



from
**Southern
Water** 

Pollution Incident Reduction Plan

April 2026



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Foreword



Lawrence Gosden
Chief Executive Officer

Protecting and enhancing the environment is one of Southern Water's most important responsibilities – for today and for the generations to come.

Our Pollution Incident Reduction Plan (PIRP) 2026 is central to this mission. It builds on previous plans and the improvements made as part of our 2023–25 turnaround. We have already reduced the risk of pollution by rebuilding our worst performing 150 pumping stations and treatment sites. Our strategy has then been to intervene proactively by installing thousands of sewer level monitors, hydraulic flow meters and electrical monitoring sensors, alongside investing in our Control Centre, building predictive models to spot failures in our assets before they occur.

By digitising our sewer network, installing 34,000 sewer level monitors linked through to a remote AI monitoring platform, we've been able to spot around 20% of our sewer blockages before they happen. This means we can clear them before they cause flooding, eliminating harm to the environment and damage to customers' properties. This multi-million-pound investment has been supported by our shareholders who have injected more than £2.5 billion of equity since 2021. At the same time, they've received no dividends, and none will be paid before 2030 at the earliest.

While we have made steady progress over recent years, we still have much more to do and we know our customers, communities and regulators expect better. Pollution incidents remain too frequent and, in some cases, too serious. Although we have achieved a 38% reduction in total incidents since 2020, our 2025 performance remained consistent with 2023 and 2024, and this is not the scale of improvement we set out to deliver. We acknowledge that the number of serious pollution incidents remains unacceptably high, so we continue to focus on how to reduce these as a top priority.

The most significant root causes of serious pollution incidents in 2025 were burst rising mains (70%) and blockages in our sewer network (15%). In our PIRP 2025, we included funding for additional pressure monitoring on our rising mains. This year, we will build on the new pressure sensors by using their data to proactively lower operating pressures in our rising mains, helping to reduce the risk of future bursts. We are also planning to spend £26 million to replace rising mains, which includes an additional £5 million within the PIRP 2026 budget. This will increase our planned survey and replacement programme by 21km, bringing the total programme coverage to 41km.

As most foul sewer incidents are due to blockages, ensuring that fat and wet wipes are not put into the drains remains essential to stopping incidents before they happen. We're spending a further £2.5 million to work with customers in targeted hotspots. Where blockages do occur, we're increasing the size of our teams and giving them better technology, so we can identify risks sooner and respond faster. We're also learning from our partners in the community, and our contractors, and investing in new vehicles and equipment to support our teams.

Self-reporting of pollutions – where incidents are reported directly to us first – continues to improve. We've been using social media campaigns to alert the public to report potential pollutions to us directly. We'd like to thank customers who have responded. The faster we can investigate a possible incident, the quicker we can respond and reduce any impact on customers and the environment.

We serve communities across Kent, Sussex, Hampshire and the Isle of Wight – an area which is a unique and special place. In densely populated areas such as Southampton and Portsmouth, we have many shellfish waters, which need to be protected. We're privileged to play a role in protecting chalk streams – the Rivers Test and Itchen in Hampshire and the Stour in Kent: these are not only special ecosystems supporting wildlife habitats but also an important source of water for our area.

Reducing pollution incidents remains a critical mission for the whole company, as we all live and work in the environment we seek to protect. Our approach is transparent. We're making improvements but we still have challenges to overcome, and we'll continue to do this working closely with the Environment Agency (EA). I approve and commend this Pollution Incident Reduction Plan 2026.

Executive summary

Our Pollution Incident Reduction Plan 2026 takes a detailed look at what caused pollution incidents in 2025 and shows how we're continuing our work, taking action to reduce incidents in 2026 and beyond.

What is a pollution incident?

In the context of our Pollution Incident Reduction Plan, pollution incidents are defined as per section 205A(3) of the Water Industry Act as discharges of any content from the undertaker's system which may be harmful to health or the quality of the environment.

How are pollution incidents categorised?

Category 1 – major, serious, persistent and/or extensive impact

Category 2 – significant impact

Category 3 – minor or minimal impact

Section 1: Understanding our 2025 pollution performance

We took an in-depth look into our pollution performance using an analysis of incidents, their causes and their categorisation. The figures used are based on our latest forecast which takes into account the best available data when this report was produced.

Incidents and targets:

The total number of sewerage **pollution incidents** in 2025 was 249 (see table 1). This was slightly lower than the previous year but above our Ofwat target.

Table 1: Understanding our 2025 pollution performance against Ofwat targets and 2020–24 previous performance.

Previous Years Pollution Performance	Category	2020	2021	2022	2023	2024	2025
Total	Cat 1	0	3	2	4	1	1
	Cat 2	4	9	3	9	14	12
	Cat 3	398	360	353	221	254	236
Total	Total	400	372	358	234	269	249
PCLs	Cat 1–3	98	64	91	88	77	99
Self Reporting	%	88%	90%	90%	69%	82%	87%

Executive summary – continued

Section 1: Understanding our 2025 pollution performance (continued)

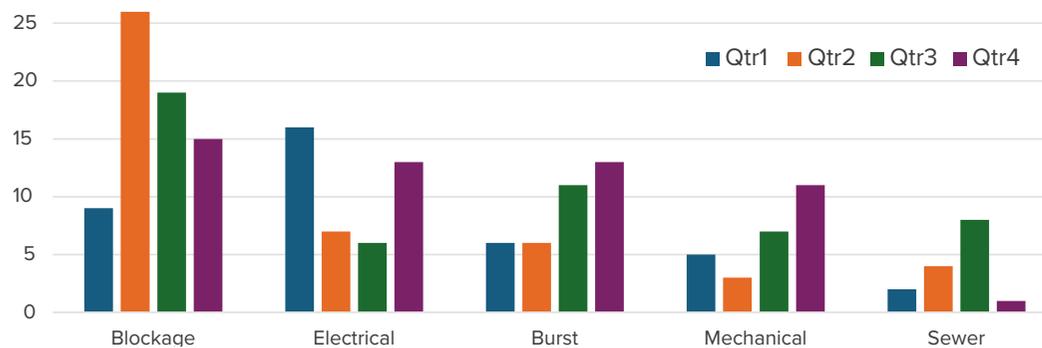
Incident causes:

When we carried out a root cause analysis on the total number of 2025 incidents covering category 1–3 (256 incidents were included at the time of analysis), we saw there was a reduction in incidents from our wastewater pumping stations and foul sewers, however incidents from rising mains increased (see figure 1). Most pollution incidents were caused by blockages in the sewer, due to fat or things that don't break down in the sewers, known as rag. There was a spike in blockages in the second quarter of the year (see figure 2).

Figure 1: 2020–25 pollutions by asset



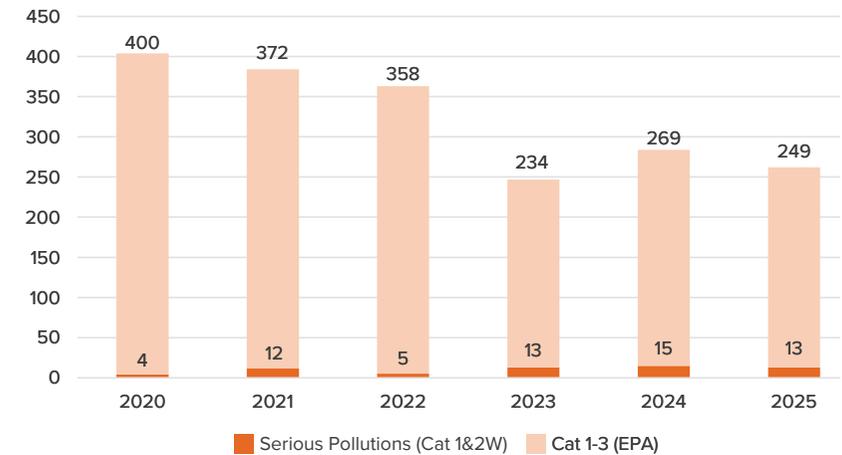
Figure 2: Category 1–3 Pollution performance per wastewater asset type



Serious pollution incidents:

In 2025, a total of 13 pollution incidents were categorised as serious (category 1–2).

Figure 3: Wastewater pollution category split



Executive summary – continued

Section 2: What we did in 2025 to reduce pollution incidents (continued)

The delivery of the PIRP 2025 has strengthened operational resilience across wastewater pumping stations, rising mains and sewer level monitors, with the impact starting to show. Some delays and process gaps mean full impact will rely on ongoing recruitment to be completed and increasing the speed of delivery into 2026 for our rising main replacements.

We implemented a range of measures to minimise pollution incidents, including overarching measures and measures aimed at different assets.

Overarching measures

Focused on high-risk root causes, we began a journey to survey 439 of our permanent generators, completing remedial works on electrical assets at three wastewater pumping to reduce risk and installing 500 monitoring devices to provide insight into our electrical asset health and lead to proactive measures before failures.

To improve control of assets, we are planning to replace any level controllers – the equipment that reads and transmits the level of sewage in tanks and wells – that have failed or are not working properly, with newer more effective models, starting with our highest risk assets in early 2026.

We are continuing to expand our condition-based monitoring (CBM) coverage by installing an additional 2,500 CBM sensors across our wastewater pumping stations and wastewater treatment works (WWTW) estate.

To enable us to tackle the increased volume of proactive alerts and work orders, we have provided our Proactive Control Centre with a dashboard overview of alerts and started recruiting additional resource to support in the field.

We are improving our pollutions response and reporting, bringing in a new Pollution Management System due to roll out in the first quarter of 2026 and providing training for our Level 1 incident managers to support them in identifying and tackling risk earlier.

Foul sewers

- Began fixing infiltration and inundation (I&I) issues using new modelling tools.
- Started identifying and planning repairs for dual manholes in a high-risk area to block this pollution pathway.
- Launched surveys and cleaning for problem syphons, with repairs planned for 2026.

Rising mains

- Added more smart sensors across the rising main network to quickly spot bursts or pressure changes – 720 sewer level monitors and 35% of the additional pressure monitors were installed by December 2025.
- Started repairing and replacing the highest-risk rising mains to prevent bursts, reduce pollution risk, and improve overall network reliability – these replacements are planned in across our current Business Plan period (2025–30), with three completed in 2025.

Wastewater treatment works

- Began the installation of 22 wastewater effluent monitors – BOD monitors – at high-risk wastewater treatment works, with the remaining sites due to complete in early 2026.
- Started a third iteration of our Go to Green project, with desktop and detailed site surveys completed, and detailed surveys identifying four remedial work programmes due to complete in 2026. Further surveys and investigations will continue in 2026.
- Began work to improve our Flow Breach Process and develop an Asset Criticality model for WWTW and will continue into 2026.

Wastewater pumping stations

- Restored full pump performance at six wastewater pumping stations, through repairs, improvements and replacements of pump assets.
- Made upgrades to monitoring at Bronze CBM standard sites was started, bringing these sites up to Silver standard where we can use proactive analytics to identify risk earlier and move away from reactive alerts only.

Executive summary – continued

Section 3: Our Pollution Incident Reduction Plan 2026

Our PIRP 2026 focuses on serious pollution incidents (category 1–2) and the total number of incidents across all categories (category 1–3), pre-WIRI changes (see page 96 for more information on WIRI).

We are targeting an impact range – that’s the number of pollution incidents avoided – of 50 to 89 incidents.

Learning from the critical review of our PIRP 2025, we are targeting failure modes seen in 2025, focusing on serious pollution failure modes, sensitive sites and tackling total pollutions, as well as enabling our people with improved processes. Dry day spills are not covered here – they are being tackled by our [Clean Rivers and Seas Taskforce](#).

The PIRP 2026 aims to convert insights into action by:

- tackling serious pollution failure modes
- improving asset resilience
- completing enabling works for future reduction.

Our Pollution Incident Reduction Plan is closely linked with our Drainage and Wastewater Management Plan (DWMP). These strategic programmes underpin regulatory compliance, enhance resilience and drive environmental improvement across the wastewater network (see page 97 for more on the DWMP).

This Pollution Incident Reduction Plan has been published in accordance with Sections 205A-B of the Water Industry Act 1991 and the statutory guidance issued by the Environment Agency/Natural Resources Wales. It will remain available on our website for a minimum of five years from publication and will not be updated after publication.

We’re using four work streams:

Serious pollutions

Measures focus on tackling the common failure modes to prevent the failure before a pollution and improving detection and response to incidents to decrease the chance of a pollution becoming a serious incident, focusing on:

- burst rising mains, blockages, bead containment at wastewater treatment works, and removing Single Points of Failure at sensitive sites such as bathing waters and shellfish areas
- centralising mobile-generator logistics which will also speed up response to power failures, addressing key failure modes seen in 2025 and improving resilience against power-related instability.

Total pollutions

This workstream targets the wider asset base, prioritising activity around high-risk locations, it:

- strengthens pump performance
- improves incident management
- accelerates sewer level monitor repair times, and enhances air-valve maintenance and replacement.
- reduces power related pollution risks by adding electrical monitoring and new generator sockets.

People and process

Building on learning from 2024–25, this workstream:

- introduces a central repository for incident learnings, adds Operational Control Centre (CC) training capacity, and develops live and dry-run training for first responders
- makes improvements to evidence capture to support faster, more consistent and effective pollution response.

Future pipeline

Planning for the remainder of this Business Plan period 2025–30 includes:

- measures being explored for 2026 or requiring further scoping for 2027–28 start. These include enabling activities such as enhanced Wastewater Network training and BAU (business as usual) improvements including resolving any issues with tidal flaps and network syphons.

Section 1: Understanding our 2025 pollution performance

This section analyses our pollution performance. It gives an analysis of pollution incidents, the causes and their seriousness.

1.1 A summary of pollution incidents

Our 2025 pollution performance shows a slight improvement compared to 2024 (this is based on our latest forecast which takes into account best available data), however the total number of incidents remained higher than our Ofwat performance commitment level and our internal target. Our PIRP covers all pollution incidents attributable to Southern Water’s assets, excluding permitted treated effluent discharges.

The total number of sewerage pollution incidents for 2025 was 249. Our Ofwat target for 2025 was 99. Out of the total number, 13 were categorised as 1–2 or serious incidents.

The main cause of pollution incidents is blockages. In 2025 they made up 27% of all category 1–3 wastewater pollutions – this is an increase of 5% compared to 2024. While blockages have gone up, electrical and mechanical failures have gone down.

