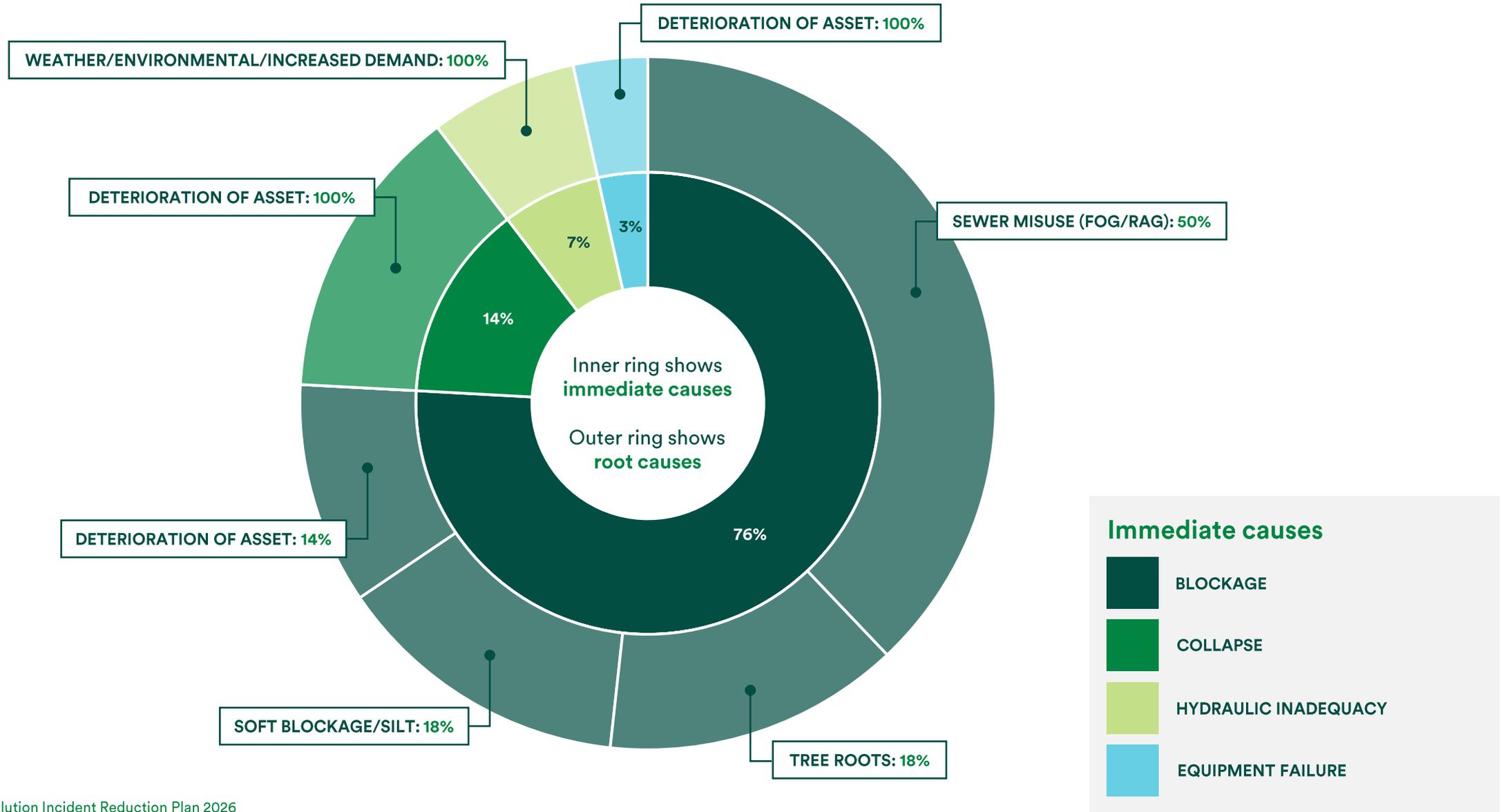
Our cleansing programme combines proactive maintenance with alert driven activity. We have introduced site click maintenance to identify assets that need attention, helping us plan ahead and direct resources to the right places based on risk and priority. We also deliver a programme of planned works, including major capital and civils upgrades, to keep the network resilient for the future.

Customer awareness and engagement campaigns enable us to educate customers how simple everyday actions can help to reduce the risk of pollution incidents. By encouraging customers to make small changes to their 'flushing/pouring' habits, we can reduce blockages and better protect the environment.

We work closely with housing developers to make sure new and existing sewers are used correctly as foul only systems. This reduces the risk of contamination and pollution now, and in years to come.

Foul Sewers

DETERIORATION OF ASSET: 100%

WEATHER/ENVIRONMENTAL/INCREASED DEMAND: 100%

DETERIORATION OF ASSET: 100%

SEWER MISUSE (FOG/RAG): 50%

14%

7%

3%

Inner ring shows **immediate causes**

Outer ring shows **root causes**

DETERIORATION OF ASSET: 14%

76%

SOFT BLOCKAGE/SILT: 18%

TREE ROOTS: 18%

Immediate causes

BLOCKAGE

COLLAPSE

HYDRAULIC INADEQUACY

EQUIPMENT FAILURE

Foul Sewers

The table below summarises the key projects within our PIRP across our foul sewer estate, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Foul Sewers	Bespoke Measure: Enhanced asset health intelligence	Use of Sewerball to identify points of infiltration into the combined or foul sewer network.	Infiltration increases hydraulic load, treatment cost, and environmental risk.\n\nThe Operational Intelligence (OI) team are trialling Sewerball to understand if there is a scalable, data-driven and low-cost way to identify points of ingress and infiltration within the Wastewater Network. Sewerball is a tennis-ball sized, autonomous sensor device developed to float through wastewater pipes, detecting issues like blockages (silt), and structural leaks up to three times faster than traditional methods. It monitors pH, temperature, and flows, often using 360-degree cameras for inspections. This technology is to be used to identify infiltration on our sewer network faster than conventional CCTV where this infiltration will have an impact on drain down times/number of spills.	Enabler	Asset defect, deterioration of asset and blockages.	Groundwater infiltration is a key performance indicator that is included within the DWMP to understand future risk. Inflow and infiltration will be one of a suite options considered within our DWMP options toolkit to support us in achieving long-term targets.	January 2026	June 2026
Foul Sewers	Customer engagement	Initiatives to raise awareness of 'what not to flush/pour' to influence customer behaviour to reduce blockages, sewer flooding and pollution incidents caused by wet wipes, period products, cooking fats, oils and grease.	We plan to deliver a series of targeted, hyper-local hotspot campaigns; launch a new campaign to support the government's 'Simpler Recycling' campaign to encourage household customers to dispose of leftover food waste, including cooking fats, oils and grease, in kitchen caddies; and we also plan to launch of a new campaign, targeting parents and carers to encourage the disposal of baby/toilet training wipes in the bin.	Low	Customer behaviour of flushing wet wipes and period products and disposing of cooking fats, oils and grease into the sewer network.	Blockages are the main driver of pollution incidents, and over 38% are linked to customer behaviour. We monitor where blockages occur across our network, and our DWMP will build on this by analysing past hotspots and other relevant data to predict the likely future number and impact of blockages in an area. This will help us target the most effective actions, including improving customer understanding of 'what not to flush or pour'.	January 2026	March 2027

Combined Sewer Overflows

OVERVIEW

Our combined sewer network carries both wastewater and surface water runoff from rain in the same pipe system. All of this mixed flow is normally sent through the sewer network to a wastewater treatment works before being discharged into rivers or the sea.

While this system transports domestic and commercial sewage during dry weather, heavy rainfall can significantly increase water volumes in wet weather. This creates a risk of exceeding design capacity, which may lead to pollution incidents, where spills occur that are not in line with storm overflow permits.

Some of our other investments which are providing more stormwater storage as part of our AMP8 programme, will also have ancillary benefits for pollution reduction. By building new storm tanks and enlarging existing ones, we can temporarily hold more excess water during rainfall and significantly cut the number of storm discharges into rivers. Increased storage on the network reduces the 'time to consequence' when things go wrong and gives us more time to respond and prevent more pollution incidents. Likewise, removing surface water reduces demand on the network with potential benefits for pollution incident risks.

To prevent sewer flooding or backups, our combined sewer overflows (CSOs) discharge a diluted mix of rainwater and wastewater into rivers and coastal waters when necessary. These CSOs are closely monitored and tightly regulated, and reducing their impact is a key priority for us.

RISKS

Across our region, around 54% of our sewer network is made up of combined sewers – much higher than the England and Wales average of 33%. This is because many of our sewers were originally built during the Victorian-era infrastructure when most sewers were originally built as combined.

Our region also experiences higher than average rainfall, which means more surface water enters the network.

Because combined sewers carry both wastewater and rainwater in the same pipes, they are more likely to become overloaded or blocked. Most blockages happen when products that should not enter the sewer such as wet wipes, cooking fats, oils, and greases build up and restrict the flow.

ROOT CAUSE ANALYSIS

The majority of our combined sewer pollution incidents are caused by blockages and foreign debris (such as wet wipes, plastics and other products that should not be flushed or littered), as well as hydraulic overload of infrastructure struggling with the demands of a changing climate. We have assessed the root causes and immediate reasons for pollution incidents caused by CSOs, and we have presented it in the sunburst diagram on the following page. We understand the challenges across our sewer network and have a focused plan in place to improve our performance.
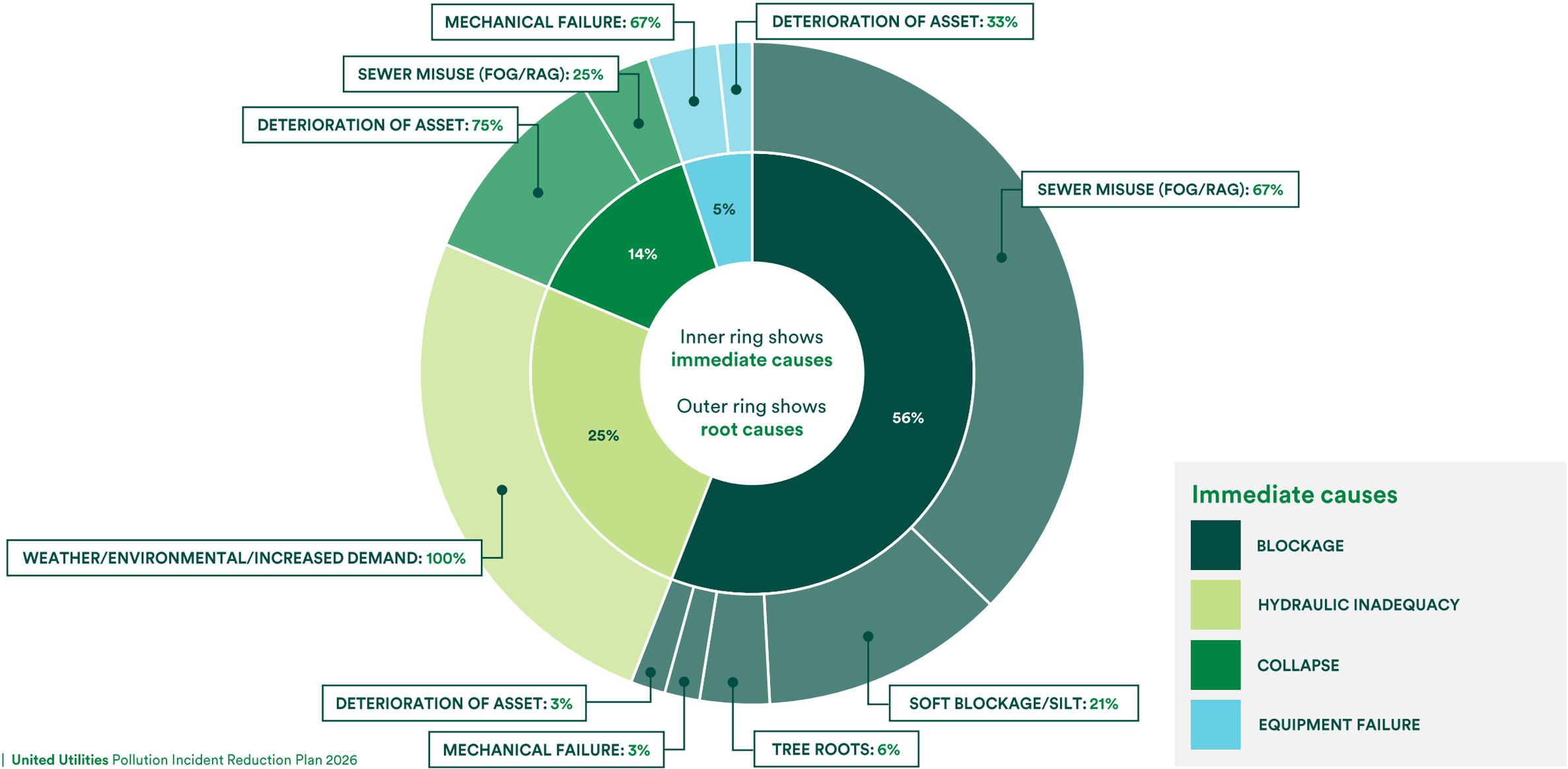
ACTIONS

As part of this plan, we'll continue running customer awareness campaigns that highlight what should and shouldn't be flushed. We are also working closely with developers to make sure building materials are disposed of properly and don't end up in our sewers. We are implementing a programme to reduce ground water infiltration and surface water inflow. This work is supported by the actions outlined below (and on the table on the next pages), which will seek to address the root cause of pollution incidents from combined sewers and associated outfalls

- Reduce storm overflow spills by cleaning, repairing, and upgrading our sewer network.
- Improve the accuracy, speed, and coverage of our real-time monitoring and improving our telemetry on our highest risk assets.
- Use Artificial Intelligence to spot problems in the sewer network early so we can fix them faster.