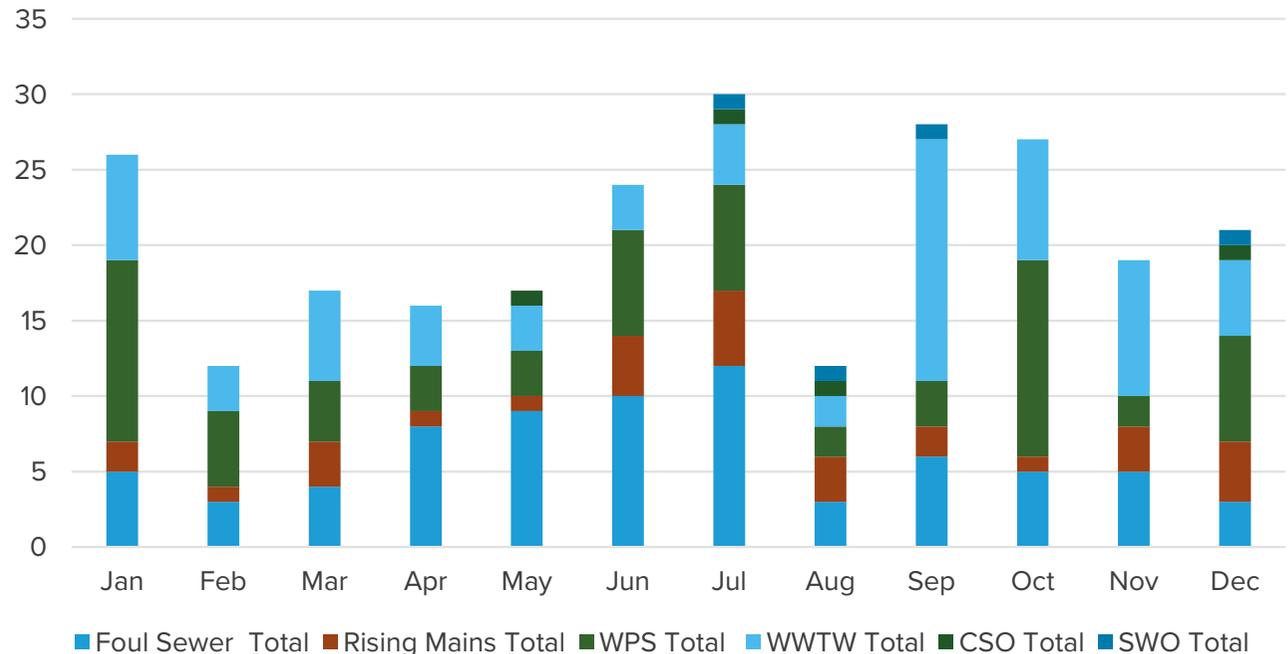
Monthly trends highlight persistent pressure from burst rising mains and sewer blockages, which continue to drive both a high frequency of pollution incidents and high-impact incidents. Wastewater pumping station performance improved in the middle of the year, however electrical and mechanical issues still contributed to avoidable incidents.

The data reinforces the need for a sharper focus in 2026 on:

- reducing blockages through targeted activities and making more **sewer level monitors** available
- strengthening rising main resilience
- improving early detection and response to keep any environmental impact to a minimum.

These insights – and the many others detailed in this report – have shaped how we have prioritised initiatives in the PIRP 2026.

Figure 4: Graph summary of 2025 pollution incidents by month and asset type.



Key:

FS – foul sewer

RM – rising main

WPS – wastewater pumping station

WWTW – wastewater treatment works

CSO – combined sewer overflow

SWO – surface water outfall

How do sewer level monitors work?

Sewer level monitors are placed in sewers to monitor the level of wastewater. They send data back to our control centre and can even predict where there may be blockages. This means we can get a team out to check, before the sewer gets blocked. We aim to have more than 95% of our 34,000 sewer level monitors fully operational at any one time.

Section 1: Understanding our 2025 pollution performance (continued)

Table 2: Summary of 2025 pollution incidents.

Asset Type	Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Foul Sewer	Cat 1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 2	0	0	0	0	1	0	1	0	0	0	0	0	2
	Cat 3	5	3	4	8	8	10	11	3	6	5	5	3	71
Foul Sewer Total	Total	5	3	4	8	9	10	12	3	6	5	5	3	73
Combined Sewer Overflows (CSO)	Cat 1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 2	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 3	0	0	0	0	1	0	1	1	0	0	0	1	4
CSO Total	Total	0	0	0	0	1	0	1	1	0	0	0	1	4
Surface Water Sewer and associated outfalls (SWO)	Cat 1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 2	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 3	0	0	0	0	0	0	1	1	1	0	0	1	4
SWO Total	Total	0	0	0	0	0	0	1	1	1	0	0	1	4
Rising Mains	Cat 1	0	0	0	0	0	0	0	0	1	0	0	0	1
	Cat 2	0	0	0	1	0	3	2	1	0	0	0	1	8
	Cat 3	2	1	3	0	1	1	3	2	1	1	3	3	21
Rising Mains Total	Total	2	1	3	1	1	4	5	3	2	1	3	4	30
Wastewater Pumping Stations	Cat 1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 2	0	0	0	0	1	0	0	0	0	0	0	0	1
	Cat 3	12	5	4	3	2	7	7	2	3	13	2	7	67
WPS Total	Total	12	5	4	3	3	7	7	2	3	13	2	7	68
Wastewater Treatment Works	Cat 1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 2	0	0	0	0	0	0	0	0	0	0	1	0	1
	Cat 3	7	3	6	4	3	3	4	2	16	8	8	5	69
WTW Total	Total	7	3	6	4	3	3	4	2	16	8	9	5	70
Wastewater Assets	Cat 1	0	0	0	0	0	0	0	0	1	0	0	1	1
	Cat 2	0	0	0	1	2	3	3	1	0	0	1	1	12
	Cat 3	26	12	17	15	15	21	27	11	27	27	18	20	236
Wastewater Assets Total	Total	26	12	17	16	17	24	30	12	28	27	19	21	249
Water Distribution	Cat 1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 2	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 3	4	3	3	1	1	4	10	5	5	4	3	4	47
Water Distribution Total	Total	4	3	3	1	1	4	10	5	5	4	3	4	47
Water Supply Works	Cat 1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 2	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cat 3	0	0	0	0	0	1	0	0	0	0	0	0	1
Water Supply Works Total	Total	0	0	0	0	0	1	0	0	0	0	0	0	1
All Assets	Cat 1	0	0	0	0	0	0	0	0	1	0	0	0	1
	Cat 2	0	0	0	1	2	3	3	1	0	0	1	1	12
	Cat 3	30	15	20	16	16	26	37	16	31	31	21	24	283
All Assets Total		30	15	20	17	18	29	40	17	32	31	22	25	296

Section 1: Understanding our 2025 pollution performance (continued)

1.1 Past performance vs Ofwat performance commitment levels (PCLs)

Our historical pollution performance has remained above Ofwat’s **performance commitment levels** (PCL), and we did not meet 2025’s PCL, which considers sewerage pollutions only.

However, we have seen improvement since 2021, against a backdrop of tightening regulatory expectations. Our 2025 performance continued with a slightly improved performance compared to 2024, based on the latest end-of-year forecast.

During 2024–25, our **self-reporting** performance improved. We started our 2026 social media campaigns about reporting pollution incidents early in the year, to protect and further improve self-reporting performance in 2026.

The forward look to 2029 on a like for like basis, shows that, without the continued acceleration of PIRP delivery and sustained **operational grip** (see page 12), we remain off trajectory. Achieving the required downward glide slope, will rely on reducing blockages and burst rising main risk at scale, as well as improving asset resilience, and embedding faster, more consistent operational response.

What is self-reporting?

Self-reporting is when a pollution incident is reported to the Environment Agency by us, not by someone else. We continue to use our website for customers spotting a possible pollution incident to contact us directly. Being the first to know about an incident, means we can quickly take action when and where it’s needed.

What are performance commitment levels?

Annual performance commitment levels – or PCLs as they’re known – are set by Ofwat every five years.

Figure 5: Pollution performance glide path showing total sewerage pollutions, covering 2020–25 performance and forward look forecast to 2029 based on pre-WIRI (Water Industry Regulation Incidents) targets.



Table 3: Summary of pollution incidents in previous years, Ofwat performance commitment levels (PCLs) and self-reporting performance.

Previous Years Pollution Performance	Category	2020	2021	2022	2023	2024	2025
Total	Cat 1	0	3	2	4	1	1
	Cat 2	4	9	3	9	14	12
	Cat 3	398	360	353	221	254	236
Total	Total	400	372	358	234	269	249
PCLs	Cat 1–3	98	64	91	88	77	99
Self Reporting	%	88%	90%	90%	69%	82%	87%

Section 1: Understanding our 2025 pollution performance (continued)

Pollution performance for 2025 compared to our forecast and previous year's performance.

Our category 1–3 pollution performance shows a 13% decrease for foul sewer and a 24% decrease for wastewater pumping station, with an increase of 7% for rising main and a 35% for wastewater treatment works.

This data reflects the forecast for Southern Water's end of year performance position as of 16 March 2026.

- Rising main performance saw a 7% increase in incidents. Notably, the first half of 2024 performed worse than the equivalent period in 2025.
- Wastewater pumping station saw a decrease in pollution numbers by 24%. A marked decrease in performance began in the second half of October 2025 and continued through to year-end, aligning with rainfall patterns.
- Wastewater treatment works performance saw a 35% increase in incidents compared to 2024.
- Foul sewer saw a 13% reduction in annual pollution numbers. Up until May, category 1–3 foul sewer pollution incidents were approximately 50% lower than during the same period in 2024.

Figure 6: Rising main (RM) forecasted final outturn vs 2024 actual performance

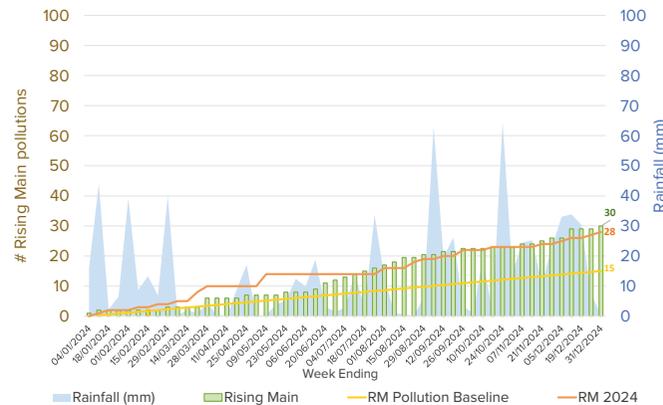


Figure 7: Wastewater pumping station (WPS) 2025 forecasted final outturn vs 2024 actual performance

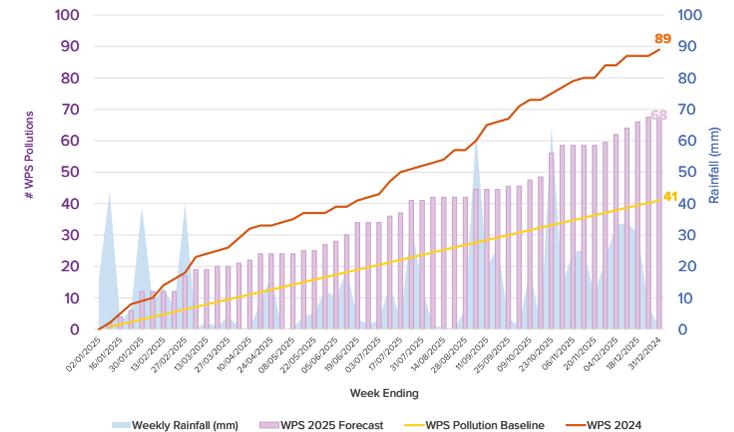


Figure 8: Wastewater treatment works (WWTW) 2025 forecasted final outturn vs 2024 actual performance

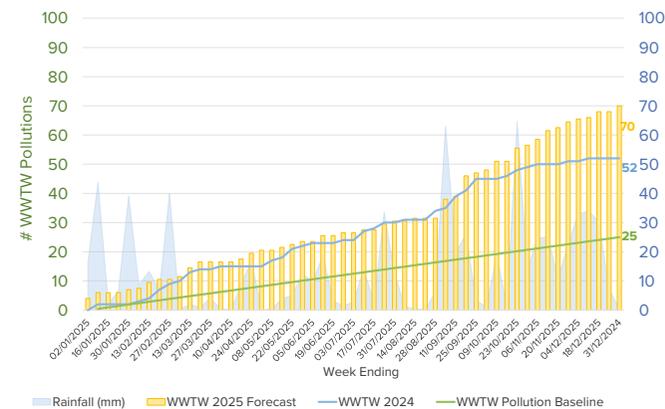
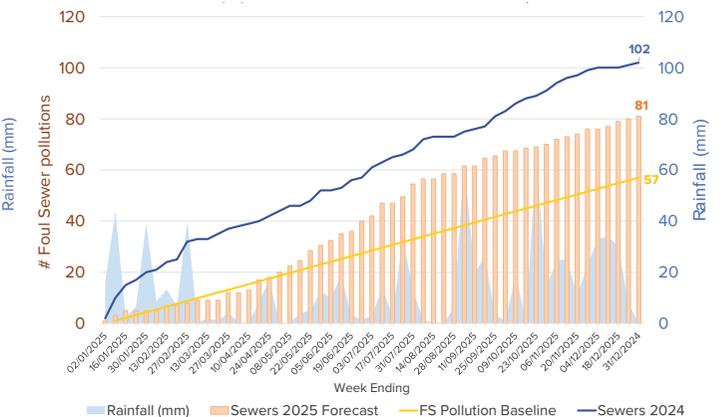


Figure 9: Foul sewer (FS) 2025 forecast final outturn vs 2024 actual performance



Section 1: Understanding our 2025 pollution performance (continued)

The rate of repeat pollution sites increased slightly to 15% from 14% in 2024, showing that the targeted site and asset investments have sustained a positive **impact**, and we continue to prevent repeat pollutions at the same rate as 2024 overall.

What do we mean by ‘impact’?

This is the number of pollution incidents prevented (by 2025) or expected to be prevented by the measure(s). It’s also referred to as the pollution reduction benefit(s).

What is operational grip and why is it so important?

It’s our way of measuring the level of control our operational management teams have across everyday operations to deliver performance. It includes operational awareness – understanding the operating status and if there’s an emerging risk – and clarity on performance, using data for making informed and effective solutions.

Monitoring asset health, tracking network performance and identifying issues early, such as bursts or blockages, are all part of maintaining operational grip – they enable us to have control over our sites and operation, so we can avoid and recover from issues.

2025 Newcomer sites/assets (category 1–3)

- A total of 65% of all 2025 pollution sites were newcomers – locations with no recorded category 1–3 incidents between 2020–24.
- Foul sewers show the highest newcomer rate at 96%, making hotspot identification and sewer level monitor placement more challenging.
- There were 18 rising mains newcomer sites in 2025 – an increase compared to 10 in 2024 – signalling emerging asset-health risks requiring network-wide interventions.
- Wastewater treatment works continue to show the lowest newcomer rate (31%), but the slight decrease compared to 2024, indicates the potential for an increase in repeat pollution incidents at treatment works.

2025 Repeat pollutions (category 1–3)

- A total of 15% of 2025 polluting sites (32 out of 219) also polluted in 2024 – this is the same as the previous year (15%, 34 repeat sites 2024).
- Increases in repeat events at wastewater treatment works (+10%) and wastewater pumping stations (+3%) were offset by reductions for rising mains (11%) and foul sewers (3%).
- Overall, the number of sites repeating has decreased slightly, from 34 in 2024 down to 32 in 2025, and ongoing improvements for learning from incidents is targeting a continued reduction in the number of repeating sites.