Combined Sewer Overflows

Inner ring shows **immediate causes**

Outer ring shows **root causes**

MECHANICAL FAILURE: 67%

DETERIORATION OF ASSET: 33%

SEWER MISUSE (FOG/RAG): 25%

DETERIORATION OF ASSET: 75%

SEWER MISUSE (FOG/RAG): 67%

5%

14%

56%

25%

WEATHER/ENVIRONMENTAL/INCREASED DEMAND: 100%

DETERIORATION OF ASSET: 3%

MECHANICAL FAILURE: 3%

TREE ROOTS: 6%

SOFT BLOCKAGE/SILT: 21%

Immediate causes

- BLOCKAGE
- HYDRAULIC INADEQUACY
- COLLAPSE
- EQUIPMENT FAILURE

Combined Sewer Overflows

The table below summarises the key projects within our PIRP across our combined sewer estate, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Combined Sewer Overflows	Implementation of proactive cleaning and maintenance	This programme focuses on clearing silt and debris from our inverted syphons so they can carry wastewater efficiently. By restoring the full capacity of these pipes, we reduce the risk of flooding and pollution in the network.	Undertaking cleaning works at five trial sites this calendar year.	Low	Soft blockages/silt.	The DWMP covers all types of sewer, including syphons and pipe bridges. Operational and maintenance activities, such as removing silt and debris, will be included within the suite of options considered within our options toolkit, to support us in achieving our long-term pollution targets.	December 2025	March 2029
Combined Sewer Overflows	Remedial capital asset improvements	A programme to remediate sewer network defects and reduce groundwater infiltration and surface water inflow.	Undertaking remedials work across 30+ networks to reduce infiltration in the network.	Medium	Deterioration of asset.	Groundwater infiltration is a key performance indicator that is included within the DWMP to understand future risk. Inflow and infiltration will be one of a suite options considered within our DWMP options toolkit to support us in achieving long-term targets.	July 2024	March 2030
Combined Sewer Overflows	Enhanced incident response	Implementation of equipment, resources and processes to mitigate the impact of pollution in response to early warning data.	We immediately review every pollution incident and use the findings to install telemetry and apply predictive analytics, helping to prevent future incidents.	Enabler	Blockages/silt, deterioration of asset and asset failure.	Our DWMP will include an assessment of the future resilience of our non-infrastructure assets to utility failure, such as communications/telemetry outages, and identify options to improve resilience across the 4Rs: resistance, reliability, redundancy and response and recovery. Enhanced monitoring will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026

Combined Sewer Overflows

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Combined Sewer Overflows	Dual manhole surveys and upgrades	Assessing and upgrading assets to ensure that foul and surface water separation is adequate, to reduce the risk of foul overflow into storm drainage.	Where a dual manhole carries both foul and surface water flows, the risk of cross connection increases. Misconnections can lead to: • Wastewater entering surface water systems, causing contamination of streams and rivers • Surface water entering foul sewers, which can overload treatment works and increase overflow events When flows mix or the separation within a chamber is compromised, blockages from sediment, debris, or roots can cause sewage to back up or overflow, polluting land and water. Operational Intelligence identified 2,515 potential dual manhole locations and are now confirming chamber separation, checking connections to nearby watercourses, and installing monitoring or carrying out civil engineering interventions where needed.	Low	Blockages/silt and sewer misuse.	Enhanced monitoring will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	June 2026
Combined Sewer Overflows	Bespoke measure: Enhanced pollution risk assessment	Assessing the pollution risk of manholes within 50m of a watercourse and implementing predictive/proactive measures to reduce the risk of failure or minimise the impact.	Manholes located close to rivers, becks, drains, and other watercourses play an important role in protecting the environment. When these assets are affected, they can create a direct route for pollution to enter nearby waterways. This can happen if: • Hydraulic overload causes a surcharge or spill • Structural failures – such as collapsed chambers, cracked covers, or missing lids – allow foul wastewater to escape • Blockages force overflows at nearby low-level manholes Using spatial data, Operational Intelligence has identified around 110,000 manholes within 50 metres of a watercourse. We are now using risk-based frameworks to prioritise telemetry installation, helping us to manage these assets proactively and reduce pollution risk.	High	Blockages/silt, sewer misuse and weather/increased demand.	Enhanced monitoring will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026

Combined Sewer Overflows

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Combined Sewer Overflows	Implementation of proactive cleaning and maintenance.	Regular proactive cleaning, inspection and maintenance programme for the asset type to reduce blockages or failure.	Proactive cleansing helps remove debris, fats, oils and grease (FOG), rags, and sediment before they can cause blockages. For United Utilities, VAPAR AI (an AI-powered cloud platform designed to automate the inspection of water, wastewater and stormwater pipes) also supports this work by automatically identifying defects in CCTV footage, giving our teams a richer and more consistent view of sewer condition. Together, proactive cleansing and VAPAR AI play a key role in reducing pollution risk. They improve visibility of the network, lower the chance of sewer collapses and blockages, and help keep assets clean and functioning reliably. Cleaner, well-maintained sewers are far less likely to fail unexpectedly. Each year, we survey around 637 km of sewer and inspect approximately 11,000 assets to support this proactive approach.	Low	Blockages/silt, deterioration of asset and asset failure.	This is one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026
Combined Sewer Overflows	Telemetry installation	Use of in Sewer pH and temperature monitors to provide early detection of industrial discharge events and insight into infiltration, inflow and groundwater impact.	Monitoring these two parameters gives wastewater teams early visibility of network conditions, allowing proactive intervention rather than reacting to failures, pollution, or compliance breaches Unexpected shifts in pH or temperature often signal illegal or accidental industrial discharges; chemical spills; or dumping of fats, oils, chemicals, or detergents – allowing for early detection of Industrial Discharge Events at the network level and tracing the source through upstream/downstream sensor comparisons, preventing them reaching the treatment works or impacting the environment at damaging concentrations. Abnormal pH or temperature changes often precede Combined Sewer Overflow (CSO) events, rising main failures, asset malfunctions, blockage development. Proactive alarms can help prevent pollution incidents. Temperature data is a powerful indicator of groundwater infiltration (cooler temperatures), stormwater inflow, surface water entry during rainfall events. Similarly, pH shifts can indicate soil/leachate interaction or corrosion-related issues. Supporting sewer rehabilitation, evidence let capital planning and reduces unnecessary pumping and treatment of dilute flow.	Medium	Asset defect, deterioration of asset and blockages/silt.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	January 2026	December 2026

Combined Sewer Overflows

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Combined Sewer Overflows	Bespoke measure: Enhanced asset health intelligence	Use of Sewerball to identify points of infiltration into the combined or foul sewer network.	Infiltration increases hydraulic load, treatment cost, and environmental risk The Operational Intelligence (OI) team are trialling Sewerball to understand if there is a scalable, data-driven and low-cost way to identify points of ingress and infiltration within the Wastewater Network. Sewerball is a tennis-ball sized, autonomous sensor device developed to float through wastewater pipes, detecting issues like blockages (silt), and structural leaks up to three times faster than traditional methods. It monitors pH, temperature, and flows, often using 360-degree cameras for inspections. This technology is to be used to identify infiltration on our sewer network faster than conventional CCTV where this infiltration will have an impact on drain down times/number of spills.	Enabler	Asset defect, deterioration of asset and blockages/silt.	Groundwater infiltration is a key performance indicator that is included within the DWMP to understand future risk. Inflow and infiltration will be one of a suite options considered within our DWMP options toolkit to support us in achieving long-term targets.	January 2026	June 2026
Combined Sewer Overflows	Enhanced incident response	Pollution Incident Management System.	Trial – AI integration of systems for improved incident management.	Low	Human error and mis-diagnosis of cause and action required.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	January 2023	December 2026
Combined Sewer Overflows	Customer engagement	Initiatives to raise awareness of 'what not to flush/pour' to influence customer behaviour to reduce blockages, sewer flooding and pollution incidents caused by wet wipes, period products, cooking fats, oils and grease.	We plan to deliver a series of targeted, hyper-local hotspot campaigns; launch a new campaign to support the government's 'Simpler Recycling' campaign to encourage household customers to dispose of leftover food waste, including cooking fats, oils and grease, in kitchen caddies; and we also plan to launch of a new campaign, targeting parents and carers to encourage the disposal of baby/toilet training wipes in the bin.	Low	Customer behaviour of flushing wet wipes and period products and disposing of cooking fats, oils and grease into the sewer network.	Blockages are the main driver of pollution incidents, and 45% are linked to customer behaviour. We monitor where blockages occur across our network, and our DWMP will build on this by analysing past hotspots and other relevant data to predict the likely future number and impact of blockages in an area. This will help us target the most effective actions, including improving customer understanding of 'what not to flush or pour'.	January 2026	March 2027

Rising Mains

OVERVIEW

Rising mains are pressurised pipes that help move water or wastewater uphill when gravity can't do the job. They are an asset type that is used in both drinking water supply and wastewater collection networks.

In our wastewater system, rising mains play an essential role. We use pumping stations to push wastewater uphill across the varied terrain in our region, keeping it moving safely through the network. We operate around 1,190 km of rising mains, and like most of our sewer network they sit underground, out of sight. We closely monitor their performance via telemetry and flow and pump data to identify issues as early as possible and to keep the network running reliably.

RISKS

Our rising mains can be a point of failure in our network and do present some risk to our day-to-day operations. As they operate under high pressure and transport large volumes of wastewater. If a rising main becomes blocked or fails, it can burst and lead to pollution. This is why regular maintenance is essential to protect the environment, reduce flooding risk, and avoid service interruptions.

Pressure inside a rising main is constantly changing as pumps switch on and off. Over time, this repeated pressurising and depressurising can weaken the pipe and increase the chance of bursts.

ROOT CAUSE ANALYSIS

Our data and investigations show the pollution incidents in our rising mains are primarily driven by asset failure under pressure. Commonly pipe failure results from structural defects such as corrosion, joint or pipe wall failure and fatigue – all made worse by pressure surges. When a rising main fails, it can burst suddenly and release large volumes of wastewater in a short period of time.

These risks increase as assets age and because underground rising mains are difficult to inspect and monitor routinely. In many cases, defects are only discovered after a failure has already happened. Other factors such as pump failures, power outages, or extreme weather that increases pressure in the system can add to the risk. Together, these challenges mean rising main pollution incidents are often sudden, high impact events driven by the combination of pressurised operation, asset condition, and limited opportunities for monitoring.
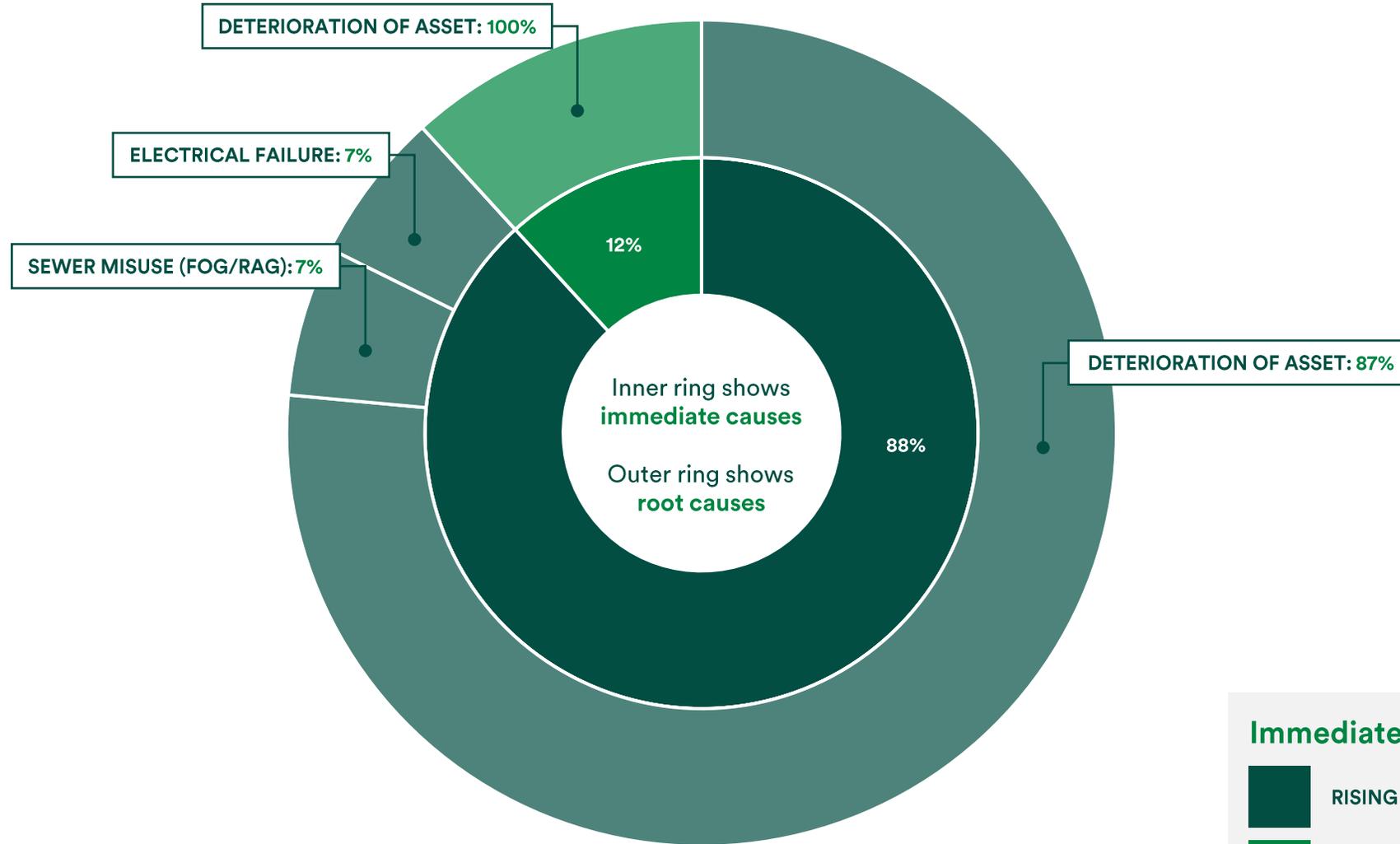
ACTIONS

Our key actions to address root causes of pollution caused by rising mains are set out below and on the table next page. Actions will focus on further understanding condition, so that timely and appropriate interventions can be made and controlling internal conditions.

- We are trialling monitors from two suppliers (Atmos and Syrinix) and will add a third supplier, Technolog, in February 2026. We are testing a range of devices across different rising mains to understand their capability and identify the right solution for our needs. We currently have monitoring installed on 11 pipelines, and the results will inform our AMP8 plan.

- We use variable speed drives to reduce pressure surges by adjusting pump speed gradually rather than switching pumps on and off. This helps protect pipes and reduces stress on the rising mains.