Key insight

In 2025 there was both a high influx of new pollution sites and a stable but persistent proportion of repeat sites. The PIRP 2026 will prioritise:

- reducing emerging risk across the wider asset base
- preventing repeat incidents at wastewater treatment works and wastewater pumping stations
- improving detection, operational response and asset resilience.

Table 4: Summary of 2025 newcomer analysis.

Premise	No. Newcomer Sites	Total Sites	%
Rising Main	18 (10)	26 (22)	69%
Foul Sewers	91 (91)	95 (98)	96%
Wastewater Pumping Stations	22 (24)	59 (70)	37%
Wastewater Treatment Works	12 (12)	39 (39)	31%
Wastewater Summary	143 (137)	219 (229)	65%
Water Distribution	45	46	98%
Water Supply Works	1	1	100%

Table 5: Summary of 2025 repeat site analysis.

Premise	No. Repeat Sites	Total Sites	%
Rising Main	3 (5)	26 (22)	12%
Foul Sewers	1 (4)	95 (98)	1%
Wastewater Pumping Stations	15 (16)	59 (70)	25%
Wastewater Treatment Works	13 (9)	39 (39)	33%
Wastewater Summary	32 (34)	219 (229)	15%
Water Distribution	1	46	2%
Water Supply Works	0	1	0%

Section 1: Understanding our 2025 pollution performance (continued)

1.2 Incident causes

Root cause analysis – failure modes, immediate cause and root causal factors

Our pollution investigations use the ‘5 Whys’ method to identify the real root cause and any issues in how incidents were detected or handled. We also review human, asset and external factors to strengthen learning and prevent repeat events.

An overview of root cause analysis (RCA)

When a pollution incident happens, we investigate what went wrong.

We start from the main issue and work down to the specific asset failure. For more serious incidents, we gather extra detail, but this level of insight isn’t always available for every case.

How we identify the immediate cause

We break incidents into two parts:

- Failure mode: the broad category of what went wrong.
- Immediate cause: the specific reason the asset failed.

To find the immediate cause, we use the ‘5 Whys’ method. This approach means asking ‘why?’ repeatedly until we reach the underlying cause.

Here’s an example of the ‘5 Whys’ method:

A site has a power cut, and the back-up generator fails.

1. Why did the pollution happen?
→ the pumps weren’t running.
2. Why weren’t the pumps running?
→ there was no power.
3. Why was there no power?
→ there was a power outage.
4. Why didn’t back-up power work?
→ there is a back-up generator.
5. Why didn’t the generator run?
→ the generator failed.

Failure mode: electrical

Immediate cause: generator failure

Summary tables for each asset type are provided throughout. Where an immediate cause is attributed to less than 5% of the incidents for the asset type, these immediate causes are grouped under the failure mode.

Detection and response

We also look at whether anything slowed down how quickly we spotted or responded to the issue. We use the same ‘5 Whys’ approach to uncover these delays and include these findings in our overall 2025 pollution performance root cause analysis.

Causal factors

For more serious incidents, or incidents where specific factors need further investigation we can go further and explore why the asset failed in more detail, to look for causal factors. Although this isn’t required for every investigation today, we do look at several areas:

- Human factors – reviewed by our Human Factors Practitioners
- Asset health issues – investigated by maintenance teams locally
- External factors – noted when known.

As part of the PIRP 2026, we’re improving root cause analysis training, so these causal factors are recorded more consistently and support longer-term learning. At present, we have awareness of these factors, but they aren’t recorded in the same structured way as the main root cause analysis – but where we have the information this has been included.

Examples of root causal factors

These are the wider, systemic reasons that incidents occur. They are often linked to processes, controls or infrastructure.

Some examples of what we’ve found during previous investigations are:

- Asset deterioration: older or worn-out assets (e.g. pipes failing).
- Customer behaviour: items other than the three Ps – pee, poo and paper – flushed, or food waste down sinks.
- Misconnections: pipes incorrectly connected, causing pollution or flow issues.
- Inadequate maintenance: wrong or missing maintenance tasks.
- Lack of maintenance: a maintenance task exists but wasn’t completed.

Section 1: Understanding our 2025 pollution performance (continued)

A review of the root causes of pollution incidents in 2025 for categories 1 to 3 – failure modes and immediate causes

In the second quarter of 2025, there was a spike in blockages as an immediate cause of pollution incidents. This was followed by a decline in this type of cause for the remainder of the year. Despite this, pollution incidents caused by blockages have increased year-on-year and they are the most significant failure mode in 2025, with a total of 27% of these.

Here is an overview of the different immediate causes of pollution incidents from our network in 2025. Percentages are based on total pollution incidents, category 1 to 3 at the time of the analysis, which was 256 incidents.

What's FOG and rag?

FOG stands for fats, oils and greases – these get down the kitchen sink after cooking or when preparing food. Rag includes wet wipes and period products – they're non-biodegradable.

Both FOG and Rag can block sewer network pipes and pumps, which can cause pollution incidents.

We work with customers to explain the importance of only flushing the three Ps – pee, poo and paper.

Blockages: 27% (a total of 69)*

Blockages have increased as a root cause of pollution incidents, with a figure of 27%*. This is an increase of 6% compared to 2024 – the previous year – when the figure was 21% with a total of 55 pollution incidents.

Sewer blockages can cause leaks from foul sewers. These blockages can be due to a build-up of fats, oils and grease – **FOG – and rag**, which relies on customer behaviour. Our FOG and unflushables team works with customers to provide information about how FOG – for example from cooking – can be reduced.

A total of 6% of our manholes currently contain sewer level monitors, and moving into 2026, the focus is to optimise the pollution reduction benefit we can achieve from these assets. We want to do this by increasing the frequency of monitoring data, decreasing the time to fix any problems.

Electrical and mechanical

Electrical and mechanical issues as a failure mode have shown a decrease in both areas. A total of 16% of causes were electrical in 2025 (42), showing a decrease of 6% from the previous year (22%, 58 pollution incidents). For mechanical, a total of 10% of incidents (26) were due to this failure mode, which is down by 7% compared to 2024 (17%, 44 pollution incidents).

This type of pollution was due to failure of plant on site, leading to a spill or insufficient treatment. Examples include airlocked pumps, screens failing, assets deteriorating or incorrect commissioning.

The PIRP 2025 continued a focus on overall asset resilience including the installation of electrical monitoring devices to alert us to potential power issues, and improved generator health and resilience. Our 2026 plans continue the focus on power resilience and improved back-up control.

Burst: 14%* (up 4% compared to 2024)

Incidents from burst rising mains have increased by 4% compared to the previous year, making up a total of 14% of pollutions included in the analysis. This is an actual increase up to 36 in 2025, from 27 in 2024.

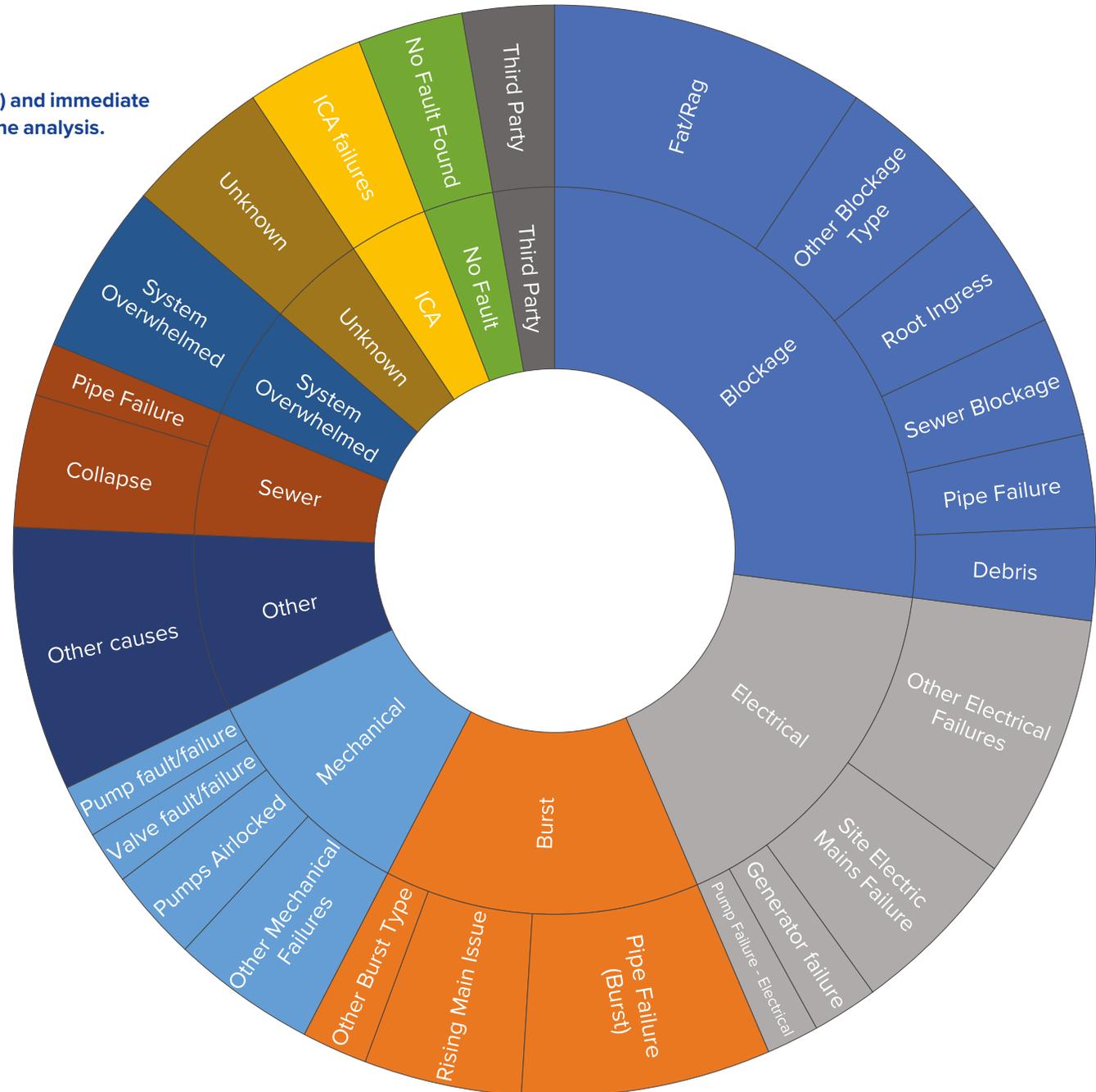
Burst rising mains have significant potential to become serious pollution incidents and are a high cost to mitigate and repair. For the third year, we have seen an increase in this space despite additional funds to repair and rehabilitate these assets. This is partly due to the long duration of the work to complete, and the limited ability to predict burst rising mains.

PIRP 2025 included funding for additional pressure monitoring on our rising mains, and PIRP 2026 continues this with the provision of additional resource to turn the pressure data into proactive risk reduction. In addition, we have included a programme to conduct corrosion testing and build a criticality model to highlight and visualise the risk in our rising main estate.

*The percentages included in RCA are the proportion of category 1 to 3 pollutions listed on the Pollutions Database at the time the analysis was completed, ahead of possible alignment changes, 256 total.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 10: 2025 Pollution failure modes (inner ring) and immediate causes (outer ring) for 256 pollutions included in the analysis.



Section 1: Understanding our 2025 pollution performance (continued)

2025 Category 1 to 3 pollution root cause review – detection issues

Pollution incidents are reviewed to determine whether the incident could have been detected more swiftly. Opportunities to improve pollution detection were identified in 32% of pollution incidents in 2025.

Detection issues – 32% (a total of 81) of all incidents

Earlier detection of issues allows us to respond swiftly, preventing or limiting the impact of a pollution incident. Analysis shows that 32% of our incidents were impacted by an issue causing delays detecting incidents. There is a significant decline in the number of incidents impacted by CBM failure, showing an improvement in this area.

Alarm interpretation – 18%* (a total of 16)

Our detection and response capability is dependent on our control centre identifying and actioning alarms and signals from our sites appropriately. This can be compromised by situations where there is a high number of alarms, knowledge gaps, or confusing/unclear systems and processes. In 2025, the most frequent issue for alarm interpretation was alarms not being actioned by our **Operational Control Centre** (OCC) (8).

Not detected on site – 17%* (a total of 15)

Issues that could not be detected on site due to no escalation of the issue or risk, first responders not following the 4r's and 30-minute pollution plan (2) or issues not visible to a first responder due to lack of site information (5), for example a lack of site plans, diagrams or local only SCADA alarms.

Telemetry failure – 15%* (a total of 13)

Existing telemetry that was not working as expected, leading to delays in detecting an issue proactively or reactively. There is a variety of causes for this, including line failures – where there is a breakdown in the communication pathway between a remote site (the outstation) and the monitoring system – and issues at the outstation. But in most cases, it is a unique issue presenting for each incident.

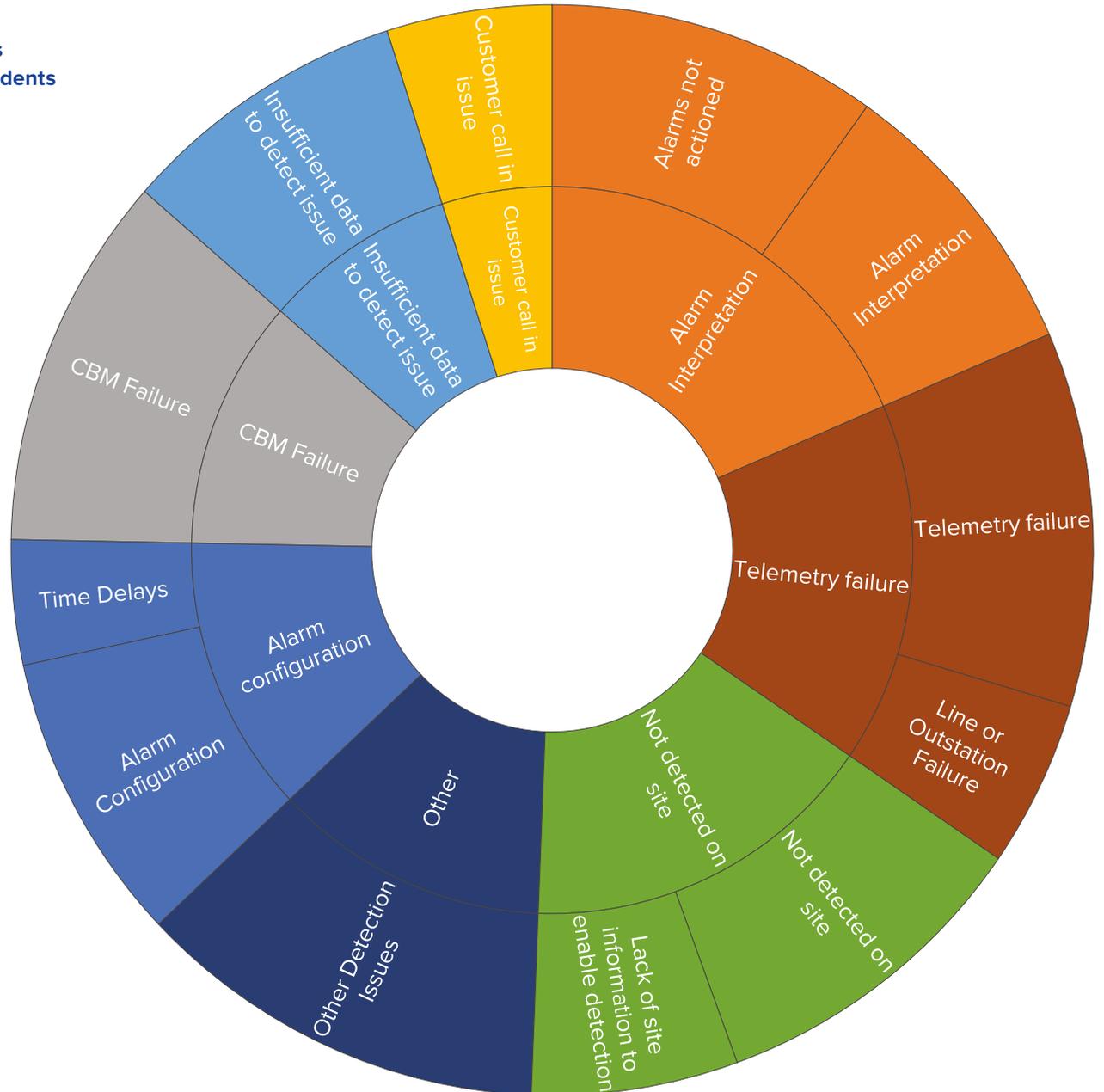
*The above percentages are the proportion of pollutions category 1–3 listed on the Pollutions Database at the time the analysis was completed, ahead of possible alignment changes, with a detection issue 81 total.

The Operational Control Centre – or OCC as it's often called – is our centralised control room which operates 24/7.

The OCC uses smart technologies, such as condition-based monitoring tools and sewer level monitors, alongside real-time data to monitor, manage and run our water and wastewater systems. It helps us to identify any risks or incidents, so we can respond sooner.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 11: 2025 pollution detection issues, failure modes (inner ring) and immediate causes (outer ring), for 81 incidents that were impacted by delayed detection.



Section 1: Understanding our 2025 pollution performance (continued)

2025 Category 1 to 3 pollution root cause review – response issues

While 27% of 2025 incidents involved response issues, performance has improved year-on-year, driven by better escalation and field response practices.

Response issues – 27% (a total of 71)

Quick, effective response helps contain pollution and reduce impacts. In 2025, 27% of incidents were affected by response-related issues.

1st responder limitations – 25%* (a total of 20)

These occur when first responders can't resolve the issue quickly due to limited skills (a total of four) or resource constraints (a total of three). Additional delays happen when second line support (technicians, electricians, contractors, tankers) is needed. These issues have significantly improved since 2024, when they made up 45% of response-related problems.

Delays in escalation – 20%* (a total of 17)

Some issues were identified but not escalated promptly due to workload, prioritisation challenges, or process/training gaps. Seven 2025 incidents were affected by delayed alarm handling in OCC, and improvements are underway.

Remaining issues

Other 2025 response issues included poor containment (a total of seven), delayed work order response (a total of seven), and ineffective continuity plans (a total of four). These increased slightly but are expected to reduce with the new pollution investigation system launching in 2026.

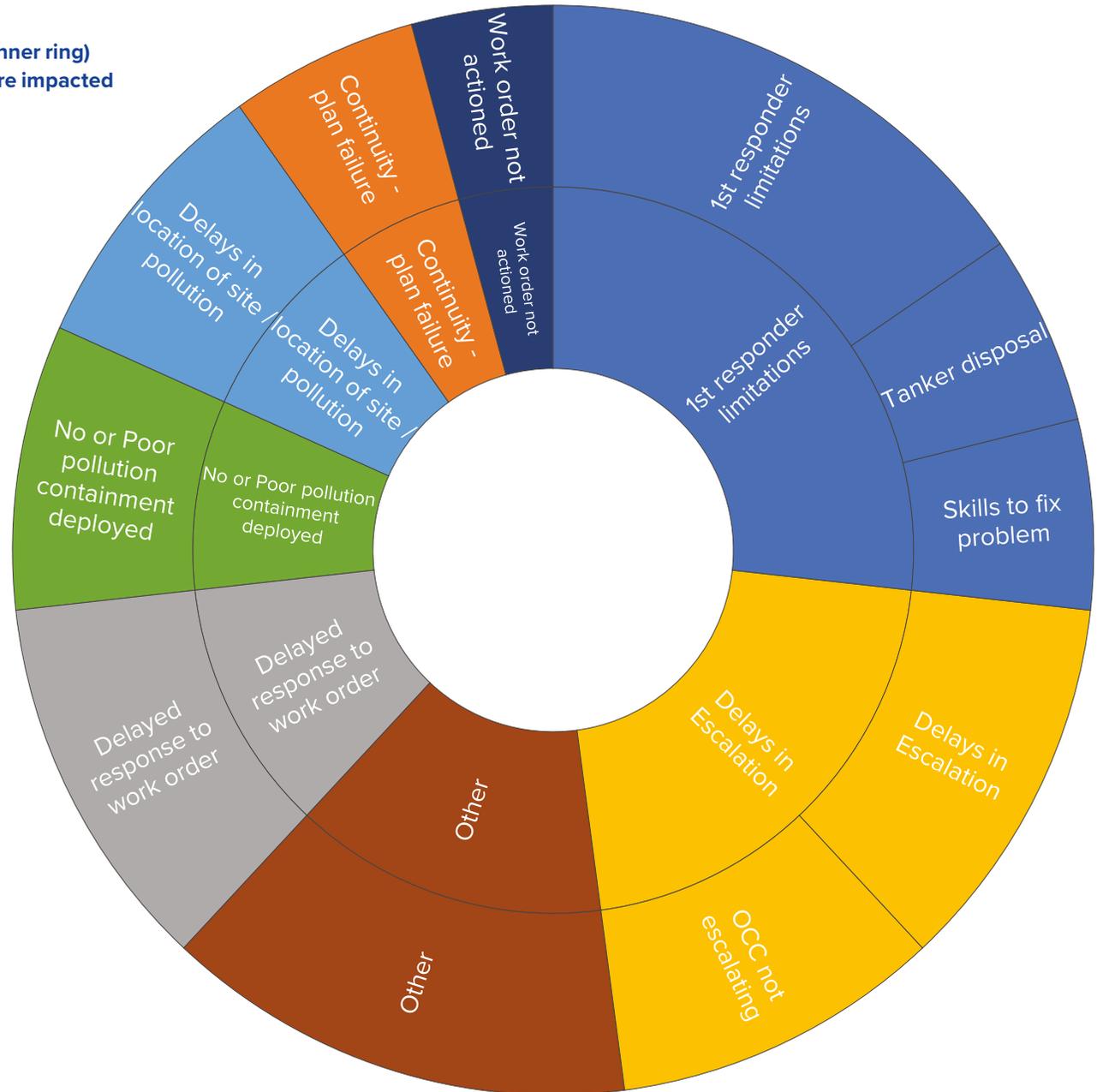
Overall

Response-related issues have decreased by 6% compared to 2024, reflecting improved OCC and field performance. We will continue monitoring to confirm this improvement is sustained and not influenced by changes in the investigation process.

*The above percentages are the proportion of pollutions category 1–3 listed on the Pollutions Database at the time of the analysis that had recorded response issue, 71 in total.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 12: 2025 pollution response issues, failure modes (inner ring) and immediate causes (outer ring), for 81 incidents that were impacted by delayed detection.



Section 1: Understanding our 2025 pollution performance (continued)

2025 Pollution insights – the difference between assets and top failure modes

Root cause analysis was undertaken on 256 pollution incidents in 2025 covering category 1–3. Blockages had the sharpest spike in the second quarter of the year, predominately due to fat/rag.

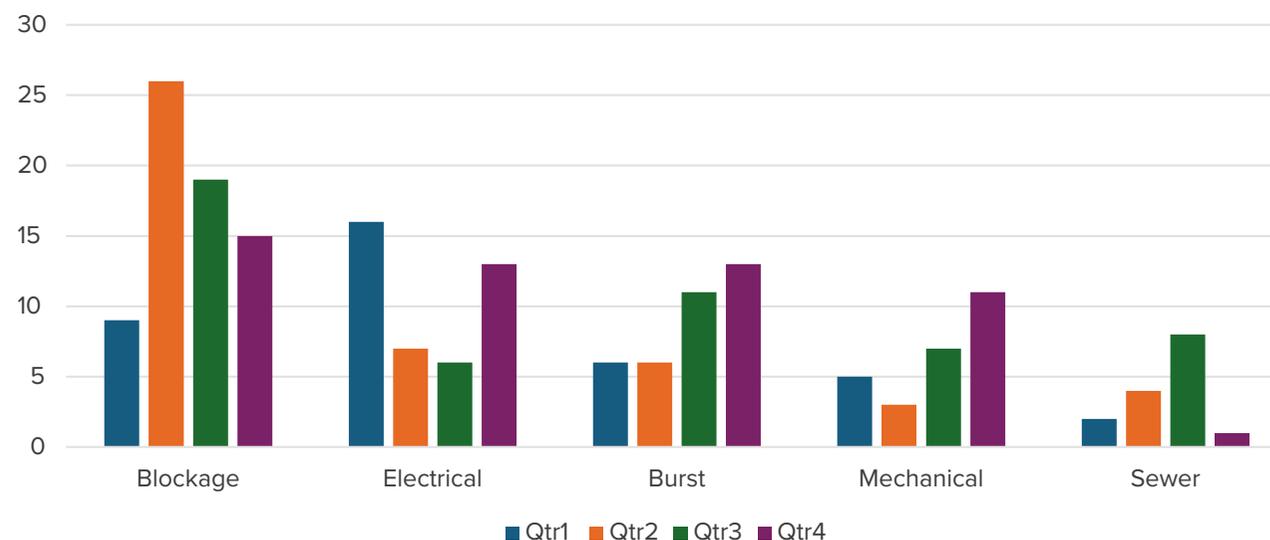
Key insights – the proportion of pollution incidents by premise and quarter.

The foul sewer (FS) network and wastewater pumping stations have contributed the most pollution incidents per month, throughout 2025. The first and fourth quarters of the year were best for foul sewers, and second and third quarters for wastewater pumping stations. The fourth quarter saw an increased proportion of incidents from each premise, with the exception of rising mains.

Table 6: Changes in premise prevalence during 2025.

	Q1	Q2	Q3	Q4
RM	14%	33%	36%	17%
WWTW	17%	17%	32%	34%
WPS	28%	17%	17%	38%
FS	29%	21%	19%	31%

Figure 13: 2025 pollutions by failure mode across the year, showing a spike in blockages in Q2 which then declined over the year. Other failure modes increased, with peaks for electrical, burst and mechanical failures in Q4.



Pollution failure modes in 2025 varied in significance throughout the year. Sewer failures including damaged pipes, leaks through cracks and collapses, were increasing across Q1–3 but saw a reduction in Q4. Despite this, it remained one of the top five failure modes across 2025.

Summary failure mode changes by quarter:

Quarter 1 (Q1) – Dominated by electrical pollutions due to site main failures.

Quarter 2 (Q2) – Blockages were prominent, while network overwhelmed and electrical pollutions were lower than Q1.

Quarter 3 (Q3) – A decline in blockages and electrical failure modes, but an increase in bursts due to pipe failures.

Quarter 4 (Q4) – A continued decrease in blockages, but an increase in pollution incidents due to bursts, electrical faults and mechanical issues.

Section 1: Understanding our 2025 pollution performance (continued)

2020–25 Pollution insights – top failure modes over time

Five-year trends show improving asset reliability but rising burst and blockage risks, reinforcing the need for continued resilience and prevention measures. Enhanced root cause analysis has strengthened our understanding of the failure modes driving performance, enabling more targeted PIRP actions. In 2025 the top nine failure modes contributed 201* incidents, down from 325 in 2020, demonstrating a significant improvement in overall pollution performance.

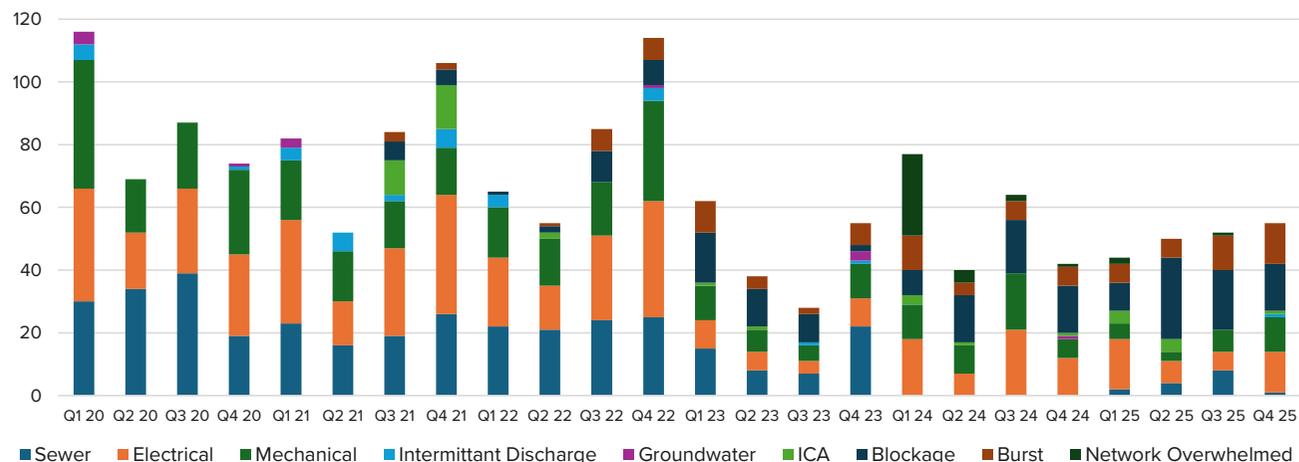
Sewer failure mode

Reported sewer failure modes decline significantly from 2020 onwards, from 122 in 2020 to 15* in 2025, largely due to improved data separation that now attributes blockages and bursts to their own categories. This change has helped reveal true performance improvements and provided clearer visibility of underlying issues.

Burst failure mode

Burst incidents show a year-on-year increase from 2023 (23) to 36* in 2025, driven by both a reporting change and a genuine rise in rising main failures. This remains a key risk area and is a priority for PIRP 2026, given its contribution to serious pollution incidents.