- We are maintaining or replacing air valves to better control pressure and reduce burst frequency

Rising Mains

DETERIORATION OF ASSET: 100%

ELECTRICAL FAILURE: 7%

SEWER MISUSE (FOG/RAG): 7%

12%

Inner ring shows **immediate causes**

Outer ring shows **root causes**

DETERIORATION OF ASSET: 87%

88%

Immediate causes

RISING MAIN BURST

WASTEWATER LEAK

Rising Mains

The table below summarises the key projects within our PIRP across our rising main estate, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Rising Mains	Pressure calming	Use of both of power and pressure data to manage assets to reduce pressure transients and variance.	Rising sewer mains have a high burst frequency due to their pressurised conditions and burst events can have the most severe impact on the environment. Fast moving pressure surges can occur in the network for many reasons like during pump start up and shut down or valves being closed too quickly. Using advanced monitoring tools such as the negative pressure wave (NPW) method, pump-vibration monitoring and flow-rate analysis to detect high-frequency pressure events as soon as they occur. Applying sensing technology to get valuable diagnostics before and after a pipeline failure, helping us reduce response times and resolve bursts before they escalate. Working with suppliers including Atmos, Syrinix and others to develop a comprehensive monitoring strategy that improves rising-main performance and reduces the risk of serious pollution across the network.	Enabler	Weather/increased demand, electrical failure and mechanical failure.	Enhanced monitoring of our assets will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026
Rising Mains	Air valve maintenance	Maintaining or replacing air valves to better control pressure and reduce burst frequency.	Air accumulates naturally at high points in rising mains. Without functioning air valves, air pockets can be produced that reduce the effective cross-section of the pipe, causing: • Sudden velocity changes and pressure shocks capable of catastrophic pipeline failures. • Restriction of flow, resulting in pump over-pressurisation and increased burst risk. Keeping our air valves in good working order helps stop air building up inside our pipes. This means the pressure stays steady, which greatly reduces the chance of pipes bursting – one of the main causes of wastewater pollution. We currently have approximately 1,000 air release valves which impacts 362 km of rising mains.	Low	Asset defect, deterioration of asset and mechanical failure.	Air valve maintenance will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026

Wastewater Pumping Stations

OVERVIEW

We operate a network of 2,794 wastewater pumping stations that play a vital role in keeping our sewer system moving. These stations step in where gravity can't do the job, lifting wastewater from lower areas into the main sewer network and on to our treatment works. This helps ensure wastewater is moved quickly and safely for processing before being returned to the environment. Our sites range from small local stations serving individual neighbourhoods to large, complex facilities that feed major trunk sewers.

To keep these assets performing reliably, we follow a proactive asset management strategy. This helps us reduce the risk of failures and overflows and supports our commitment to protecting the environment.

Over the past two years, we have seen an increase in incidents at these sites. Although performance began to improve slightly in 2025, we are stepping up our efforts to deliver further, sustained improvements. You'll find more detail on the actions we are taking in the following pages.

RISKS

- Mechanical and electrical failures at pumping stations can disrupt the flow of wastewater, creating a significant risk of pollution.

- When equipment breaks down, wastewater can back up and discharge through emergency overflows or manholes. Pump failures are a significant sub-set of our overall equipment failure root cause, and we have plans to at this.

- Blockages caused by fats, oils, grease and wipes can slow or stop pumps, increasing the likelihood of spills.

- Power outages, telemetry failures, and hydraulic overload during heavy rain present a risk of pollution incidents.

- Pressurised rising main bursts or leaks represent high-impact risks due to the potential for rapid and large wastewater releases.

ROOT CAUSE ANALYSIS

In 2025, our pollution incidents at wastewater pumping stations were driven by deteriorating assets, complex operational demands, and increasing pressure on our network.
Power failures were a major contributor. To tackle this, we have launched a new, dynamic power resilience programme that will run throughout AMP8. We are also focusing on reducing failures caused by our own infrastructure especially pump faults and wider equipment breakdowns, so we can improve reliability across the system and reduce the risk of pollution.
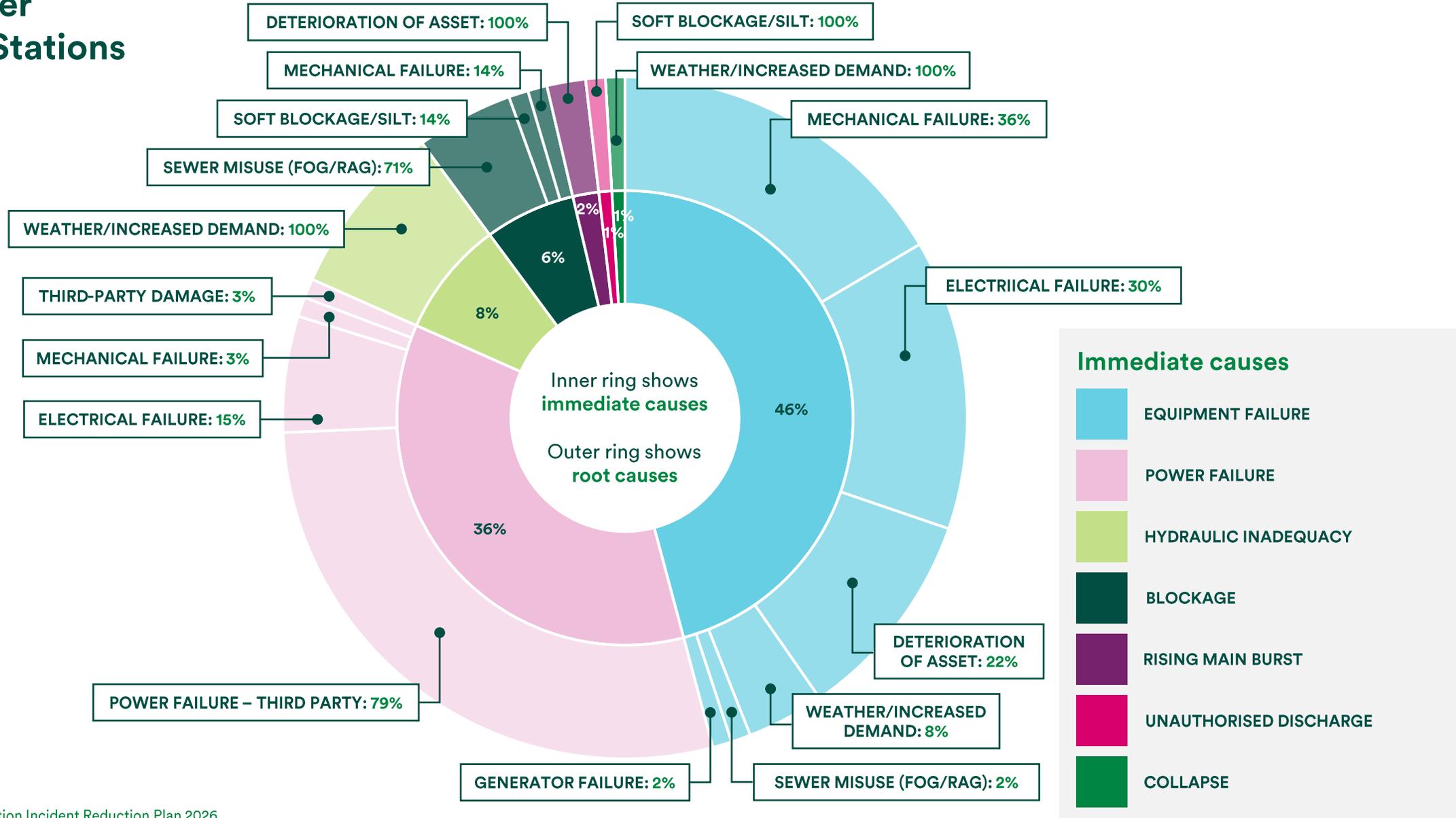
ACTIONS

Our key actions to address root causes of pollution caused by wastewater pumping station are set out below and on the tables on the next pages. Actions will focus on improving the condition on assets and further understanding condition, so that timely and appropriate interventions can be made.

- Rolling out our Power Resilience Programme to reduce the risk of power related failures at key sites.

- Strengthening our network to cope with heavy rainfall through extra storage, capacity upgrades and other improvements.

- Upgrading telemetry, monitoring and control systems at pumping stations so issues can be spotted and resolved more quickly.

- Delivering a proactive maintenance and renewal programme to keep our assets in reliable working order.

- Optimising pumping station performance through our Pump Optimisation Programme to improve efficiency and reduce the risk of pollution.

Wastewater Pumping Stations

Inner ring shows immediate causes

Outer ring shows root causes

DETERIORATION OF ASSET: 100%

SOFT BLOCKAGE/SILT: 100%

MECHANICAL FAILURE: 14%

WEATHER/INCREASED DEMAND: 100%

SOFT BLOCKAGE/SILT: 14%

MECHANICAL FAILURE: 36%

SEWER MISUSE (FOG/RAG): 71%

WEATHER/INCREASED DEMAND: 100%

ELECTRIICAL FAILURE: 30%

THIRD-PARTY DAMAGE: 3%

MECHANICAL FAILURE: 3%

ELECTRICAL FAILURE: 15%

DETERIORATION OF ASSET: 22%

WEATHER/INCREASED DEMAND: 8%

POWER FAILURE – THIRD PARTY: 79%

GENERATOR FAILURE: 2%

SEWER MISUSE (FOG/RAG): 2%

46%

36%

8%

6%

2%

1%

1%

Immediate causes

- EQUIPMENT FAILURE
- POWER FAILURE
- HYDRAULIC INADEQUACY
- BLOCKAGE
- RISING MAIN BURST
- UNAUTHORISED DISCHARGE
- COLLAPSE

Wastewater Pumping Stations

The table below summarises the key projects within our PIRP across our wastewater pumping station estate, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Pumping Stations	Power resilience improvements	Improve response to power outages and availability of backup technology to ensure asset continues to operate.	In 2026, we are carrying out remedial work at around 200 sites, C.60% pumping stations and C.40% wastewater treatment works) to reduce the risk of pollution caused by voltage drops in the electricity network (often called brownouts). As part of this work, at least 40 sites will receive new Battery Storage Systems to provide backup power when the mains supply dips. To move at pace, we are delivering temporary and permanent solutions sequentially. Temporary systems will be installed first to give immediate protection and then replaced with permanent equipment over the year. We are also assessing a further 59 sites for permanent Battery Energy Storage Systems (BESS) as part of our wider Climate Change Energy Resilience programme. We prioritise sites for intervention based on whether they have experienced a pollution incident (Category 1–4) in the past seven years linked to a Distribution Network Operator (DNO) power event whether that's a surge, dip, or full blackout. Sites that have suffered a voltage drop which caused equipment to slow down or fail will receive our core resilience package, with enhanced measures up to a platinum level installed at the sites most vulnerable to full power interruptions (see table below for further details). Current focus on power resilience using these standards:	High	Power failure third party, power failure UU, electrical failure and generator failure. These upgrades mean our equipment can keep operating through short power cuts and stay protected from electricity surges, helping us prevent disruptions and protect the environment.	We know that power failures contribute to around 20% of our pollution incidents, and we are taking comprehensive action to address this. As part of our DWMP, we are assessing how well our sites can cope with power outages and identifying improvements across the '4Rs': resistance, reliability, redundancy, and response and recovery, so our assets stay resilient in the future. Due to the timescales to develop the DWMP, the findings from these assessments will be available in future PIRP reports.	January 2026	March 2030

	Brown Out Relays	Surge Protection Device	Uninterrupted Power Supply	Generator Hook Up Point	Temporary Generator	Battery Energy Storage System (BESS)	Permanent Generator
PLATINUM	X	X	X	X		X	X
GOLD	X	X	X	X	X	X	
SILVER	X	X	X	X	X		
BRONZE	X	X	X	X			
STANDARD	X	X	X				

Wastewater Pumping Stations

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Pumping Stations	Bespoke measure: Pump optimisation programme	Pump replacement, panel modifications, power upgrades, refurbishment and reconfiguration of pumps to improve performance throughout the network.	This year, we'll be carrying out over 15 upgrades across our pumping stations and treatment works to strengthen performance and reduce the risk of pollution.	Medium	Asset defects, asset maintenance and mechanical failure.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	November 2025	December 2030
Wastewater Pumping Stations	Remedial capital asset improvements	A programme to remediate sewer network defects and reduce groundwater infiltration and surface water inflow.	We are carrying out remedial work across 30+ networks to reduce infiltration in the network.	Medium	Asset defects and asset maintenance.	Groundwater infiltration is a key performance indicator that is included within the DWMP to understand future risk. Inflow and infiltration will be one of a suite options considered within our DWMP options toolkit to support us in achieving long-term targets.	July 2024	March 2030
Wastewater Pumping Stations	Bespoke measure: Enhanced maintenance capability	Preventative Maintenance (PM) compliance improvements and PM yield launch (greater focus on increasing proactive maintenance rather than reactive).	We are strengthening how we maintain our equipment by rolling out performance improvement plans across the business. This includes raising awareness of planned maintenance (PM) yield (% of maintenance work that is preventative) , providing coaching for teams, and continuing to support frontline staff with specialist maintenance expertise. By increasing the amount of preventative and predictive maintenance we complete, we are fixing more issues before they turn into failures. This proactive approach is already delivering strong results. Key improvements so far include: • Preventative maintenance (PM) yield (% of maintenance work that is preventative) has increased by 5.23 percentage points over the last 12 months, rising from 2.25% to 7.48%. • The number of defects identified through PM has grown significantly – from 90 in January 2025 to more than 400 by November 2025. • Front-line predictive kit compliance has increased by 25%, helping teams identify issues earlier and maintain equipment more effectively.	High	Asset defects and asset maintenance.	Preventative maintenance will be a central part of our DWMP, supporting our drive to meet our long-term pollution-reduction ambitions.	April 2025	March 2030

Wastewater Pumping Stations

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Pumping Stations	Bespoke measure: Enhanced asset health intelligence	We are installing wireless vibration and motion-amplification technology on our most critical assets to spot issues earlier and keep equipment running reliably.	We have invested £350,000 to strengthen how we carry out health checks on our most critical assets. As part of this investment, we have: • Purchased 17 Sensoteq wireless remote monitoring kits along with 204 vibration sensors, giving us better real time insight into asset condition. • Added 3 Motion Amplification cameras and accessories to help us spot early signs of mechanical issues that can't be seen by the naked eye. • Trained our Precision Maintenance Engineers to use this new technology and deployed the equipment across the business so we can identify and fix problems sooner. • These upgrades improve our ability to detect faults early, reduce the risk of equipment failure, and keep our sites running reliably for customers and the environment.	Medium	Asset defects and asset failure.	Enhanced monitoring of our assets will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	April 2025	March 2030
Wastewater Pumping Stations	Remedial capital asset improvements	We have launched a defect elimination strategy within the business, complete with standardised reporting and benefits tracking.	We are carrying out Defect Elimination studies across the business and putting solutions in place to stop repeat issues. This work is supported by training and coaching for our in-house Maintenance Specialists, helping teams tackle problems at the root cause. So far, eight case studies have been completed, each with benefits tracking in place to make sure improvements are delivered and sustained.	Medium	Asset defect and deterioration of asset.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered	April 2025	March 2030
Wastewater Pumping Stations	Bespoke measure: Enhanced maintenance capability	We are reducing risk of assets going out of service.	Fully embed all 77 local stores via stocktakes/audits and rationalise the £12m worth of inventory we have out in operational local stores. Review all goods ordered by production area and amend stock as well as stock levels to cater for as much demand as we can.	Medium	Asset defect and deterioration of asset.	Maintenance excellence will be a central part of our DWMP, supporting our drive to meet our long-term pollution-reduction ambitions.	April 2025	March 2030
Wastewater Pumping Stations	Bespoke measure: Targeted asset class maintenance	We are improving maintenance for the assets that matter most, (those that are costly or critical) so we can boost reliability and deliver stronger business benefits.	The first asset we are focusing on is our screw pumps. These are now in the discovery phase, where we are reviewing how much they cost to maintain and how effectively they are currently managed. Using this insight, we will develop a new and more proactive way of maintaining screw pumps so they run more reliably.	Medium	Asset defect and deterioration of asset.	Maintenance improvements will be a central part of our DWMP, supporting our drive to meet our long-term pollution-reduction ambitions.	June 2026	March 2030

Wastewater Pumping Stations

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Pumping Stations	Bespoke measure: Enhanced maintenance capability	We are expanding our internal workshop so we can bring more refurbishment work in-house and repair equipment more efficiently.	We are developing a business case for a new workshop with greater capability, one that can handle a wider range of asset types, not just pumps, and has the capacity to complete more pump overhauls.	Medium	Asset defect and deterioration of asset.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered	January 2026	March 2030
Wastewater Pumping Stations	Bespoke measure: Pump optimisation programme	We are improving the performance and reliability of our pumped assets to support environmental compliance.	Wastewater pumping station optimisation involves improving the performance, efficiency, reliability, and lifecycle of pumping assets that move sewage or wastewater where gravity flow is not possible. By optimising our pumped assets our aim is to improve performance and reliability by preventing common issues such as poor pump selection, incorrect impeller choice, pump operation away from Best Efficiency Point (BEP), and ineffective control strategies. Extending asset life through correct design, installation, and proactive maintenance to reduce wear, breakdowns, and expensive reactive repairs, as well as supporting environmental compliance by reducing pollution, flood risk, and overflow event, which depend on reliable pump station function and effective operational control.	Medium	Asset defect and deterioration of asset.	Pumping station optimisation will be a central part of our DWMP, supporting our drive to meet our long-term pollution-reduction ambitions.	January 2026	December 2026
Wastewater Pumping Stations	Enhanced proactive wet well cleaning programme	Network pumping station and Last in Line blockage prevention.	We are fitting power monitors and de-raggers at all pumping stations with a pollution risk, helping us spot issues sooner and reduce the chance of blockages and spills.	Medium	Asset defect, deterioration of asset and soft blockages/silt.	Enhanced monitoring of our assets will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026

Wastewater Treatment Works including Storm Tanks

OVERVIEW

We operate a large and complex network of 583 wastewater treatment works across the North West, serving a population equivalent of eight million people and helping protect public health and the environment every day.

Our treatment works collect and clean wastewater from homes, businesses and industry, safely returning it to rivers, estuaries and the sea in line with strict environmental standards. These sites are a vital part of the region's infrastructure and play a key role in the wider water cycle.

Wastewater treatment works are central to our efforts to reduce pollution incidents. Through investment, better monitoring, improved maintenance, and enhanced staff training, we are working to prevent issues, respond quickly when they do happen and drive continuous improvement.

Throughout 2025, we have delivered a number of key interventions and reset expectations around compliance to strengthen the reliability of our treatment works. We have introduced new golden measures and rolled out role specific pollution prevention training for our teams. These changes are already making a real difference. While there is more work to do, we are encouraged to see strong improvements in performance and clear evidence that our actions are driving the right results.

RISKS

Our wastewater treatment works are vital to the service we provide, but they face a range of operational, environmental and external risks. Understanding and managing these risks helps us keep services running, protect the environment and meet our regulatory responsibilities.

The main risks we are focused on are:

- Power supply interruptions
- Equipment and process failures
- Blockages
- Hydraulic overload
- Control and telemetry failures

Together, these risks mean treatment works pollution incidents often arise from the interaction between extreme flows, asset reliability, and the effectiveness of monitoring and operational control.

ROOT CAUSE ANALYSIS

In 2025, the incidents we responded to were primarily driven by a combination of power failure, hydraulic, mechanical, and operational risks. Power supply interruptions or control and telemetry failures may delay operator response, increasing the duration or severity of incidents. Equipment and process failures such as breakdowns of screens, pumps, aeration systems, or sludge handling assets can compromise treatment performance and result in the discharge of partially treated or untreated effluent. Hydraulic overload, particularly during heavy or prolonged rainfall in combined sewer catchments, can exceed treatment or storm storage capacity and lead to storm overflows or permit breaches. Aging infrastructure and asset condition issues further elevate risk, while human factors such as operational error or delayed maintenance can contribute.
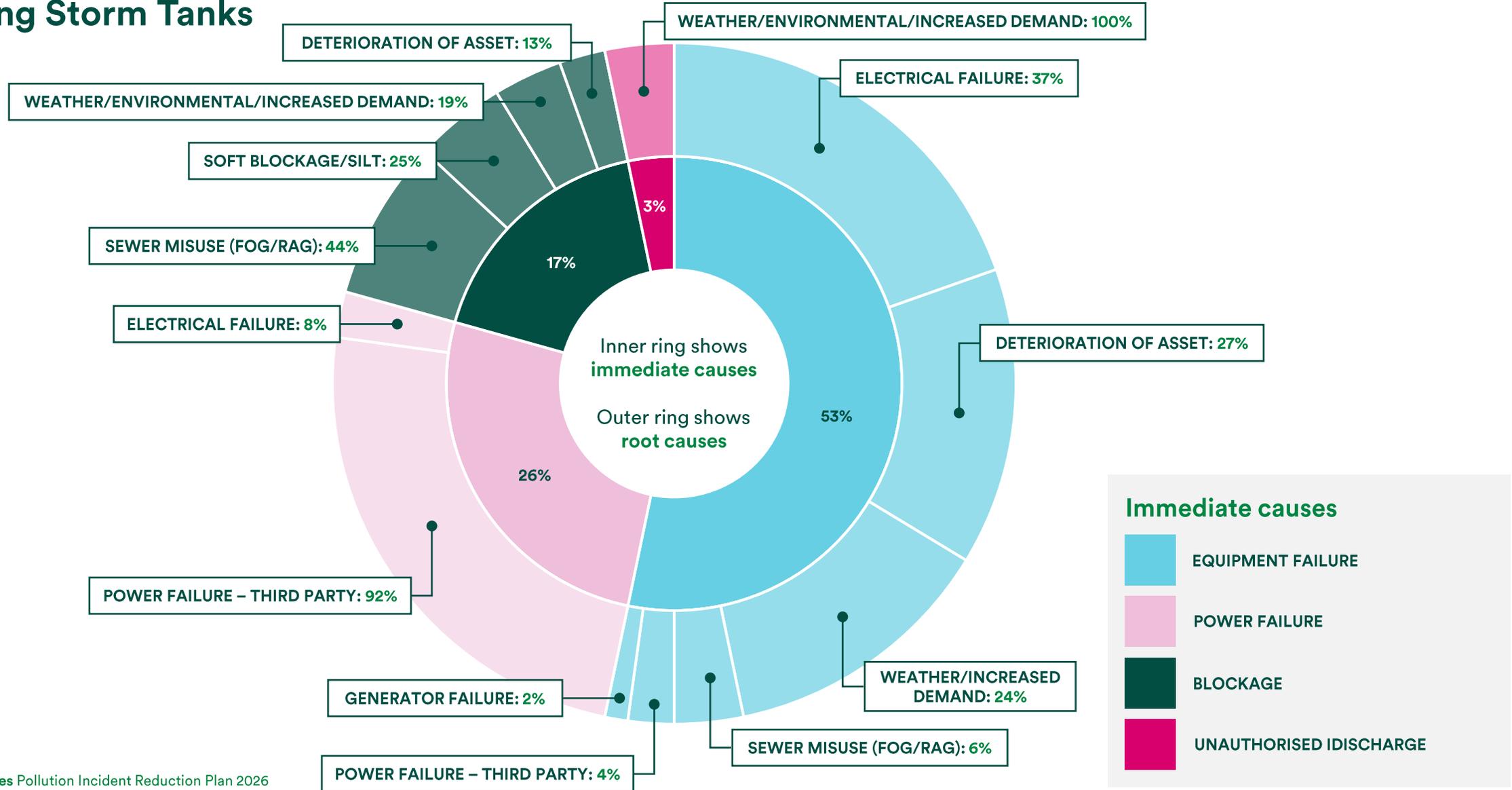
ACTIONS

Our key actions to address root causes of pollution caused by wastewater treatment works are set out below and on the tables on the next pages. Actions will focus on improving power resilience and targeting asset maintenance on key assets.

- We analyse the information provided from our EDM and final effluent monitoring at our treatment works. This insight will help us identify how to strengthen asset maintenance and utilise the most effective resourcing model.

- We are introducing Sidestream Treatment (separate treatment of nutrient-rich liquid waste generated during wastewater sludge dewatering before it returns to the main treatment plant) at suitable wastewater treatment works to improve performance and resilience.

- We are rolling out our Power Resilience Programme to protect sites from power dips, surges and outages.

- Installation of new storm tank auto-return systems at wastewater treatment works to help improve flow management and prevent storm-related pollution incidents.

Wastewater Treatment Works including Storm Tanks

WEATHER/ENVIRONMENTAL/INCREASED DEMAND: 100%

ELECTRICAL FAILURE: 37%

DETERIORATION OF ASSET: 13%

WEATHER/ENVIRONMENTAL/INCREASED DEMAND: 19%

SOFT BLOCKAGE/SILT: 25%

SEWER MISUSE (FOG/RAG): 44%

ELECTRICAL FAILURE: 8%

DETERIORATION OF ASSET: 27%

3%

17%

53%

26%

Inner ring shows **immediate causes**

Outer ring shows **root causes**

POWER FAILURE – THIRD PARTY: 92%

GENERATOR FAILURE: 2%

POWER FAILURE – THIRD PARTY: 4%

SEWER MISUSE (FOG/RAG): 6%

WEATHER/INCREASED DEMAND: 24%

Immediate causes

EQUIPMENT FAILURE

POWER FAILURE

BLOCKAGE

UNAUTHORISED IDISCHARGE

Wastewater Treatment Works including Storm Tanks

The table below summarises the key projects within our PIRP across our wastewater treatment works estate addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Treatment Works including Storm Tanks	Power resilience improvements	Improve response to power outages and availability of backup technology to ensure asset continues to operate.	In 2026, there are approximately 200 sites (circa. 60% pumping stations, 40% wastewater treatment works) in scope for brown out (temporary drop in electrical power voltage) remedial work and at least 40 sites will have Battery Storage Systems delivered. In order to mobilise quickly, a temporary hire and permanent solution programme will run in parallel, with the temporary hires being made permanent over the course of the year. Outside of this, there is a further programme looking at an additional 59 sites for a permanent BESS solution as part of Climate Change Energy Resilience. Decision point for site selection is if a site has had a pollution incident (Cat 1–4) over the last seven years that was deemed to have been caused by a DNO power event, be it a power surge/drop, or a full blackout. Any site having suffered a 'brown out' will receive the standard offering, building up to platinum on the sites most susceptible to full power interruptions. Current focus on power resilience using these standards:	High	Power failure third party, power failure UU, electrical failure and generator failure. These upgrades help our equipment keep running during short power cuts and protect it from sudden electricity surges, making our sites more resilient.	We know that power failures contribute to around 20% of our pollution incidents, and we are taking firm action to address this. As part of our DWMP, we are assessing how well our sites can cope with power outages and identifying improvements across the '4Rs': resistance, reliability, redundancy, and response and recovery, so our assets stay resilient in the future. Due to the timescales to develop the DWMP, the findings from these assessments will be available in future PIRP reports.	January 2026	April 2030

	Brown Out Relays	Surge Protection Device	Uninterrupted Power Supply	Generator Hook Up Point	Temporary Generator	Battery Energy Storage System (BESS)	Permanent Generator
PLATINUM	X	X	X	X		X	X
GOLD	X	X	X	X	X	X	
SILVER	X	X	X	X	X		
BRONZE	X	X	X	X			
STANDARD	X	X	X				

Wastewater Treatment Works including Storm Tanks

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Treatment Works including Storm Tanks	Bespoke measure: Storm tank operability	Installation of storm tank auto-return systems.	Installation of storm tank auto-return systems and associated upgrade works at 5+ wastewater treatment works.	Low	Asset defects, deterioration of asset, weather, and increased demand.	Improving our storm tanks will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	June 2024	December 2026
Wastewater Treatment Works including Storm Tanks	Bespoke measure: Pump optimisation programme	Pump replacement, panel modifications, power upgrades, refurbishment and reconfiguration of pumps to improve performance throughout the network.	15+ site interventions are this calendar year across pumping stations and wastewater treatment works.	Medium	Asset defects and deterioration of asset.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	November 2025	March 2030
Wastewater Treatment Works including Storm Tanks	Implementation of proactive cleaning and maintenance	A programme focused on the cleansing and refurbishment of storm tanks and wet wells across large and medium-scale wastewater treatment works. This initiative combines routine asset maintenance with critical infrastructure upgrades to enhance operational efficiency.	Target for 10+ wastewater treatments works to undergo cleansing and refurbishment.	Medium	Blockages, asset defect and deterioration of asset.	Asset cleansing and refurbishment will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	April 2026	March 2030