Figure 14: 2020–25 pollutions per quarter by failure mode



Electrical failure mode

Electrical failures have reduced across the period, with a major improvement in 2023 – down from 107 in 2020 to 28 in 2023. Despite a slight increase in 2024 (58), performance in 2025 resumed a downward trend with 42*. Electrical issues still account for a sizeable proportion of total incidents and remain an area of focus for 2026.

Mechanical failure mode

Mechanical failures have dropped steadily from 2020–25 (106 down to 26*), supported by targeted resilience measures delivered through previous PIRPs. Continued focus on mechanical reliability is planned for 2026 to sustain the downward trend.

*The percentages and figures included in RCA are the proportion of category 1 to 3 pollutions listed on the Pollutions Database at the time the analysis was completed, ahead of possible alignment changes, 256 total.

Section 1: Understanding our 2025 pollution performance (continued)

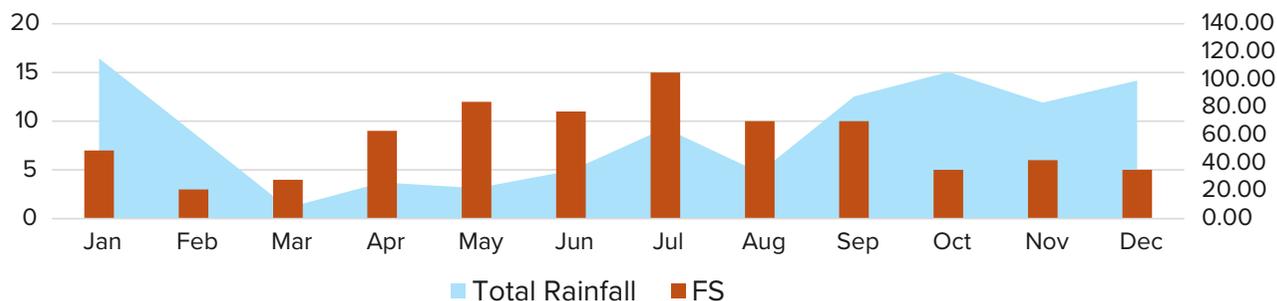
Root cause analysis – 2025 foul sewer

This is a summary of insights from 97 pollutions for foul sewers, combined sewer overflows and surface water sewers. Blockages are the most frequent cause of pollution incidents in our foul sewer network, accounting for 64% of foul sewer incidents. **Root ingress** has increased in 2025, suggesting a need to target this in addition to fat/rag causes.

What is root ingress?

When trees or plants grow, their roots can get into sewer or wastewater pipes. This can cause blockages or cracks in the pipes, which may release sewage into the environment, causing pollution incidents.

Figure 15: 2025 foul sewer pollutions over the year, demonstrating a peak in foul sewer pollution incidents in July, and rainfall peaking in January and increasing heading into winter.



Failure modes and immediate causes

Blockages continue to be the main contributor of pollutions in our foul sewer network, predominately fat/rag (22) although there have been 10 incidents attributed to root ingress, and nine for sewer blockage. Blockages account for 63 (64%) of the 97 pollutions for foul sewers.

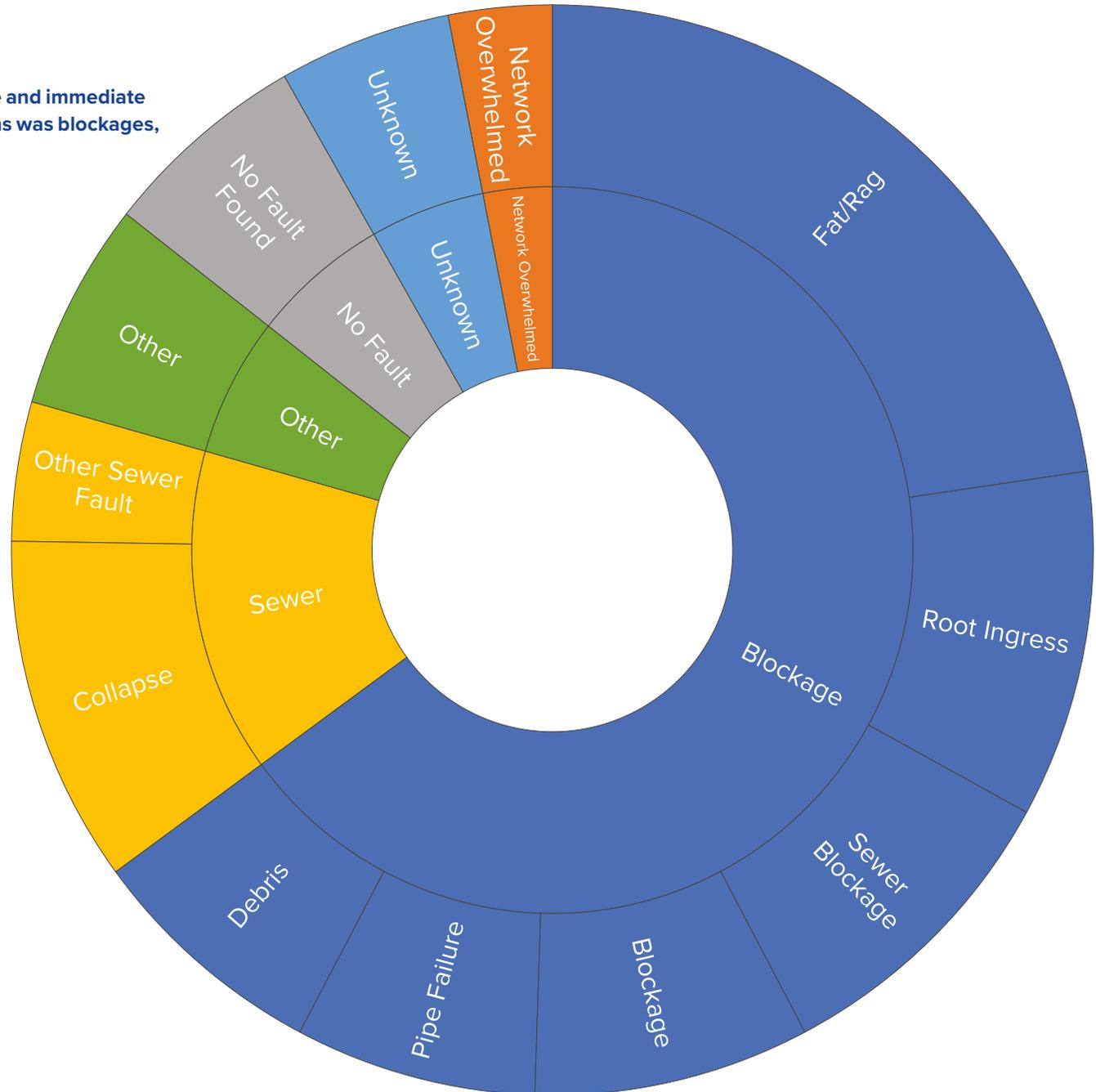
Weather and monthly view

July 2025 was the highest month for sewer pollution incidents throughout 2025 with 15 incidents, but this does not appear to be linked with rainfall. We're exploring the relationship between weather and blockages.

* The total number of pollution incidents included in the root cause analysis are based on the data available at the time. The number may include incidents that are later aligned and no longer included in our total pollutions.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 16: 2025 foul sewer pollutions by failure mode and immediate cause, the most significant contributor to FS pollutions was blockages, specifically fat or rag blockages.



Section 1: Understanding our 2025 pollution performance (continued)

Root causes – foul sewer pollutions

Where further analysis has been completed, 8% of incidents were found to be influenced by a human factor – this can include slips such as a task not being completed as planned. Where Human Factors are found, they are triaged for additional investigation to confirm the influence of these factors, but due to resource constraints not all instances can be fully investigated. Asset end of life was noted in 5% of the incidents, along with another 5% impacted by inappropriate use of system – such as a domestic household putting FOG (fat, oils and grease) or other waste into the system.

In total, 71% of the pollution incidents included additional analysis, but for 53% we were unable to determine the exact root cause. The 2026 PIRP includes additional training for root cause analysis, and the implementation of the new pollution management system should support better understanding of incidents moving forward.

*The total pollutions included in the RCA are based on the data available at the time, and may include incidents that are later aligned and no longer included in our total pollutions.

Table 7: Summary of 2025 foul sewer pollution immediate causes.

Failure Mode	Immediate cause	Number of Cat 1–3 Pollutions	Proportion of Cat 1–3 Pollutions
Blockage	Fat/Rag	22	23%
Blockage	Root Ingress	10	10%
Blockage	Sewer Blockage	9	9%
Blockage	Debris	7	7%
Blockage	Remaining Blockage Root Causes	15	15%
Sewer	Collapse	10	10%
Sewer	Remaining Sewer Root Causes	4	4%
No Fault	No Fault Found	6	6%
Unknown	Unknown	5	5%
Remaining Failure Modes	Remaining Root Causes	9	9%
Total		97	100%

Table 8: Summary of foul sewer pollution root causes.

Root Cause	Number of Cat 1–3 Pollutions	Proportion of Cat 1–3 FS Pollutions
Human Factor	8	8%
Asset end of life	5	5%
Inappropriate use of system	5	5%
Inconclusive	16	16%
Other	35	36%
Total	69	71%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 foul sewer detection and response

In 2025, 30% of foul sewer incidents were affected by delays in detection and 31% by delays in response, showing that faster identification and action remain key to preventing pollution. These insights highlight where improved monitoring, clearer information and quicker escalation will deliver the greatest impact.

Detection issues

A total of 29 out of 97 foul sewer incidents in 2025 were affected by delays in detecting problems early. The most common causes were:

- CBM failures – seven incidents (7%) where monitoring alerts were late or not actioned in time.
- Customer call-in issues – four incidents (4%) where the problem was misdiagnosed or sent to the wrong location.
- Insufficient data – three incidents (3%), often due to missing monitoring equipment such as SLMs.
- Not detected on site – three incidents (3%), including situations where responders lacked the right information.
- Alarm configuration and interpretation – four incidents combined (4%), where alarms were incorrectly set up or not acted on.
- Telemetry failures – four incidents (4%), where equipment faults prevented issues from being picked up.

Improving monitoring, alarm handling and on-site information will help us detect issues sooner and reduce pollution risk moving forward.

Table 9: Summary of foul sewer pollution detection issues.

Detection issue	Detection Description	No. Cat 1–3 Impacted	% of Cat 1–3 FS
Alarm configuration	Alarms are being received by OCC, but the configuration is incorrect.	2	2%
Alarm Interpretation	Issues with how alarms are investigated and actioned.	2	2%
CBM failure	Where a CBM device has failed and not provided an alert.	7	7%
Customer call in issue	When a customer had to call in the issue, but the information is incorrect.	4	4%
Insufficient data to detect issue	When the detection equipment is insufficient to detect/ diagnose an issue.	3	3%
Not detected on site	When an issue is not detected on site in person, meaning it cannot be dealt with.	3	3%
Not interrogating other data sources	When other data sources are not used to help detect issues/ corroborate information.	1	1%
Other	This covers issues that do not fit in the pre-assessed categories, but we can define an issue that delayed detection.	3	3%
Telemetry failure	Issues with the telemetry infrastructure which have prevented alarms / transfer of data to the OCC, meaning that pollution indicators were not presented to a controller.	4	4%
Total		29	30%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 foul sewer detection and response continued

Response issues

A total of 31% of foul sewer incidents (30 out of 97) were affected by delays or challenges in responding once an issue had been identified.

Key causes included:

- 1st responder limitations – eight incidents (8%), such as lack of tools, skills or resource availability.
- Delayed work-order response – five incidents (5%), where follow-up action took longer than needed.
- Delays in escalation – six incidents (6%), often linked to pressure on the Operational Control Centre.
- Delays locating the site – three incidents (3%), particularly in rural or heavily vegetated areas.
- Poor containment – two incidents (2%), where temporary measures couldn't be deployed effectively.
- Other response challenges – three incidents (3%), including missed follow-up activities.

These insights show where improvements to training, escalation processes and field capability can help us act faster and prevent incidents from escalating.

*The total number of pollutions included in the RCA are based on the data available at the time, and may include incidents that are later aligned and no longer included in our total pollutions.

Table 10: Summary of foul sewer pollution response issues.

Response issue	Response description	No. Cat 1–3 Impacted	% of Cat 1–3 FS
1st responder limitations	When the first responder does not have the capability or tools to deal with the issue sufficiently.	8	8%
CBM Failure	Where a CBM device has failed and not provided an alert.	1	1%
Delayed response to work order	When a work order is raised but not responded to in a timely manner.	5	5%
Delays in Escalation	When the issue is known but not escalated in a timely manner, causing delays to the recovery.	6	6%
Delays in location of site / pollution	When there is a delay due to lack of knowledge of where the issue has occurred.	3	3%
No or Poor pollution containment deployed	No or Poor pollution containment deployed.	2	2%
Other	This covers issues that do not fit in the pre-assessed categories, but we can define an issue that hindered our response.	3	3%
Work order not actioned	When a work order is raised but not responded to.	2	2%
Total		30	31%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 rising mains

This is a summary of insights from 35 pollutions from rising mains.

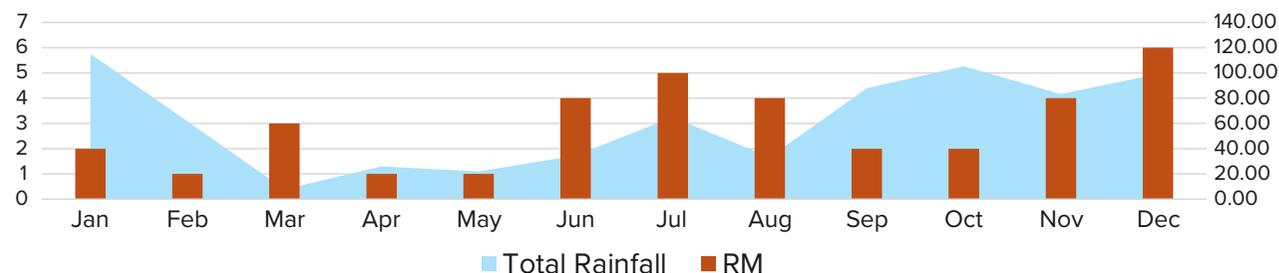
Root cause analysis – 2025 rising mains

A summary of insights from 35 pollution incidents from rising mains shows that burst rising mains are a growing risk, having increased in numbers for the third year. They are also at a higher risk of serious pollution incidents, as they can be challenging to locate and contain. As such it is a focus for our PIRP 2026.

Failure modes and immediate causes

Burst rising mains have also been more prominent in the second half of the year, causing a total of 35 pollution incidents throughout the year. These are predominately made up of pipe failures (16) and rising main issues (12), with one unknown failure mode. Our understanding of why our rising mains fail, will be improved in 2026 with the roll out of testing on failed assets.

Figure 17: 2025 rising main pollutions and monthly rainfall, upturn in incidents in Q4, with the a spike in December 2025 highlighting key risk into 2026.