Wastewater Treatment Works including Storm Tanks

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Treatment Works including Storm Tanks	Bespoke measure: Enhanced maintenance capability	Preventative Maintenance (PM) compliance improvements and PM yield launch (greater focus on increasing proactive maintenance rather than reactive).	We are strengthening how we maintain our equipment by rolling out performance improvement plans across the business. This includes raising awareness of planned maintenance (PM) yield, providing coaching for teams, and continuing to support frontline staff with specialist maintenance expertise. By increasing the amount of preventative and predictive maintenance we complete, we are fixing more issues before they turn into failures. This proactive approach is already delivering strong results. Key improvements so far include: • PM yield has increased by 5.23 percentage points over the last 12 months, rising from 2.25% to 7.48%. • The number of defects identified through PM has grown significantly – from 90 in January 2025 to more than 400 by November 2025. • Front-line predictive kit compliance has increased by 25%, helping teams identify issues earlier and maintain equipment more effectively.	High	Asset defect, deterioration of asset and soft blockages / silt	Preventative maintenance will be a central part of our DWMP, supporting our drive to meet our long-term pollution-reduction ambitions.	April 2025	March 2030
Wastewater Treatment Works including Storm Tanks	Bespoke measure: Enhanced asset health intelligence	Deployment of wireless vibration and motion amplification technology on critical assets across the business	We have invested £350,000 to strengthen how we carry out health checks on our most critical assets. As part of this investment, we have: • Purchased 17 Sensoteq wireless remote monitoring kits along with 204 vibration sensors, giving us better real time insight into asset condition. • Added 3 Motion Amplification cameras and accessories to help us spot early signs of mechanical issues that can't be seen by the naked eye. • Trained our Precision Maintenance Engineers to use this new technology and deployed the equipment across the business so we can identify and fix problems sooner. • These upgrades improve our ability to detect faults early, reduce the risk of equipment failure, and keep our sites running reliably for customers and the environment.	Medium	Asset defect and deterioration of asset	Enhanced monitoring of our assets will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	April 2025	March 2030

Wastewater Treatment Works including Storm Tanks

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Treatment Works including Storm Tanks	Remedial capital asset improvements	Defect elimination strategy launched within the business, complete with standardised reporting and benefits tracking.	We are carrying out Defect Elimination studies across the business and putting solutions in place to stop repeat issues. This work is supported by training and coaching for our in-house Maintenance Specialists, helping teams tackle problems at the root cause. So far, eight case studies have been completed, each with benefits tracking in place to make sure improvements are delivered and sustained.	Medium	Asset defect and deterioration of asset.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	April 2025	March 2030
Wastewater Treatment Works including Storm Tanks	Bespoke measure: Enhanced maintenance capability	Reducing risk of assets out of service.	Fully embed all 77 local stores via stocktakes/audits and rationalise the £12m worth of inventory we have out in operational local stores. Review all goods ordered by production area and amend stock as well as stock levels to cater for as much demand as we can.	Medium	Asset defect and deterioration of asset.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	April 2026	March 2030
Wastewater Treatment Works including Storm Tanks	Screens maintenance	Proactive replacement or refurbishment of inlet screens to ensure effective screenings removal and reduce blockages on site.	Roll out new team to deliver 100% preventative maintenance compliance against the annual MOT task. This will reduce the risk of catastrophic failure as well as the amount of rag being carried through the system. This dedicated teams sole focus is to maintain below coping level escalator screens and do asset health surveys.	Medium	Asset defect, deterioration of asset.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	April 2026	March 2030
Wastewater Treatment Works including Storm Tanks	Bespoke measure: Targeted asset class maintenance	Addressing how we better maintain costly or high criticality asset classes to provide business benefit.	The first asset we are focusing on is our screw pumps. These are now in the discovery phase, where we are reviewing how much they cost to maintain and how effectively they are currently managed. Using this insight, we'll develop a new and more proactive way of maintaining screw pumps so they run more reliably.	Medium	Asset defect, deterioration of asset.	Maintenance improvements will be a central part of our DWMP, supporting our drive to meet our long-term pollution-reduction ambitions.	June 2026	March 2030
Wastewater Treatment Works including Storm Tanks	Enhanced incident response	Incident management.	United Utilities developed a contingency planning tool in conjunction with Jacobs. This tool was developed for our network sites and was to be utilised by the operational teams as a decision-support and scenario-planning system during operational incidents. This tool will be expanded to include our WwTW assets.	Low	Human error and mis-diagnosis of cause and action required.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	January 2026	December 2026

Wastewater Treatment Works including Storm Tanks

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Wastewater Treatment Works including Storm Tanks	Bespoke measure: Inlet works blockage prevention	Inlet works blockage prevention.	Blockages at inlet works are a cause of pollution events and can be caused by sewer misuse when rags and wipes (especially 'flushable' wipes), fats, oils, and grease (FOG), grit and debris (sand, stones, litter) or large solids or screenings accumulate, reducing the hydraulic capacity and meaning the incoming wastewater can no longer pass freely through screens or channels. Power monitors and de-raggers are two of the most effective technologies for preventing blockages at inlet works, especially where pumps and screens are prone to rag build-up. They work in different ways, but together they create a predictive, automated defence against both hydraulic restriction and asset failure. We have completed a successful trial and are looking to scale up by installing power monitors and de-raggers where appropriate across all inlet works.	High	Sewer misuse (FOG/ RAG).	Our data shows that the main cause of pollution incidents is blockages. We record and monitor blockages on the sewer network and more than 60% of blockages are caused by customer behaviour. Our DWMP will analyse hotspots of previous blockage locations and combine with other data to predict the likely future number and impact of blockages in an area. We will utilise this risk assessment to identify best value blockage risk management measures, including options to increase customer awareness of 'what not to flush/pour' down drains.	January 2026	December 2026

Surface Water Sewers and Associated Outfalls

OVERVIEW

Our surface water sewer system is a key part of our overall wastewater network challenge – especially where combined sewers carry both sewage and rainwater, leading to discharges through storm overflows when capacity is exceeded during heavy rainfall. Given we have a high proportion of combined sewers compared to other UK water companies, this means surface water can rapidly contribute to hydraulic overloads that result in spills from storm overflows and other discharges.

RISKS

Several factors can increase the likelihood of pollution incidents from surface water sewers:

- High rainfall and runoff events increases volume and speed of water potentially carrying more pollutants.

- Proximity to sensitive water bodies can pose greater risk.

- Industrial or commercial catchments – areas with chemicals or hazardous substances have greater risk.

- Timeliness and quality of maintenance interventions.

- Misconnections – when foul sewer is inadvertently connected to surface water sewers causing sewage discharge into rivers.

ROOT CAUSE ANALYSIS

Our root cause analysis shows very few incidents related to surface water sewers – three incidents investigated in 2025. The immediate causes show blockage and sewer collapse because of sewer misuse and build-up of FOG or wet wipes. We are confident the plans we have during AMP8 will support further improvements and resilience in this asset area.

ACTIONS

Our key actions to address root causes of pollution caused by surface water sewers and associated outfalls are set out below and on the tables on the next pages. Actions will focus on misconnections and campaigns to help raise awareness of good behaviours which help to prevent pollution.

We continue to work with homes, businesses and industry to promote good practices that help prevent pollution at the source, like our 'Connect Right' campaign. We will carry out planned maintenance to keep the surface water network running effectively and reduce the risk of blockages or failures. Our ongoing monitoring helps us spot and act on issues early.

When incidents do occur, our Environmental Events Management (EEM) desk supports a fast and coordinated response to protect the environment (see our case study on page 19).

Other ongoing actions include:

- Trade engagement: We are working with local training colleges to help improve awareness amongst trades such as the plumbing industry, and with wider industry groups. We are actively working with Preston College to include drainage misconnections in their apprenticeship curriculum. If successful, we would seek to work with the other nine colleges across the North West to update their curricula.

- Innovation and technology: By using data analytics and mapping tools, we can target problem areas more effectively and prioritise action where it matters most. We are looking to share more open data, including known contaminated surface water outfall locations and their associated catchments to better inform customers of where these problems are, and what they can do to help resolve them.

Surface Water Sewers and Associated Outfalls

Root cause analysis shows a single root cause of sewer misuse through a build up of fats, oils, grease and rags.

Inner ring shows **immediate causes**

Outer ring shows **root causes**

100%

SEWER MISUSE (FOG/RAG): 100%
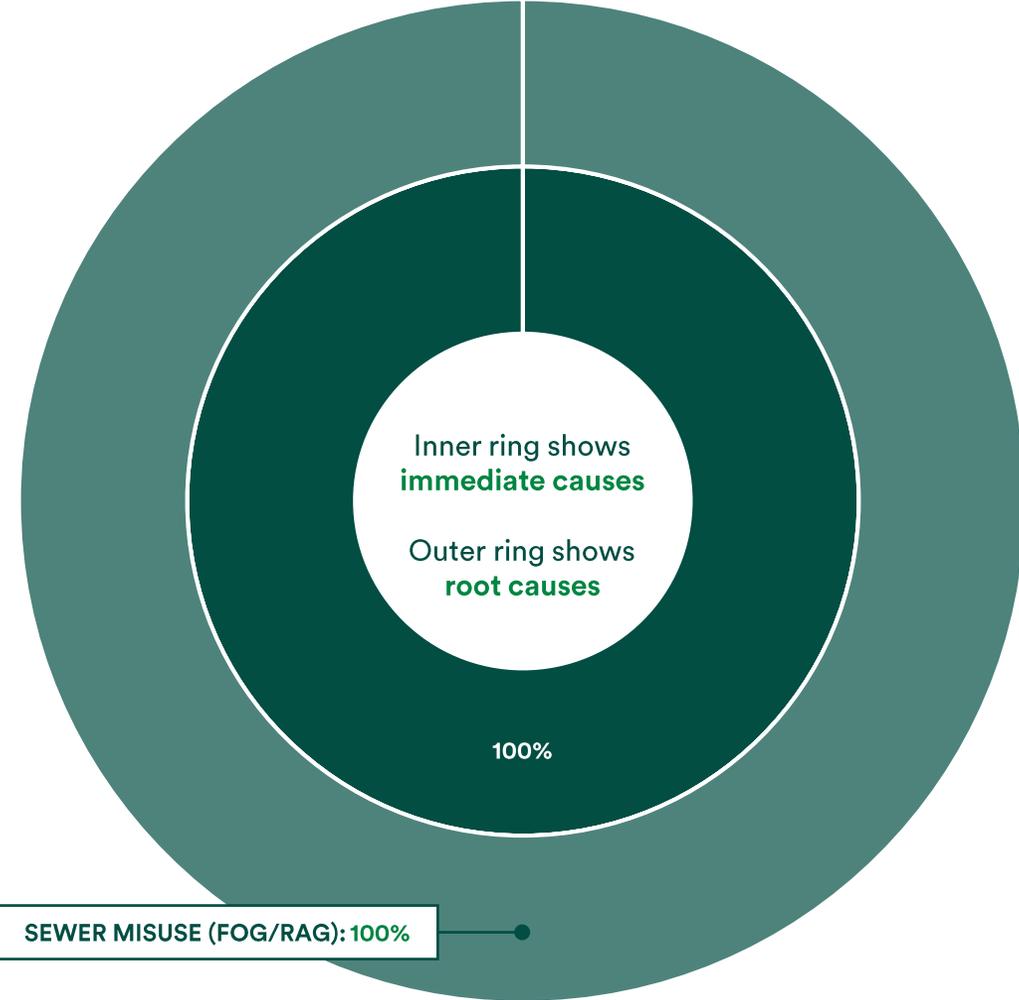
Immediate causes

CONTAMINATED SURFACE WATER

Surface Water Sewers and Associated Outfalls

The table below summarises the key projects within our PIRP across our surface water sewer estate, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Surface Water Sewers and Associated Outfalls	Bespoke measure: Reduce drainage misconnections	Customer engagement and catchment investigations to identify and reduce drainage misconnections.	We are committed to tackling this challenge. Our approach includes: **Customer engagement:** We investigate every new reported contaminated surface water outfall, and will continue to work closely with homeowners, providing guidance and support to help them correct misconnections. Education is key, many people simply don't know their plumbing can be causing a pollution. During AMP7, we surveyed over 25,000 properties to identify sources of misconnections. **Trade engagement:** We are working with local training colleges to help improve awareness amongst trades such as the plumbing industry, and with wider industry groups. We are actively working with Preston College to include drainage misconnections in their curriculum. **Collaboration:** We partner with other water companies, professional bodies, and regulators to raise awareness and drive collective action through the national 'Connect Right' campaign. **Innovation and technology:** By using data analytics and mapping tools, we can target problem areas more effectively and prioritise action where it matters most. We are looking to share more open data, including known contaminated surface water outfall locations and their associated catchments to better inform customers of where these problems are, and what they can do to help resolve them.	Enabler (delivers through reduction in third party incidents)	Resolving misconnections – to do the right thing for the environment.	Our DWMP will include an assessment of the number of Reasons for Not Achieving Good Status (RNAG) attributed to discharges of urban/highway runoff and misconnections that will not be remedied through investment. We will use this data to outline the actions required by local residents to support the delivery of the plan, including the removal of misconnections. Due to the timescales to develop the DWMP, the findings from these assessments will be available in future PIRP reports.	January 2026	December 2026

Surface Water Sewers and Associated Outfalls

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Surface Water Sewers and Associated Outfalls	Customer engagement	Initiatives to improve customer behaviour to reduce blockages	We plan to deliver a series of targeted, hyper-local hotspot campaigns; launch a new campaign to support the government's 'Simpler Recycling' campaign to encourage household customers to dispose of leftover food waste, including cooking fats, oils and grease, in kitchen caddies; and we also plan to launch of a new campaign, targeting parents and carers to encourage the disposal of baby/toilet training wipes in the bin.	Low	Customer behaviour of flushing wet wipes and period products and disposing of cooking fats, oils and grease into the sewer network.	Blockages are the main driver of pollution incidents with many linked to customer behaviour. We monitor where blockages occur across our network, and our DWMP will build on this by analysing past hotspots and other relevant data to predict the likely future number and impact of blockages in an area. This will help us target the most effective actions, including improving customer understanding of 'what not to flush or pour'.	January 2026	March 2027

Storm Tanks

OVERVIEW

Storm tanks are large storage structures built within our sewer networks to temporarily hold excess wastewater and stormwater during heavy rainfall. They help prevent sewer flooding and reduce pollution of rivers and coastal waters by providing temporary storage capacity when the sewer network becomes overloaded. This prevents sewer flowing in streets and properties and reduces untreated wastewater entering rivers and coastal waters.

In dry weather, storm tanks stay empty or hold only small amounts of flow. When rainfall is heavy and pipes reach capacity, extra flow is diverted into the storm tank. Once the weather improves and capacity becomes available, the stored wastewater is returned to the sewer system and taken for treatment.

Storm tanks are an essential part of our network as they protect the environment through reducing pollution of rivers and coastal waters as well as preventing untreated wastewater releases during moderate storms. Additionally, they offer infrastructure protection by reducing pressure on sewer pipes.

RISKS

We consider several operational, environmental, regulatory and infrastructure risks when using storm tanks to help reduce flooding and pollution. These risks mainly arise when rainfall is unusually high, equipment fails, or storage capacity is exceeded.

The main risk is environmental pollution. When a storm tank reaches capacity, untreated or partially treated wastewater may need to be released through combined sewer overflows (CSOs). However, because a large part of our network is made up of combined sewers, storm tanks remain essential. They help prevent other serious outcomes, such as urban flooding or wastewater backing up into homes.

ROOT CAUSE ANALYSIS

We are pleased to see we have reported zero incidents in 2025 as a result of our storm tanks failing. As mentioned, they are a critical part of our asset base and we have plans to install more tanks and increase our capacity to further strengthen our environmental protection plans.

ACTIONS

Our key actions fall into inspection, maintenance, monitoring and operational control, for example:

- Decrease storm overflow spills by cleansing, repairing, upgrading network assets and providing temporary storage.

- Regular maintenance and sediment management.

- Repair and upgrade of storm tank assets.

- Mechanical and electrical equipment maintenance.

This work is supported by the actions outlined above (and on the table on the next page), which will seek to address the root cause of pollution incidents from Storm Tanks located on the combined sewer network.

Storm Tanks

The table below summarises the key projects within our PIRP across our storm tank estate, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Storm Tanks	Implementation of proactive cleaning and maintenance	Programme of improvements to our storm tanks, detention tanks and inlets, including reducing sludge build-up, and desilting of sewer systems.	500+ number of sites to have remedials undertaken at across the programme.	High	Asset defects, deterioration of asset.	Improving our storm tanks will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	September 2024	December 2026
Storm Tanks	Bespoke measure: Enhanced stormwater storage capacity	Programme of work to install temporary storm tanks to store storm flows and then return flows to the network/site once weather/flows allow (manual or automatic return).	Target of 20+ sites to have temporary storm tanks installed.	High	Weather/increased demand.	Further installation of storm tanks will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	December 2025	March 2030

Water Distribution Network

OVERVIEW

We operate one of the largest and most complex water distribution networks in the UK, supplying drinking water to a population equivalent of around eight million across the North West of England. The distribution network is responsible for transporting treated drinking water from water treatment works to customers' taps while maintaining quality, pressure, and security of supply.

Treated water leaves water treatment works and enters the network via service reservoirs, water towers, and pumping stations, which provide storage, pressure management, and resilience. Water is then conveyed through an extensive system of trunk mains, distribution mains, and service pipes, supplying homes, businesses, and critical infrastructure. The network includes both gravity systems and pumped systems, depending on geography and demand.

The network is divided into water supply zones (WSZs) to manage water quality, pressure, and regulatory compliance. Within each zone, water quality is monitored to ensure compliance with Drinking Water Inspectorate (DWI) standards, including maintaining disinfectant residuals and preventing contamination. Interconnections between zones provide operational flexibility and resilience, allowing supplies to be rerouted during incidents, maintenance, or drought conditions.

RISKS

We actively manage risks across our network such as leakage, bursts, pressure fluctuations, asset deterioration, and water quality issues (e.g. discolouration or loss of chlorine residual). A changing climate increase the risk of pipe bursts and escapes with more extreme weather events increasing the risk of erosion impacting pipelines, freeze-thaw events and drought causing additional ground movement and impacting pipe integrity. Action is taken through real-time monitoring, leakage detection, pressure management, planned maintenance, and capital investment in mains renewal. The distribution network is a critical component of our water supply system, ensuring safe, reliable, and continuous delivery of drinking water while adapting to challenges such as climate change, population growth, and maintaining/replacing infrastructure.

ROOT CAUSE ANALYSIS

In 2025 we have seen a deterioration in performance on our water distribution network and will be increasing our focus and efforts in improving in this area in 2026 and beyond. Our root cause analysis shows most of our pollution incidents from this asset class are caused by leaking or burst water pipes caused through deterioration of our assets, and this is where our planned interventions are focused. We have a mixture of ongoing and planned interventions ranging from asset renewal, maintenance and optimisation.
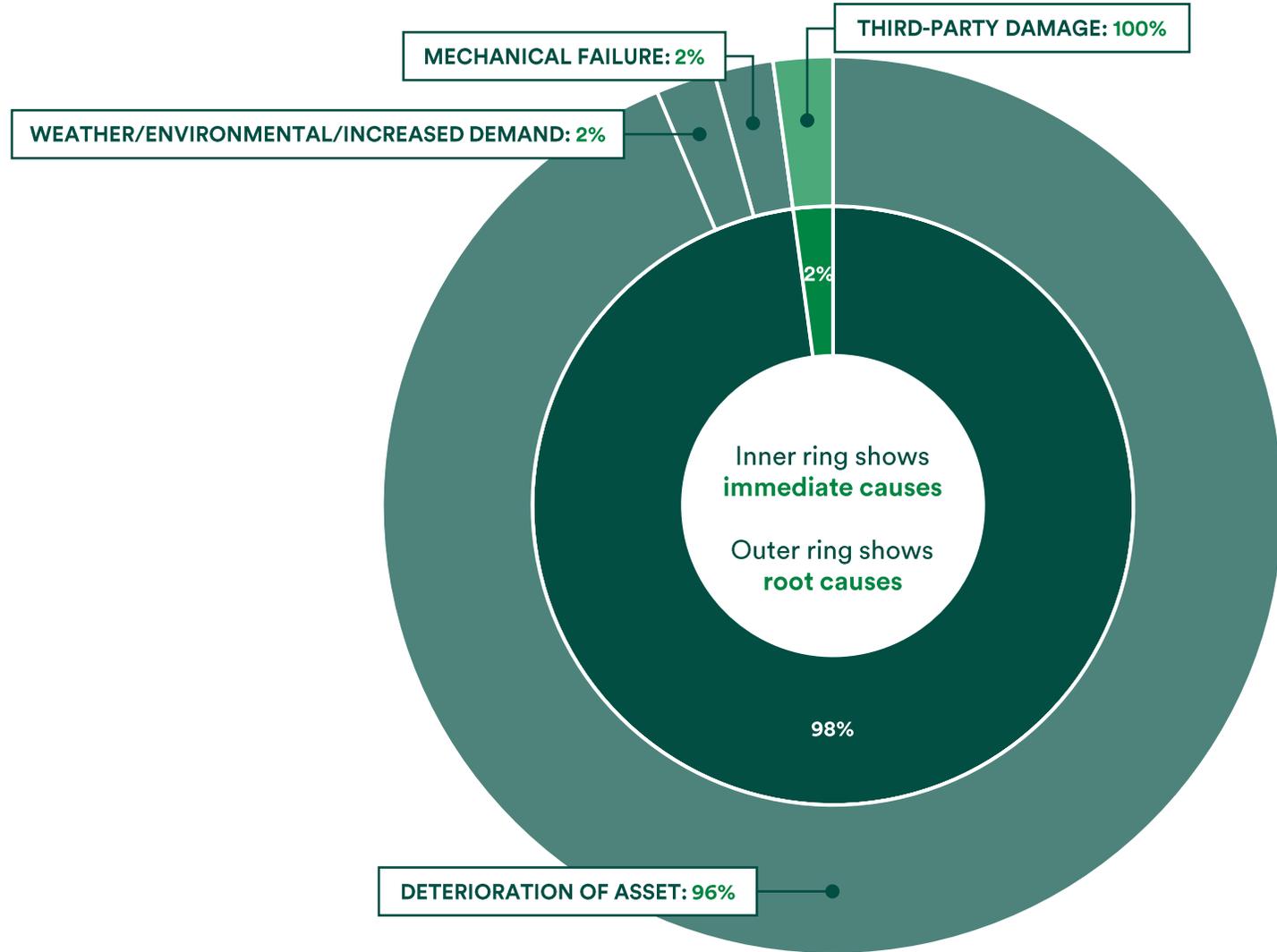
ACTIONS

Our key actions to address root causes of pollution caused by our water distribution network are set out below and on the tables on the next pages. Actions will focus on improving the condition of our assets by replacing and upgrading our highest risk water mains, focussing on pressure management and optimisation to mitigate against asset deterioration and defects where we can.

- We are planning to renew at least 130 km of water mains in 2025/26, helping improve reliability and reduce the number of bursts.

- We are cutting bursts and leaks through a combination of asset renewal, maintenance, and smarter pressure management and optimisation.

- Our Environmental Events Management (EEM) desk reviews our incident response 24/7, helping us learn from every event and continually strengthen how we respond. See our case study on page 19.

Water Distribution Network

THIRD-PARTY DAMAGE: 100%

MECHANICAL FAILURE: 2%

WEATHER/ENVIRONMENTAL/INCREASED DEMAND: 2%

2%

Inner ring shows **immediate causes**

Outer ring shows **root causes**

98%

DETERIORATION OF ASSET: 96%

Immediate causes

BURST

WATER – EQUIPMENT FAILURE

Water Distribution Network

The table below summarises the key projects within our PIRP across our water distribution network, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Water Distribution Network	Remedial capital asset improvements	Replacing and upgrading our highest-risk water mains.	There is a Price Control Deliverable (PCD) in place to ensure the delivery of at least 863 km of mains renewal in AMP8. The target for 2025/26 was to deliver 130 km, which we are on track to do. Our target for 2026/27 is ~170 km – we are working through a plan to over-deliver as much as possible. Using risk modelling and operational understanding, each county has developed a priority list of water mains for renewal, including specific poor condition mains.	Low	Asset deterioration and asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Pressure calming	Use of pressure management valves (PMVs) and pressure monitors data to manage assets to reduce pressure transients and variance	A proactive approach and data driven insights is being used to carry out maintenance on our existing PMV asset base. A new PMV installation programme will install new PMVs in areas of highest pressure and burst risk.	Enabler	Asset deterioration and asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Air valve maintenance	Maintaining or replacing air valves to better control pressure and reduce burst frequency.	There are over 14,000 water network air valves and there is an ongoing programme of proactive risk-based inspection and maintenance being implemented. We have purchased two new air valve types to trial for improved data availability and maintenance efficiency.	Enabler	Asset deterioration and asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Bespoke measure: Enhanced asset health intelligence	Inspection of pipe bridges and critical crossings to inform management of assets and prevent failure.	We carry out regular, proactive inspections of our pipe bridge assets using tools like our asset-health data collector app. Over the next year, a team of graduates will also explore how robotics could help us further improve and streamline these inspections.	Low	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030

Water Distribution Network

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Water Distribution Network	Smart valve installation	Installation of technology to allow remote closure or opening of valves in the distribution network.	Installation priority based on risk level (criticality and likelihood). Business cases being built currently with more detail to follow once agreed – this will be delivered in our plans for 2025.	Enabler	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Staff training (asset type specific)	Formal organised training of staff on relevant processes and procedures associated with preventing potential pollution-causing incidents.	We are training all appropriate operational staff on essential processes, including CALM networks and quality assurance, to help prevent network disturbances that could cause pollution. At the same time, our Environmental Events Management (EEM) desk is helping to strengthen and embed consistent pollution-reporting across the business. (see page 19 for a case study about the EEM desk).	Enabler	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Use of predictive analytics	Use of Artificial Intelligence technology to assess telemetry data to predict asset issues and allow early response.	Having clear visibility of this data helps us reduce the risk of asset failures by feeding it into our prediction and prevention models. We are also continuing our project to optimise telemetry alarms, which helps us focus investigations where they are needed most.	Enabler	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Manual analysis of telemetry data	Direct use of telemetry data to manually identify issues and allow early response.	Visibility of this data reduces the likelihood of asset failure as we feed the information into failure prediction/prevention models. An ongoing project of telemetry alarm optimisation allows focussed investigations.	Enabler	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Remedial capital asset improvements	Rehabilitation or replacement of network assets to improve operation, resilience and reliability of the asset type.	Regular, proactive inspections and repairs on assets such as service reservoirs and pumping stations to reduce the risk of failures.	Enabler	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030

Water Distribution Network

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Water Distribution Network	Manual analysis of telemetry data	Direct use of telemetry data to manually identify issues and allow early response.	Visibility of this data reduces the likelihood of asset failure as we feed the information into failure prediction/prevention models. An ongoing project of telemetry alarm optimisation allows focused investigations.	Zero (While this measure does not prevent pollution incidents. It enables prevention through other measures)	Asset deterioration, asset defects.	N/A – The DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030
Water Distribution Network	Remedial capital asset improvements	Rehabilitation or replacement of network assets to improve operation, resilience and reliability of the asset type.	Regular, proactive inspections and repairs on assets such as service reservoirs and pumping stations to reduce the risk of failures.	Zero (While this measure does not prevent pollution incidents. It enables prevention through other measures)	Asset deterioration, asset defects.	N/A – The DWMP is a long-term, strategic plan across wastewater and drainage.	April 2025	March 2030

Water Treatment Works

OVERVIEW

Our water treatment works are critical infrastructure ensuring safe drinking water and environmental protection across millions of homes and businesses in the North West of England. Our processes are designed to meet UK drinking water standards and limits on contaminants such as turbidity, microbes, and disinfection by-products like trihalomethanes. These standards are enforced by regulators like the Drinking Water Inspectorate (DWI).

We operate around 91 drinking water treatment works. Each one takes raw water from natural sources (like rivers, reservoirs and boreholes) and transforms it into safe, clean drinking water before it is supplied to customers in their homes and businesses.

Our water treatment processes are complex and usually feature multiple assets. Some of which create sludge and wash water byproducts. These are then treated and disposed to the environment as part of permitted activities. Activities on site include:

- Chemical, storage and dosing
- Water treatment process
- Sludge handling and removal
- Waste storage and tanker movements

RISKS

The main pollution risks at a water treatment works arise from the storage and handling of treatment chemicals, sludge and sludge liquors, and the operation of treatment processes and drainage systems. Spills or leaks from tanks, pipework, or during deliveries, loss of containment from process units, and contaminated surface water runoff – particularly during heavy rainfall or flooding can lead to pollutants entering the surface water, groundwater or land. Additional risks include power or control system failures leading to uncontrolled discharges, misconnected or poorly maintained drainage, and human or contractor error causing delayed response or incorrect actions. These risks have the potential to harm the environment, breach permit conditions, and result in regulatory action if not effectively controlled and managed.