Repeats

Out of the 35 rising main incidents, 17 have occurred at eight wastewater pumping stations. Repeat failure of rising mains has been investigated, and the insights suggest that repeat rates are not significant across the asset base. However, repeat pollution incidents due to rising mains are a risk with seven sites contributing 2 each in 2025, with a further site experiencing three pollution incidents due to a burst.

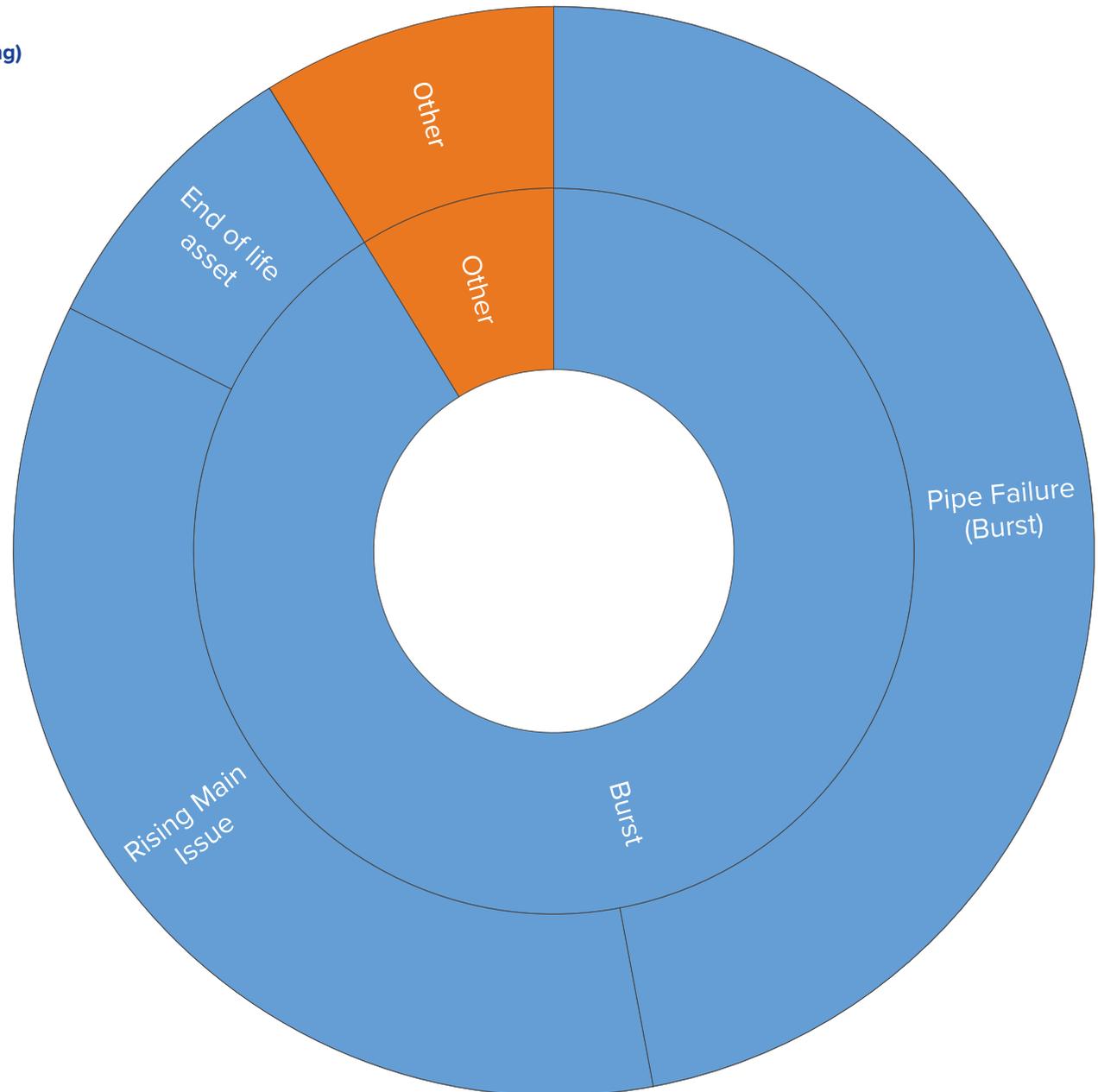
Weather and monthly view

December had the most rising main pollution incidents in 2025 (6), rainfall does not appear to be linked to rising main pollution numbers throughout 2025, and further investigation into the relationship between bursts and weather is underway.

*The total number of pollution incidents included in the root cause analysis are based on the data available at the time. The number may include incidents that are later aligned and no longer included in our total number of pollution incidents.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 18: 2025 rising main pollution failure modes (inner ring) and immediate causes (outer ring).



Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 rising main supporting table 11.

Root causes – rising main pollutions

Where further analysis has been completed, the predominant root cause was associated with assets being at end of life, supporting the identified need to replace rising main assets before failure. This has driven the increase to our planned rising main replacements over the Business Plan period 2025–30.

In total, 74% of the pollutions included additional analysis but for 40%, we were unable to determine the exact root cause. The 2026 PIRP includes additional training for root cause analysis, and the implementation of the new pollution management system should support improved incident understanding moving forward.

*The total pollutions included in the RCA are based on the data available at the time, and may include incidents that are later aligned and no longer included in our total pollutions.

Table 11: Summary table of rising main pollution immediate causes.

Failure Mode	Immediate Cause	Number of Cat 1–3 Pollutions	Proportion of Cat 1–3 Pollutions
Burst	Rising Main Issue	12	34%
Burst	Pipe failure (burst)	16	46%
Burst	End of life asset (asset deterioration)	3	9%
Burst	Remaining root causes	2	6%
Unknown	Unknown	2	6%
Total		35	100%

Table 12: Summary table of rising main pollution root causes.

Root Cause	Number of Cat 1–3 Pollutions	Proportion of Cat 1–3 Pollutions
End of life asset	12	34%
Inconclusive	3	9%
Other	11	31%
Total	26	74%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 rising main detection and response

Rising mains remain a high-risk asset class, with over a third of 2025 incidents impacted by delays in detection (37%) and issues hindering response (34%). These findings highlight the need for stronger monitoring, clearer site information and faster mobilisation to prevent burst events and reduce pollution impacts.

Detection issues

In 2025, a total of 37% of rising-main pollution incidents (13 out of 35) were affected by delays in detecting problems early. The main reasons were:

- Not detected on site impacted five incidents (14%). Issues weren't spotted during initial visits, often because key information wasn't available at the time.
- Insufficient data – three incidents (9%). Some sites lacked monitoring tools like pressure meters or flowmeters, making it harder to identify bursts quickly.

Installing pressure monitoring devices aims to support an increased detection capability moving forward, including the installation of specifically located sewer level monitors at rising main outlets.

Table 13: Summary table of rising main pollution detection issues.

Detection issues	Detection Description	No. Cat 1–3 Impacted	% of Cat 1–3 RM
Alarm Interpretation	Issues with how alarms are investigated and actioned.	1	3%
CBM failure	Where a CBM device has failed and not provided an alert.	1	3%
Insufficient data to detect issue	When the detection equipment is insufficient to detect/ diagnose an issue.	3	9%
Not detected on site	When an issue is not detected on site in person, meaning it cannot be dealt with.	5	14%
Other	This covers issues that do not fit in the pre-assessed categories, but we can define an issue that delayed detection.	3	9%
Total		13	37%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 rising main detection and response continued

Response issues

A total of 34% of rising main incidents (12 out of 35) were affected by a response issue once an issue had been identified.

Key causes included:

- 1st responder limitations – specifically related to tanker movements, including disposal locations and availability (3).
- Delays locating the site – three incidents (3%). In some rural or complex locations, it took longer to find the exact point of failure.
- Poor containment – three incidents (3%). In a small number of cases, temporary measures could not be safely or effectively deployed.
- Continuity plan failures – two incidents (2%), where our established plan to react to the incident failed to deliver a complete response, these plans are reviewed post incident where they have not been effective.

These response issues highlight the need for clearer site information, faster mobilisation, and improved processes to contain bursts quickly and limit environmental harm.

*The total pollutions included in the RCA are based on the data available at the time, and may include incidents that are later aligned and no longer included in our total pollutions.

Table 14: Summary table of rising main pollution response issues.

Response issues	Response description	No. Cat 1–3 Impacted	% of Cat 1–3 RM
1st responder limitations	When the first responder does not have the capability or tools to deal with the issue sufficiently.	3	9%
Continuity – plan failure	When an issue is not resolved due to a failure with the continuity plan.	2	2%
Delays in location of site / pollution	When there is a delay due to lack of knowledge of where the issue has occurred.	3	3%
No or Poor pollution containment deployed	No or Poor pollution containment deployed	3	3%
Other	This covers issues that do not fit in the pre-assessed categories, but we can define an issue that hindered our response.	1	1%
Total		12	34%

Section 1: Understanding our 2025 pollution performance (continued)

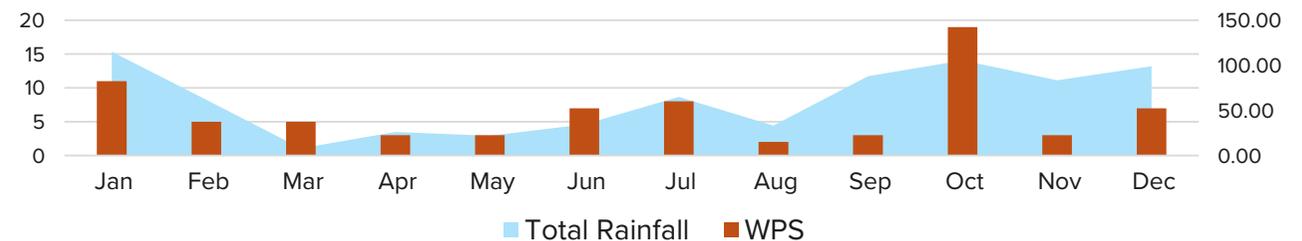
Root cause analysis – 2025 wastewater pumping stations

This is a summary of insights from 76 pollution incidents for the wastewater pumping stations premise. Electrical failures have been most frequent in our wastewater pumping stations estate for the second year, and 19% of wastewater pumping station incidents were due to power failures. Repeat analysis shows a reduction in the number of sites contributing multiple pollutions vs 2024, and the total impact of repeat sites has reduced.

Failure modes and immediate causes

Wastewater pumping station pollution incidents are predominately caused by electrical failures (35), most frequently site electric mains failure (12) followed by electrical pump failures (3) and generator failures (3). Power related issues are a frequent cause for pollutions accounting for 19% (15) of wastewater pumping station pollution incidents in 2025.

Figure 19: 2025 Wastewater pumping station pollutions and monthly rainfall, significant peak in October, with smaller peaks in January, June, July and December. Remaining months consistently five or below incidents per month.



Repeats

A total of 11 pumping stations had multiple pollutions in 2025, contributing a total of 27 incidents. Of the repeating sites only three contributed three per site, with the remaining contributing two per site. Repeat root causes include site electric mains failure contributing four incidents at three wastewater pumping stations, hire pump failure at two pollution incidents from one wastewater pumping station, airlocked pumps (2, 1 wastewater pumping station) and hydraulic overload (2, 1 wastewater pumping station). In 2024, 16 sites contributed two or more pollution incidents with a total of 35 pollution incidents, showing a decline in both the number of sites repeating but also the total impact of repeat wastewater pumping station pollution incidents.

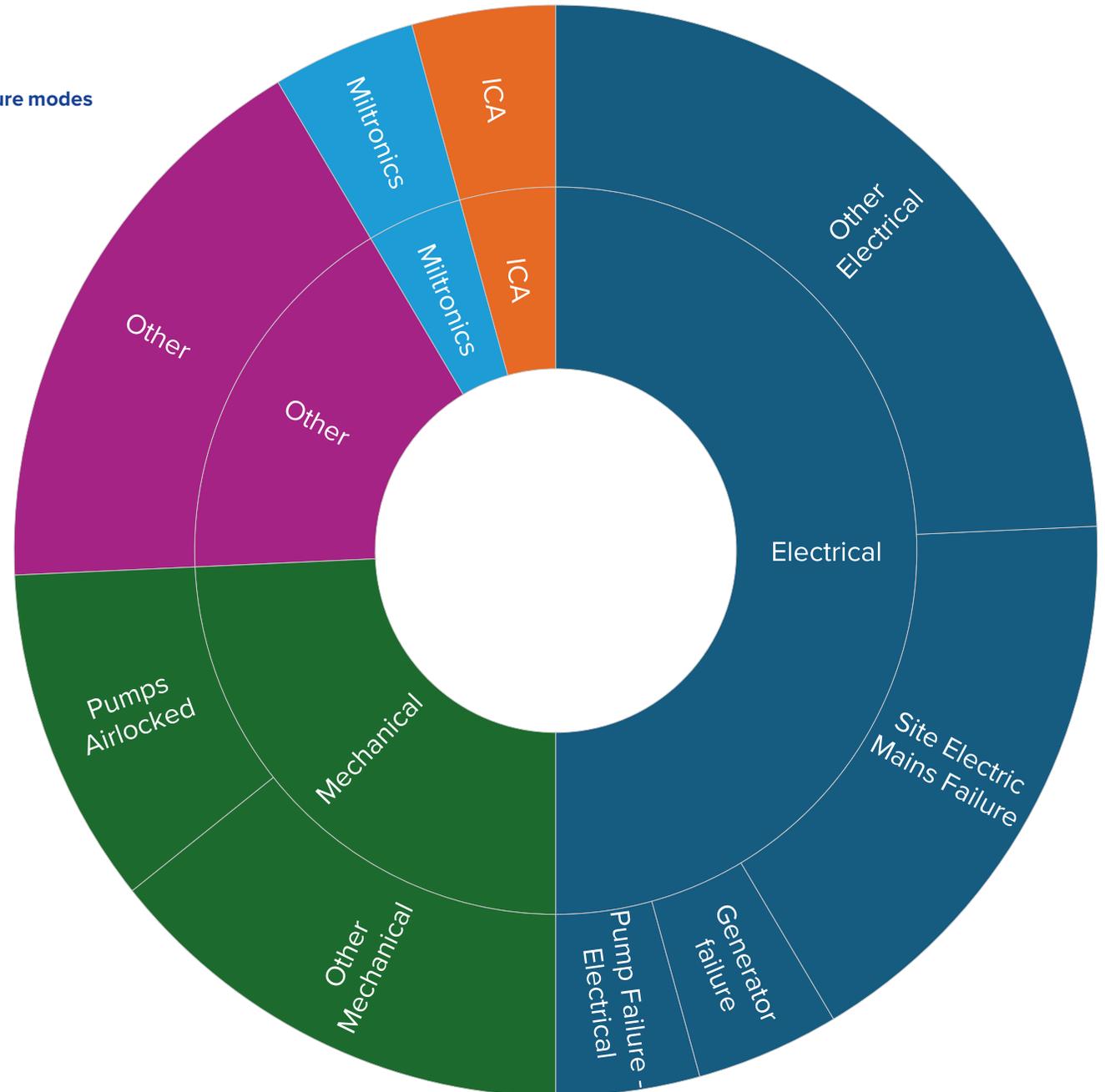
Weather and monthly view

October 2025 had the most wastewater pumping station pollution incidents in 2025 with 19 incidents, while the best performance was in August (2). Higher rainfall in October does coincide with the worst performing month from the year. Despite performances in September and November being low, with higher rainfall, there is still a positive correlation between pollution incidents at wastewater pumping stations and rainfall.