ROOT CAUSE ANALYSIS

In 2025, there have been five pollutions reported at water treatment works and the overriding root cause we have found has been because of our equipment failing through deterioration of the asset. This is being addressed through regular asset inspections and planned maintenance. Each incident is investigated thoroughly, and actions are put in place to do everything we can to avoid a repeat incident. Such investigations are used to inform our future plans in ensuring we always have a plan that is fit for purpose.
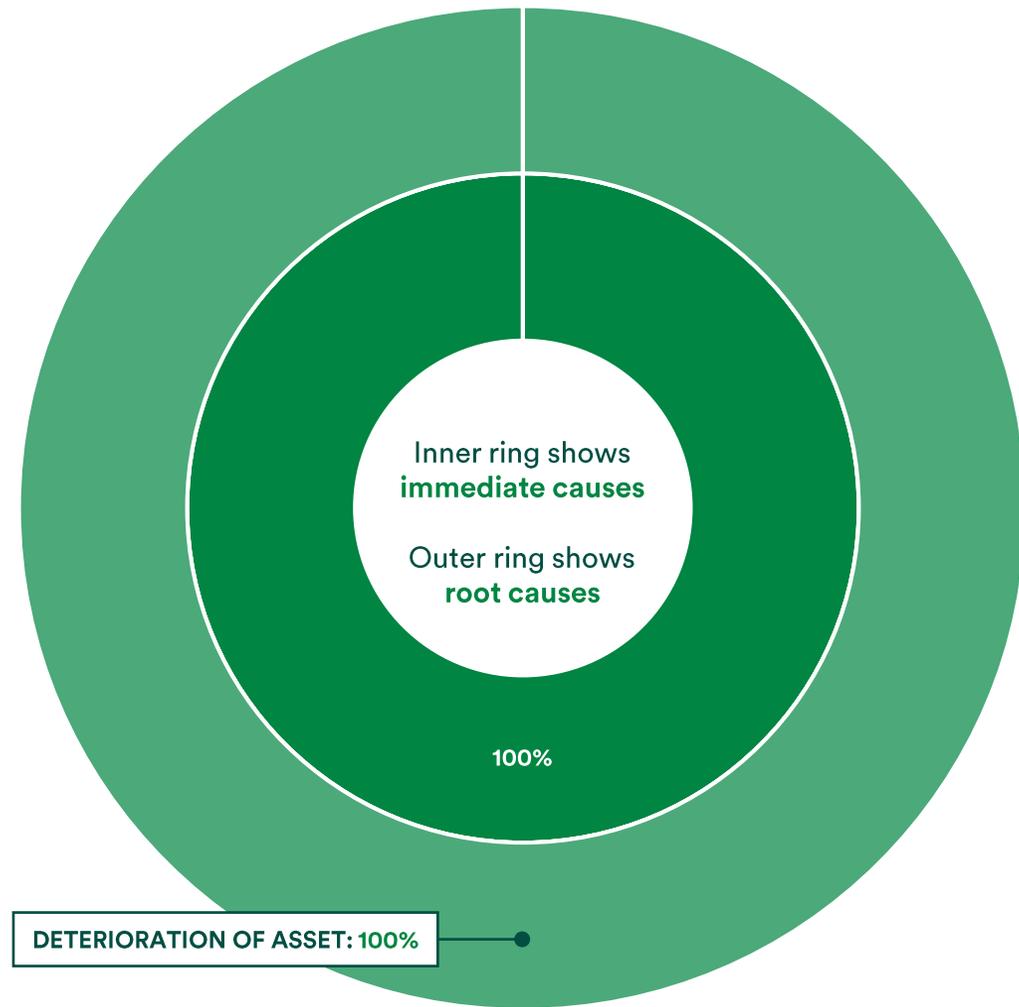
ACTIONS

As part of our investment in AMP8, we will be continuing maintenance of our water treatment assets and prioritising investment around asset resilience in this area to minimise risk to the environment. Key actions are listed below and on the tables on the next pages:

- Improving sludge management at key sites, e.g. Franklaw, to reduce risks and improve treatment performance.

- Regular inspection and maintenance of chemical tanks and bunding to ensure they remain safe, secure and compliant.

- Ongoing training for our process operators, alongside strengthened monitoring and control of treatment-works processes, to reduce the risk of accidental chemical release.

Water Treatment Works

Root cause analysis shows a single root cause of equipment failure through deterioration of the asset.

Inner ring shows **immediate causes**

Outer ring shows **root causes**

100%

DETERIORATION OF ASSET: 100%

Immediate causes

WATER – EQUIPMENT FAILURE

Water Treatment Works

The table below summarises the key projects within our PIRP across our water treatment works estate, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Water Treatment Works	Scour valve management	Understanding and mitigation of the environmental harm and flooding risk of scour valve testing. Environmental harm is not limited to sediment pollution or scouring but also the ecological impacts.	Impounding reservoir scour valves are tested twice a year as part of the reservoir safety inspection regime. Following an incident in 2024 where fish were killed, we began a thorough process of environmental risk assessment before each scour valves test, with tests being placed on hold if the environmental risk assessment indicates a concern. The introduction of scour valve test environmental risk assessments significantly reduces (but cannot eliminate) the risk of environmental incidents. We are currently working with industry and Environment Agency colleagues to develop a better understanding and balance the various obligations in this area.	Enabler	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	January 2026	March 2030
Water Treatment Works	Management of clean water discharges	Controls for run-to-waste discharges from boreholes and clean water mains that reduce the risk of uncontrolled discharges into the environment, ensuring compliance with discharge consents and minimising pollution risk.	There is a data collection underway to identify the borehole sites where run to waste will require a discharge permit. This activity is being driven by the permitting team in the Environment Programmes Office. Environment Agency will be permitting run to waste to watercourses through EPR. The introduction of permitting and monitoring gives us more tools and control mechanisms to manage our discharges from borehole SUTW facilities.	Low	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	January 2026	March 2030
Water Treatment Works	Staff training (asset type specific)	Formal organised training of staff on relevant processes and procedures associated with reducing pollution at this asset type.	We have thorough training requirements for staff working in water treatment, including our 'Licence To Operate' which restricts staff to only operate equipment and processes that they have been thoroughly trained on. Our training regime and LTO will reduce the probability of operator error causing environmental incidents.	Low	Human error and mis-diagnosis of cause and action required.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2025	March 2030

Water Treatment Works

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Water Treatment Works	Use of predictive analytics	Use of Artificial Intelligence technology to assess telemetry data to predict asset issues and allow early response.	Artificial intelligence has been trialled at Franklaw WTW, with a view to being rolled out more widely across the WTW fleet once the initial trial operating period ends, and lessons and good practice have been captured. We are still in the early stages of artificial intelligence adoption, and this technology is unlikely to produce a step change in performance in the next calendar year. Nonetheless we are on a journey with this technology, and we anticipate significant impacts in the future.	Low	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2025	March 2030
Water Treatment Works	Manual analysis of telemetry data	Direct use of telemetry data to manually identify issues and allow early response.	The manual reading (including remote reading) of telemetered data is an ongoing part of our WTW monitoring and control operations. Instrumented monitoring of WTW is an ongoing task and will help us to maintain low levels of environmental impact.	Enabler	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2025	March 2030
Water Treatment Works	Remedial capital asset improvements	Proactive rehabilitation or replacement and modernisation of network, outfalls and sites to improve operation, resilience and reliability of the asset type.	The AMP8 programme includes over £200m of proactive investment in WTW equipment and processes. This investment will enable us to address several of the most pressing asset health issues across the WTW fleet. By slowing the decline in asset health, we reduce the likelihood of an asset failure leading to a pollution event.	Low	Asset deterioration, asset defects.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2025	March 2030
Water Treatment Works	Bespoke Measure: Enhanced maintenance capability	Preventative Maintenance (PM) compliance improvements and PM yield launch (greater focus on increasing proactive maintenance rather than reactive).	PM performance improvement plans deployed across the business along with PM yield awareness and coaching sessions with continued maintenance specialist support. Increased completion of preventative and predictive maintenance resulting in more proactive maintenance yield to repair faults before an asset failure occurs. Asset Condition Management defect resolution. • Last 12 months, PM Yield increased 5.23 percentage points from 2.25% to 7.48% • PM Yield finding defects (90 Jan 25) >400 Nov 25 • FSE predictive kit compliance – increase of 25%	High	Asset defect, deterioration of asset and soft blockages/silt.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2025	March 2030

Water Treatment Works

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Water Treatment Works	Bespoke measure: Enhanced asset health intelligence	Deployment of wireless vibration and Motion Amplification technology on critical assets across the business	We have invested £350,000 to strengthen how we carry out health checks on our most critical assets. As part of this investment, we have: • Purchased 17 Sensoteq wireless remote monitoring kits along with 204 vibration sensors, giving us better real time insight into asset condition. • Added 3 Motion Amplification cameras and accessories to help us spot early signs of mechanical issues that can't be seen by the naked eye. • Trained our Precision Maintenance Engineers to use this new technology and deployed the equipment across the business so we can identify and fix problems sooner. • These upgrades improve our ability to detect faults early, reduce the risk of equipment failure, and keep our sites running reliably for customers and the environment.	Medium	Asset defect, deterioration of asset and soft blockages/silt.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2025	March 2030
Water Treatment Works	Remedial capital asset improvements	Defect elimination strategy launched within the business, complete with standardised reporting and benefits tracking.	We are carrying out Defect Elimination studies across the business and putting solutions in place to stop repeat issues. This work is supported by training and coaching for our in-house Maintenance Specialists, helping teams tackle problems at the root cause. So far, eight case studies have been completed, each with benefits tracking in place to make sure improvements are delivered and sustained.	Medium	Accurate root cause analysis ensuring focus on the correct issues. Asset defect, deterioration of asset and soft blockages/silt	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2025	March 2030
Water Treatment Works	Bespoke measure: Enhanced maintenance capability	Reducing risk of assets out of service	Fully embed all 77 local stores via stocktakes/audits and rationalise the £12m worth of inventory we have out in operational local stores. Review all goods ordered by production area and amend stock as well as stock levels to cater for as much demand as we can.	Medium	Asset defect, deterioration of asset and soft blockages/silt.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	April 2026	March 2030
Water Treatment Works	Bespoke measure: Targeted asset class maintenance	How do we better maintain costly or high criticality asset classes to provide business benefit	The first asset on the list is screw pumps which is currently going through the discovery phase for costs and understanding of maintenance strategy in its current form. A new way of working will be developed to better proactively maintain these.	Medium	Asset defect, deterioration of asset and soft blockages/silt.	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	June 2026	March 2030

Water Treatment Works

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Water Treatment Works	Bespoke measure: Enhanced maintenance capability	In-source more corrective refurbishment work by developing the capability of the internal workshop	Develop a business case for a new workshop with increased capability to deal with more asset classes than pumps as well as increased capacity to deal with more pump overhauls.	Medium	Asset defect, deterioration of asset and soft blockages/silt	N/A – the DWMP is a long-term, strategic plan across wastewater and drainage. This element is not within the remit of the plan.	January 2026	March 2030

Whole Asset Base

The table below summarises the key projects within our PIRP across our whole asset base, addressing the root causes and risks we have identified. These projects will be externally audited once they are complete to ensure we have delivered on them fully for customers and the environment. Each of the actions listed over the next three pages will be applied across the whole asset base rather than to a particular asset type. The expected effectiveness of the interventions and initiatives is categorised as per the adjacent key.

Enabler	Enables prevention through other measures
Low	Less than 5 pollution risk reduction
Medium	Between 5–10 pollution risk reduction
High	Greater than 10 pollution risk reduction

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Whole Asset Base	Telemetry installation	Installation of monitoring to provide digital alerts for remote real-time identification of potential issues.	Over 22,500 sensors are being maintained across the North West wastewater network as part of the DNM programme, positioned inside manholes and key asset locations. More than 17,500 intelligent sensors are already place, actively detecting developing sewer blockages and performance anomalies and 1,700 for detecting pump blockages. We are planning to install a further 10,000–15,000 sensors over AMP8 to enhance the monitoring over vast asset base comprising over 78,000 km of wastewater pipes, one of the largest sewer networks in the UK.	Enabler	Asset failure, deterioration of asset.	Enhanced monitoring of our assets will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026
Whole Asset Base	Use of predictive analytics	Use of Artificial Intelligence technology to assess telemetry data to predict asset issues and allow early response.	AI analyses continuous inputs from 17,500–19,000+ wastewater sensors to provide live visibility across over 8,000 km of sewer network. Machine learning detects unusual behaviours, such as rising levels or developing blockages before they escalate. The platform forecasts likely issues ahead of time, enabling prevention rather than response. AI-triggered alerts have already helped prevent over 5,500 blockages, reducing customer impact and environmental risk.	Enabler	Asset failure, deterioration of asset.	Use of Artificial Intelligence technology to assess telemetry data and predict asset issues will be one of a suite of options considered within our DWMP options toolkit to support us in achieving our long-term pollution targets.	January 2026	December 2026

Whole Asset Base

Asset type	Additional measures	Description of action(s)	Scale of action(s) in next calendar year	Expected effectiveness in next calendar year (Cat 1–3 prevented)	Root cause(s) addressed by the measure	Recent pollution incident performance issues identified in the DWMP	Implementation start date of the measure	Implementation completion date of the measure
Whole Asset Base	Improve root cause analysis techniques	Water quality analysis.	We are trialling the use of the Surfbee aquatic drone. One has been purchased so far to trial applications and benefit. If successful we will look to purchase more. Surfbee is a modular, high-performance autonomous surface vehicle (ASV) engineered for water quality and quantity monitoring, flow gauging, bathymetric surveying, and environmental data collection. It can autonomously collect multi-parameter water quality data using sensor payloads like the YSI EXO sondes, generating rich spatially and temporally aligned datasets that far exceed what is possible with manual or point-based sampling. Surfbee enables remote water quality sampling in places where sending staff would be dangerous, such as flooded rivers, fast-moving channels or dangerous to reach sections of river.	*Note – this is in exploration/ trial stage, so benefits are unknown at this stage.	Early identification of any root cause that can negatively impact a pollution to watercourse.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	January 2026	December 2026
Whole Asset Base	Enhanced incident response	Safe sampling, water quality baselining and pollution source detection.	Development of in-house capability for aquatic drone surveys to support water quality sampling.	*Note – this is in exploration/ trial stage, so benefits are unknown at this stage.	Early identification of any root cause that can negatively impact a pollution to watercourse.	This element is not within the remit of the current plan but if investment is required for future AMPs this may be considered.	January 2026	December 2026

Prioritisation of pollution incident reduction actions

Our ambition is bold and clear: to drive down pollution incidents significantly and deliver meaningful improvement.

We prioritise our actions based on the potential severity of issues, the frequency or repeat nature of incidents, the speed at which we can achieve impact, and the proven efficacy of available interventions. This ensures we focus effort where it will make the greatest difference, although many of the essential actions have low immediate benefit as they are enabling actions.

Our prioritisation remains dynamic and under continuous review, with our pollution working groups playing a critical role in reassessing risk, rebalancing actions, and ensuring we consistently make informed, evidence-based decisions that maximise impact.

We will also use the DWMP options appraisal and optimisation tool to prioritise pollution reduction actions once the next DWMP is underway.

GOVERNANCE, MONITORING AND REVIEW

We recognise that strong, consistent governance is essential to delivering our PIRP and to maintaining our reputation for doing what we say we will.

Our Board is fully committed to overseeing this plan and ensuring it is delivered on time, transparently, and to a high standard, in line with the commitments we have made.
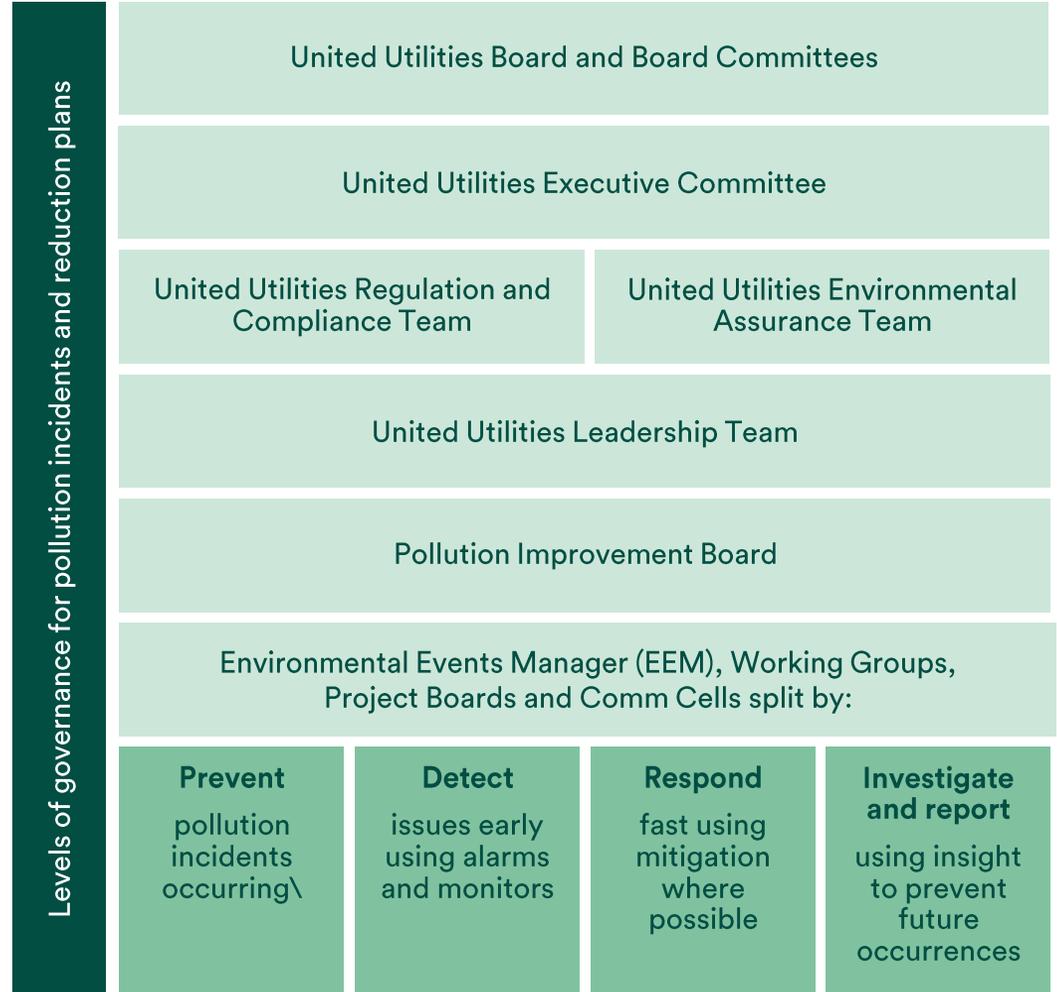
We take this responsibility extremely seriously. That is why we are strengthening our assurance framework by expanding the way we monitor and challenge our performance. We are introducing a dedicated risk and assurance team whose role is to provide independent scrutiny and help hold us to account.

Our Compliance Committee (a sub-committee of the Board) will continue to regularly review progress against our objectives. Where needed, they will reinforce responsibility and accountability across the leadership team to ensure we stay on track and deliver the commitments we have made.

This PIRP sets out the actions we are taking to reduce the risk of pollution incidents affecting the water environment, built on a detailed understanding of the root cause of these incidents. Our operational directors have confirmed that the actions in this plan are funded and are deliverable, and our Board has formally approved it.

We will track progress at multiple levels across the organisation. This includes monthly reporting to the executive team on pollution incident performance, as well as quarterly updates on progress against our planned actions.

We will also review the plan with the Environment Agency every quarter to openly discuss progress and ensure we remain aligned. Each year, the plan will be refreshed to reflect our performance, emerging risks, and any new insights. This will inform the next annual version of the plan.

Levels of governance for pollution incidents and reduction plans

| United Utilities Board and Board Committees |
| United Utilities Executive Committee |

| United Utilities Regulation and Compliance Team | United Utilities Environmental Assurance Team |

| United Utilities Leadership Team |

| Pollution Improvement Board |

| Environmental Events Manager (EEM), Working Groups, Project Boards and Comm Cells split by: |

| **Prevent** pollution incidents occurring\ | **Detect** issues early using alarms and monitors | **Respond** fast using mitigation where possible | **Investigate and report** using insight to prevent future occurrences |

ASSURANCE

This PIRP has been developed in full alignment with the guidance issued by the Environment Agency, ensuring that the content presented meets regulatory expectations.

To provide confidence that the information within the PIRP is reliable, accurate, and complete, we have applied a comprehensive three lines of assurance framework.

The first and second lines of assurance have been delivered by United Utilities' internal teams, who have reviewed the data, validated assumptions and confirmed that the plan reflects the regulatory requirements. To strengthen this further, we commissioned an independent third-line review to provide external challenge and assurance.
Jacobs, acting as our Independent Technical Assurer (ITA), has undertaken a detailed assessment of the PIRP. Its work has focused on two areas:

- Verifying delivery of the actions committed to in the 2025 plan; and
- Confirming that all Environment Agency requirements have been fully captured, evidenced, and traceably incorporated into the PIRP.

Following its review Jacobs reported that they did not find any material issues or misstatement, confirming that progress was as stated within this document.

This combined assurance approach provides a high level of confidence that the PIRP is compliant and the content within is reliable, accurate, and complete.

We will continue to implement a three lines of assurance approach for future PIRPs and will share findings of such reviews.
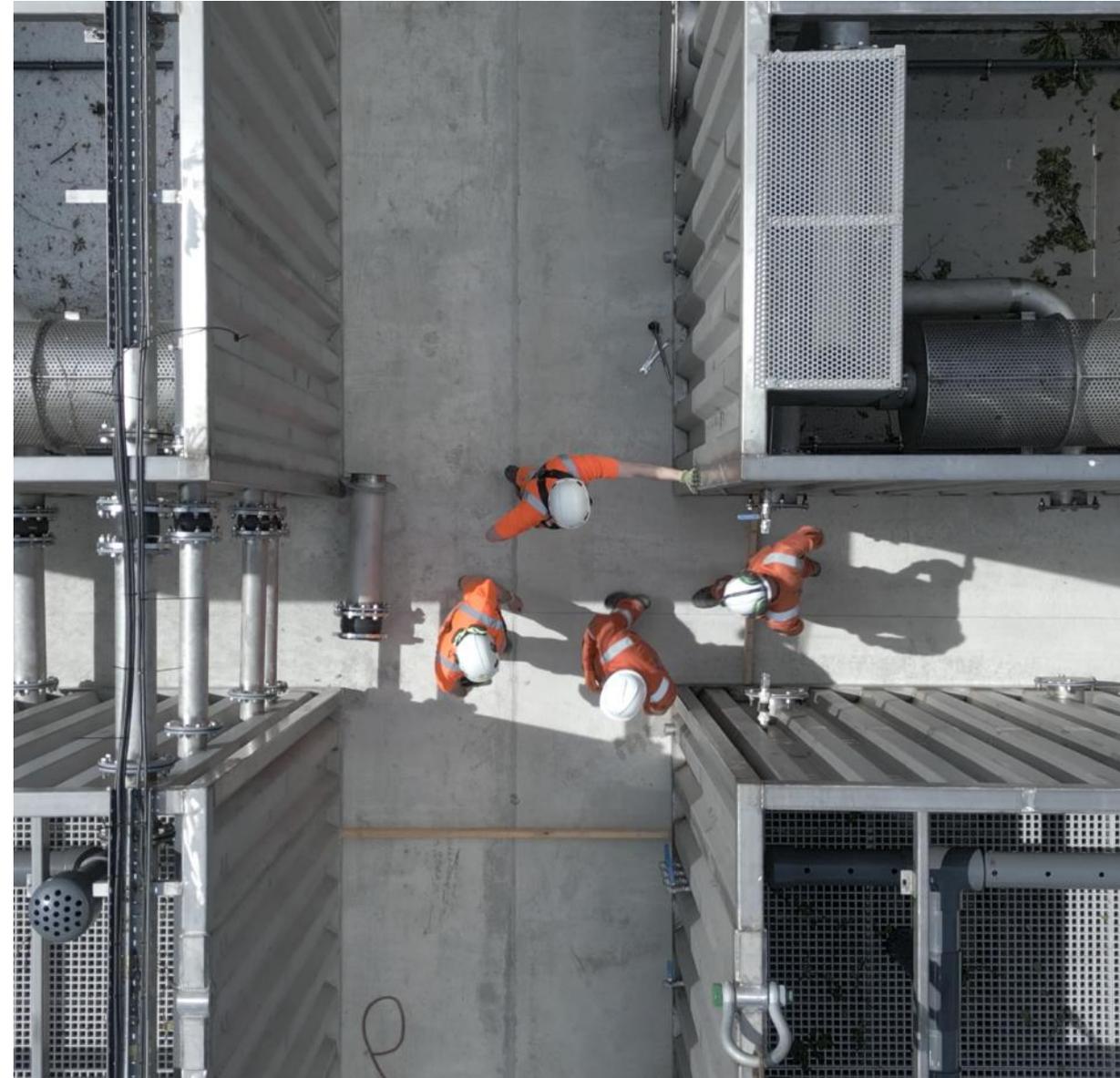
We are committed to delivering the actions in our PIRP throughout 2026 and will continue looking for new ways to improve our performance.

We will be sharing regular progress updates with the Environment Agency, both against this plan and to discuss new ideas we may have for reducing pollution.

Going forward, we will publish an updated Pollution Incident Reduction Plan (PIRP) annually to share any updates. From 2027, we will also publish an Implementation Report which will provide feedback on the effectiveness of this plan.

The next update will be available in April 2027, when we will report on the benefits we have been able to deliver and our progress in achieving our ambitions. We would really value your comments and feedback on this plan.

Share your thoughts at myview@uuplc.co.uk

GLOSSARY

The following definitions and acronyms apply throughout this Pollution Incident Reduction Plan (PIRP) unless otherwise stated.

AMP (Asset Management Period): the water industry develops plans on a five-year basis. Each five-year period is called an AMP, thus AMP7 covered 2020–25 and AMP8 covers 2025–30.

Blockage: a build up of debris within an asset.

CSO (Combined Sewer Overflow): an asset on our sewer network that acts as a relief point when combined sewers are overwhelmed with rainwater allowing discharge into rivers/watercourse.

DWMP (Drainage and Wastewater Management Plan): 25-year strategic plan that is reviewed and updated every five years that sets out how we will ensure that the needs of the environment, customers and communities are met now and in the future.

EEM (Environmental Events Management Desk): this is a single, reliable point of contact for any potential wastewater pollution incident.

EPA (Environmental Performance Assessment): an assessment framework used by the Environment Agency each year to report on environmental measures in the water sector.

FOG (Fats, oils and grease): refers to substances from food preparation and industrial processes that enter the sewer system and can solidify, accumulate, and cause blockages.

Rag and wipes: refers to period products and wet wipes that enter the sewer system and can cause blockages.

FSE (Food Service Establishment): refers to business premises that serve food and so may be a potential source of FOG into the network.

NIRS (National Incident Recording System): the Environment Agency's central database for logging, tracking, and analysing environmental incidents across England.

ODI (Outcome Delivery Incentives): a performance mechanism set by Ofwat which allows companies to earn rewards if they beat targets. and be penalised if they fail targets.

Ofwat: economic regulator for the water sector.

PIRP (Pollution Incident Reduction Plan): annual, publicly published plan that outlines how we will reduce the frequency and impact of pollution incidents attributable to water and wastewater systems.

PCL (Performance Commitment Levels): specific target or level of performance set by Ofwat that a water company is expected to achieve over a price control period. It is used in setting incentives and penalties for over or under performance.

PM (Preventative Maintenance): planned, routine work done to keep equipment, buildings, or systems in good condition, to reduce breakdowns and unplanned interruptions to service.

Pollution incident: when untreated wastewater or clean water escapes from the system hand harms the environment, such as rivers and streams.

Serious pollutions: the sum of category 1 and 2 pollutions.

Total pollutions: the sum of category 1, 2 and 3 pollutions.

WIRI (Water Industry Regulation Incidents): guidance from the Environment Agency introduced on 1 January 2026 that sets out how water companies are expected to report and record pollution incidents.

WSZ (Water Supply Zones): we divide the network into water supply zones in order to manage water quality, pressure, and regulatory compliance.

FIND OUT MORE

Find out more about our environmental improvement
plans and other work we are doing across the company.

Reducing pollution >	Improving the North West's rivers >
How to report a pollution >	Our environmental, social and governance approach >
Our business plan for 2025–30 >	What we are doing in your area >
Our action plan for Windermere >	Windermere: what you can do >
Stop the Block: help us prevent blockages >	Understanding misconnections >
Change the Cycle: period product disposal >	How do storm overflows work? >

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