*The total pollutions included in the RCA are based on the data available at the time, and may include incidents that are later aligned and no longer included in our total pollutions.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 20: 2025 Wastewater pumping station pollution failure modes (inner ring) and immediate causes (outer ring).



Section 1: Understanding our 2025 pollution performance (continued)

Root causes – wastewater pumping station pollution incidents

Where further analysis has been completed, third party and service provider issues – for example, unplanned power outages – impacted 20% of the wastewater pumping station pollution incidents. In addition to this, 8% were influenced by human factors and 5% by asset end of life.

In total, 68% of the pollutions included additional analysis, but for 36% we were unable to determine the exact root cause.

The 2026 PIRP includes additional training for root cause analysis, and the implementation of the new pollution management system should support improved incident understanding moving forward.

*The total pollutions included in the RCA are based on the data available at the time, and may include incidents that are later aligned and no longer included in our total pollutions.

Table 15: Summary table of wastewater pumping station pollution immediate causes.

Failure Mode	Immediate Cause	Number of Cat 1–3 Pollutions	Proportion of Cat 1–3 Pollutions
Electrical	Site Electric Mains Failure	12	16%
Electrical	Generator failure	3	4%
Electrical	Pump Failure – Electrical	3	4%
Electrical	Remaining Electrical root causes	17	22%
Mechanical	Pumps Airlocked	7	9%
Mechanical	Remaining Mechanical root causes	10	13%
Other	Other root causes	5	7%
Remaining Failure Modes	Remaining root causes	19	25%
Total		76	100%

Table 16: Summary table of 2025 wastewater pumping station pollution root causes.

Root Cause	Number of Cat 1–3 RM Pollutions	Proportion of Cat 1–3 RM Pollutions
Third party	10	13%
Human Factors	6	8%
Service Provider	5	7%
Asset end of life	4	5%
Other	18	24%
Inconclusive	9	12%
Total	52	68%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 wastewater pumping station detection and response

In 2025, 38% of wastewater pumping station pollution incidents were affected by detection delays and 22% by response challenges. Most issues stemmed from alarm handling, telemetry faults, and limited on-site information. Although these factors still contribute to risk, improvements in escalation and first-response capability have helped reduce overall impact compared with 2024.

Detection issues

In 2025, a total of 27 of 76 wastewater pumping station incidents (36%) were affected by detection issues. The most significant contributors were:

- Alarm interpretation – 11 incidents (14%) where high alarm volume or handling delays meant alarms were not reviewed promptly.
- Telemetry failures – six incidents (8%), including missing alerts, equipment faults and line-level failures.
- Alarm configuration gaps – four incidents (5%), often caused by missing logic or site information.
- On-site detection limitations – two incidents (3%) where responders lacked the necessary information to identify the issue.

These findings show the importance of strengthened alarm logic, reliable telemetry and clearer site information to support earlier detection.

Table 17: Summary table of wastewater pumping station pollution detection issues.

Detection issues	Detection description	No. Cat 1–3 Impacted	% of Cat 1–3 WPS
Alarm configuration	Alarms are being received by OCC, but the configuration is incorrect	4	5%
Alarm Interpretation	Issues with how alarms are investigated and actioned	11	14%
CBM failure	Where a CBM device has failed and not provided an alert.	1	1%
Not detected on site	When an issue is not detected on site in person, meaning it cannot be dealt with.	2	3%
Other	This covers issues that do not fit in the pre-assessed categories, but we can define an issue that delayed detection.	3	4%
Telemetry failure	Issues with the telemetry infrastructure which have prevented alarms/transfer of data to the OCC, meaning that pollution indicators were not presented to a controller.	6	8%
Total		27	36%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 wastewater pumping station detection and response

continued

Response issues

Response-related issues impacted 17 wastewater pumping station incidents in 2025. The main contributors were:

- Delays in escalation – five incidents (5%), where risks were not raised quickly enough to trigger the required response.
- First-responder limitations – three incidents (4%), particularly where specialist electrical skills were needed.
- Continuity plan failures – two incidents (2%), where existing plans did not provide an effective recovery route.
- Other constraints – including weather impacts, tanker logistics and competing asset failures.

These issues highlight the need for stronger escalation processes, improved support for first responders, and clearer continuity arrangements.

*The total pollutions included in the RCA are based on the data available at the time, and may include incidents that are later aligned and no longer included in our total pollutions.

Table 18: Summary table of wastewater pumping station pollution response issues.

Response issue	Response description	Number of Cat 1–3 Pollutions	Proportion of Cat 1–3 WPS Pollutions
1st responder limitations	When the first responder does not have the capability or tools to deal with the issue sufficiently.	3	4%
Continuity – plan failure	When an issue is not resolved due to a failure with the continuity plan.	2	2%
Delayed response to work order	When a work order is raised but not responded to in a timely manner.	2	2%
Delays in Escalation	When the issue is known but not escalated in a timely manner, causing delays to the recovery.	5	5%
Other	This covers issues that do not fit in the pre-assessed categories, but we can define an issue that hindered our response.	5	5%
Total		17	22%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 wastewater treatment works

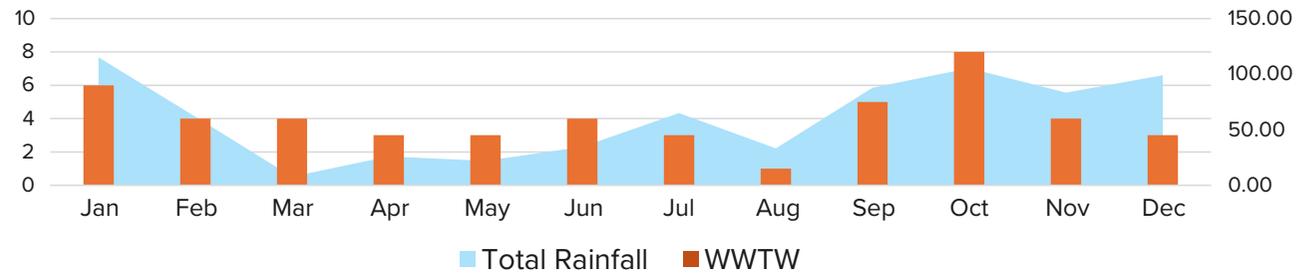
Summary of insights from 48* pollutions for the wastewater treatment works premise.

To provide meaningful analysis, 17 incidents from one wastewater treatment works have been excluded from the analysis, as all these incidents were caused by the same failure. Outside of these incidents, mechanical failures are the most frequent, but the variety of root causes makes it challenging to target initiatives.

Failure modes and immediate causes

Wastewater treatment works pollutions have varied root causes throughout the year, with key failure modes being mechanical (9), followed by electrical, ICA, other and wastewater treatment works overwhelmed all at six incidents each. Repeat mechanical issues have been valve fault/failure (2) and pump fault/failure (2). The most frequent repeat root causes were groundwater infiltration and hydraulic overload (3 each). In addition, blockages on wastewater treatment works assets caused three pollutions but at three separate wastewater treatment works.

Figure 21:



Weather and monthly view

October 2025 had the most wastewater treatment works pollutions throughout the year (8), with remaining months being ranging between 1-6 incidents per month. While October pollutions do coincide with high rainfall, the relationship between pollutions and weather is being investigated to understand the significance of this.

*The total number of pollution incidents included in the root cause analysis are based on the data available at the time. It may include incidents that are later aligned and no longer included in our total number of pollution incidents.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 22: 2025 WWTW pollution failure modes (inner ring) and immediate causes (outer ring).



Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 wastewater treatment works supporting table

*The total pollutions included in the RCA are based on the data available at the time and may include incidents that are later aligned and no longer included in our total pollutions.

Root causes – WWTW pollutions

Where further analysis has been completed, human factors were identified in 10% of the WWTW incidents.

In total, 52% of the pollutions included additional analysis but 42% were unable to determine the exact root cause. The 2026 PIRP includes additional training for root cause analysis, and the implementation of the new pollution management system should support improved incident understanding moving forward.

Table 19: Summary table of wastewater treatment works pollution immediate causes.

Failure Mode	Immediate Cause	Number of Cat 1–3 Pollutions	Proportion of Cat 1–3 FS Pollutions
Mechanical	Pump fault/failure	2	4%
Mechanical	Valve fault/failure	2	4%
Mechanical	Remaining root causes	5	10%
WWTW Overwhelmed	Groundwater – WWTW	3	6%
WWTW Overwhelmed	Hydraulic Overload	3	6%
Electrical	Generator failure	2	4%
Electrical	Remaining root causes	4	8%
Other	Remaining root causes	6	13%
ICA	PLC fault/failure	2	4%
ICA	Remaining root causes	4	8%
Unknown	Unknown	4	8%
Third Party	Remaining root causes	3	6%
Blockage	Remaining root causes	3	6%
Remaining Failure Modes	Remaining root causes	5	10%
Total		48	100%

Table 20: Summary table of 2025 wastewater treatment works pollution root causes.

Root Cause	Number of Cat 1–3 WWTW Pollutions	Proportion of Cat 1–3 WWTW Pollutions
Human factors	5	10%
Inconclusive	11	23%
Other	9	19%
Total	25	52%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 wastewater treatment works detection and response

In 2025, 25% of wastewater treatment works pollution incidents were impacted by delays in detection and 23% by response-related issues. These findings highlight where improved monitoring, clearer alarm configuration and stronger on-site processes can reduce the risk and duration of pollution events.

Detection issues

Detection issues affected 12 wastewater treatment works incidents. The most common contributors were:

- Alarm configuration issues – four cases (8%), often due to incorrect logic or setup.
- Not detected on site – three cases (6%), where responders lacked sufficient information to identify the issue.
- Telemetry failures – three cases (6%), linked to hardware problems or line failures.
- Limited monitoring data – including missing flowmeters, reducing early-warning capability.

These findings underline the need for improved alarm configuration, better access to site-level information and more robust telemetry monitoring.

Table 21: Summary table of wastewater treatment works pollution detection issues.

Detection issue	Detection Description	No. Cat 1–3 Impacted	% of Cat 1–3 WWTW
Alarm configuration	Alarms are being received by OCC, but the configuration is incorrect.	4	8%
Alarm Interpretation	Issues with how alarms are investigated and actioned.	1	2%
Insufficient data to detect issue	When the detection equipment is insufficient to detect/ diagnose an issue.	1	2%
Not detected on site	When an issue is not detected on site in person, meaning it cannot be dealt with.	3	6%
Telemetry failure	Issues with the telemetry infrastructure which have prevented alarms / transfer of data to the OCC, meaning that pollution indicators were not presented to a controller.	3	6%
Total		12	25%

Section 1: Understanding our 2025 pollution performance (continued)

Root cause analysis – 2025 wastewater treatment works detection and response

continued

Response issues

Response issues impacted 11 wastewater treatment works incidents. Key factors included:

- First-responder limitations – four incidents (4%), where specialist tools or expertise were required.
- Delays in escalation – four incidents (4%), linked to OCC processes or on-site escalation gaps.
- Work-order delays and containment challenges – affecting a smaller number of cases.

These findings indicate that strengthened escalation processes, improved equipment availability and enhanced first-responder capability will support faster containment and recovery at wastewater treatment works.

*The total pollutions included in the RCA are based on the data available at the time and may include incidents that are later aligned and no longer included in our total pollutions.

Table 22: Summary table of wastewater treatment works pollution response issues.

Response issues	Response Description	No. Cat 1–3 Impacted	% of Cat 1–3 WWTW
1st responder limitations	When the first responder does not have the capability or tools to deal with the issue sufficiently.	4	8%
Delayed response to work order	When a work order is raised but not responded to in a timely manner.	1	2%
Delays in Escalation	When the issue is known but not escalated in a timely manner, causing delays to the recovery.	4	8%
No or Poor pollution containment deployed	No or Poor pollution containment deployed	1	2%
Other	This covers issues that do not fit in the pre-assessed categories, but we can define an issue that hindered our response.	1	2%
Total		11	23%

Section 1: Understanding our 2025 pollution performance (continued)

2025 Category 1 to 3 water distribution and water supply works pollution root cause review – failure mode and immediate cause

A total of 47 incidents were included in this analysis, one of which was attributed to water supply works with the remaining happening on our water distribution network. A total of 85% of issues were water main issues, with 6% recording a more detailed cause.

Overview

A total of 47 incidents were reviewed in 2025. Of these, 46 occurred on the water distribution network, and the remaining incident was at a water supply works. Water main failures remain the dominant cause of pollution.

Water Main Issue: 85%* (+1% vs 2024)

Eighty-five per cent of water supply pollution incidents in 2025 were attributed to failures within the water distribution network. These incidents were all linked to water mains, typically involving bursts or leaks that resulted in discharges to watercourses. This confirms that water main condition remains the primary driver of pollution risk across the water supply estate.

Burst: 6%* (+6% vs 2024)

Three of the 47 incidents were attributed to specific burst-related failure modes. Two were recorded as general pipe failures due to bursting, with one incident linked to a cracked or broken pipe. The year-on-year increase reflects improved capture of detailed root causes following the introduction of Root Cause Analysis for water supply incidents, rather than a material deterioration in asset performance.

Table 23: Root cause analysis – 2025 water distribution and water supply works supporting table

Asset	Failure Mode	Immediate Cause	Number of Cat 1 to 3 Pollutions	Proportion of Cat 1–3 Pollutions
WD	Burst	Pipe failure (burst)	2	4%
WD	Burst	Pipe failure (cracked or broken)	1	2%
WD	Water Supply	Water Main Issue	40	85%
WD	Unknown	Unknown	3	6%
WSW	Water Supply	Water Main Issue	1	2%
Total			47	100%

Unknown: 6%* (-2% vs 2024)

The proportion of incidents recorded with an unknown cause reduced compared to 2024. This improvement has been supported by more thorough investigations and a stronger focus on accurate and consistent root cause reporting.

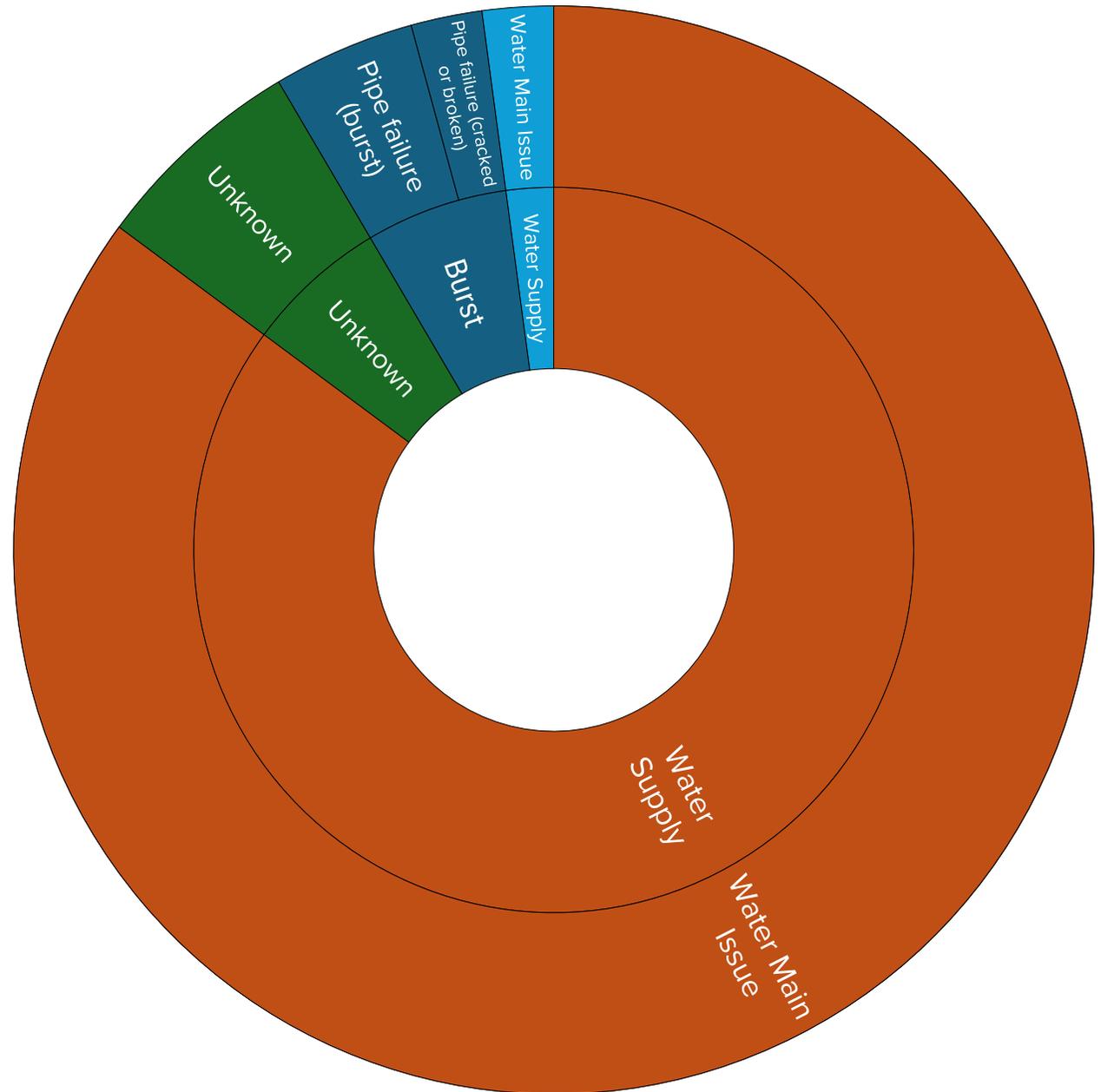
Other Failure Modes: 3%* (-5% vs 2024)

Other failure modes accounted for a small proportion of incidents and related to a single pollution at a water supply works attributed to a water main fault. Electrical failures and hydraulic overloads observed in 2024 did not feature in the 2025 dataset, reinforcing that water main failures remain the predominant risk within the water supply estate.

*The percentages included in root cause analysis are the proportion of pollution incidents from categories 1–3 listed on the pollutions database ahead of possible alignment changes, a total of 47.

Section 1: Understanding our 2025 pollution performance (continued)

Figure 23: 2025 WD and WSW pollution failure modes (inner ring) and immediate causes (outer ring).



Section 1: Understanding our 2025 pollution performance (continued)

1.3 Serious pollution incidents

An insight into serious pollution incidents in 2025

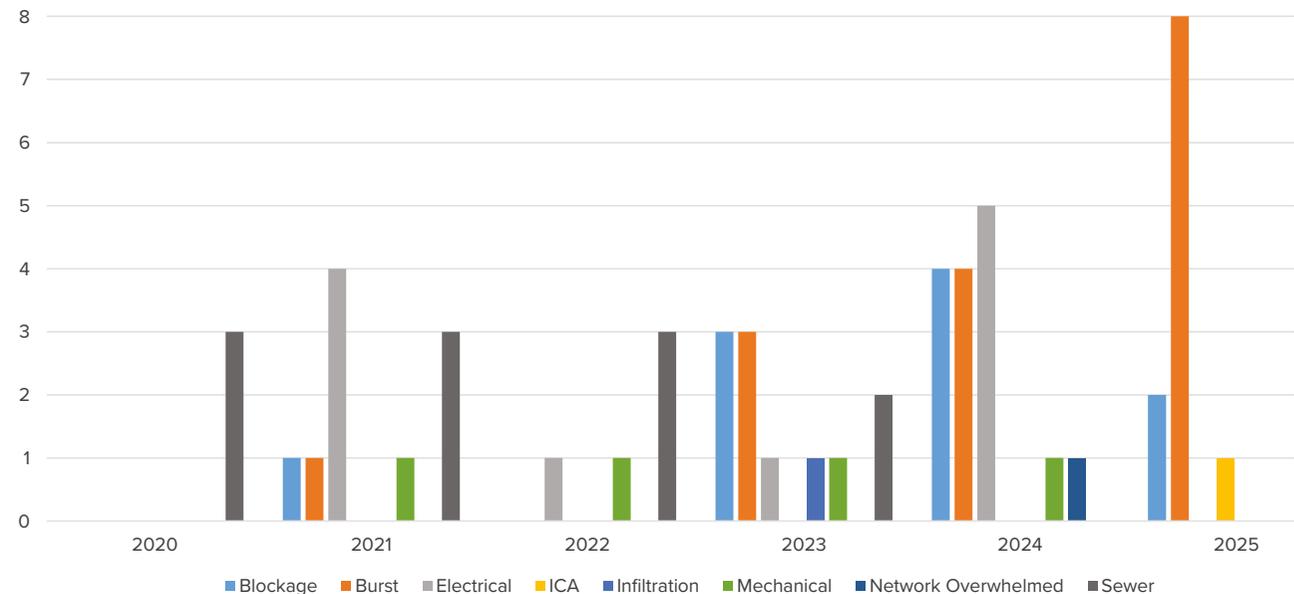
The most significant immediate causes of serious pollutions in 2025, were burst rising mains and blockages in our sewer network.

Figure 22 shows the failure modes of serious pollution incidents from 2020–25. While 2025 has seen a significant decline in electrical serious pollutions and a reduction in blockages leading to serious pollutions, figure 22 shows that bursts continue to significantly contribute to our serious pollution incidents. In fact, bursts contributing to serious pollution incidents have increased in frequency each year since 2022.

Burst rising mains and blockages on our foul sewer assets continue to contribute significantly to the number of serious pollutions in 2025. This is due to how difficult it is to detect issues early and the potentially catastrophic impact of high pressure rising main bursts. Our analysis in figure 23 shows the detection and response issues alongside serious pollution failure modes and immediate causes.

- In seven cases out of the total of eight, detection issues were noted, including five incidents that were classified as Not Detected on Site. All these cases related to our network.
- Out of the eight cases where there were response issues, the most common issue was First Responder Limitations, which were due to repeat attendance to identify the issue and limited resource availability.

Figure 24: 2020–25 Serious pollutions failure modes, showing an increase in burst rising main serious pollutions over time and a reduction in electrical and mechanical serious pollutions.



* All 2025 potential serious pollutions included at the time of analysis, 11 in total.

Section 1: Understanding our 2025 pollution performance (continued)

Causes of serious pollution incidents in 2025

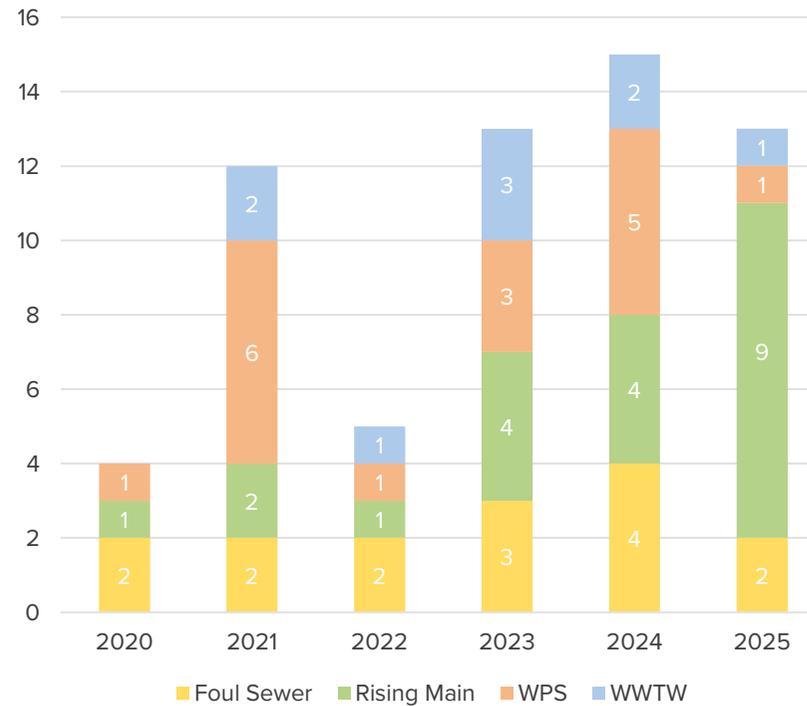
Year-on-year trends highlight the need for expanded proactive measures to reduce serious pollution incidents and enhance network resilience. We have made sustained progress to reduce mechanical failures, and we recognise the need to continue to strengthen our response to blockages and bursts.

Serious pollution incidents have reduced in 2025, down from 15 incidents in 2024 to 13 in 2025.

Rising mains have shown a year-on-year increase from 2022, with incidents doubling into 2025. This is a repeat failure mode, and accounts for 70% of 2025 serious pollutions. The number of serious pollution incidents from blockages declined in 2025, following a peak in 2024.

The 2025 performance indicates a clear need to focus on serious pollutions in our foul sewer network, focused on blockages and burst rising mains. Serious pollution incidents caused by electrical and mechanical issues have seen a drop in incidents over the past year with no incidents in 2025. Previous PIRPs have delivered initiatives to address these failure modes and have had a pollution reduction impact across categories 1–3.

Figure 26: 2020–25 Serious pollutions by premise showing increase in rising main serious pollutions and decline in wastewater pumping stations and wastewater treatment works.



Section 1: Understanding our 2025 pollution performance (continued)

* All 2025 potential serious pollutions included at the time of analysis, 11 in total.

Statistical review

A review of all serious pollutions from 2020–25 shows the most significant risk factor is time of year, with the third quarter and specifically the month of August, seeing peak frequency. When we look at days of the week and months of the year, we found that:

Days of the week

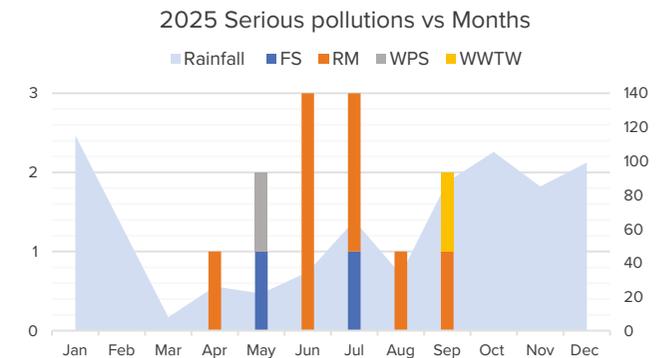
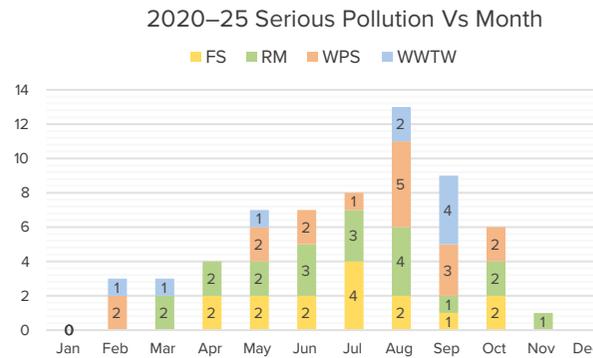
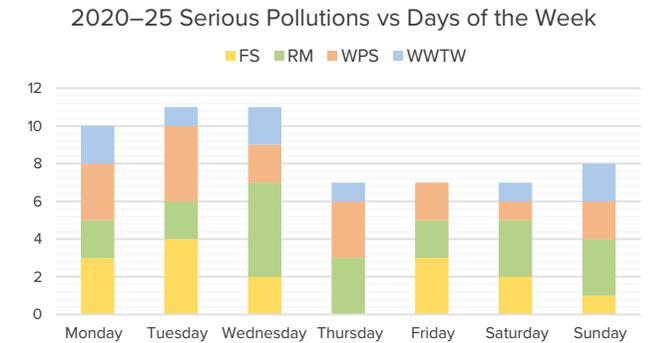
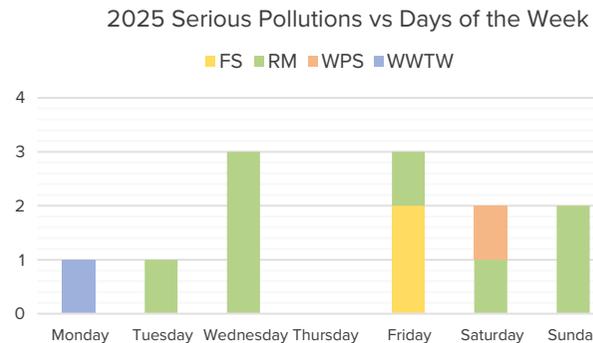
- over the six years before 2025, serious pollution incidents more commonly occurred on the weekdays of Monday – Wednesday
- our day of the week analysis for 2025 shows a different trend, with lower frequency on Monday, Tuesday and Thursday
- the analysis showed there was no relationship with detection or response factors.

Months of the year

- although pollution incidents are generally more frequent in wetter periods, serious pollution incidents are more likely to occur over the dryer summer months
- in 2025 all serious pollution incidents occurred between April and October, continuing the strong trend of summer being an increased risk for serious impact
- the summer months are an increased risk due to reduced dilution and lower river levels, which reduces the resilience of watercourses and increases the environmental impact of spills; in addition, dry, baked soils are less able to absorb spills into the ground, which leads to faster run-off to ditches and watercourses.

Figure 27: Serious pollution insights considering day of week and moment of year.

No serious pollutions in 2025 occurred on Thursdays, and typically over 2020–25 serious pollutions have occurred more frequently Monday – Wednesday. Serious pollutions have occurred more frequently in the summer months, with none occurring in January or December to date.



Section 1: Understanding our 2025 pollution performance (continued)

1.3 Our Pollution Performance: Serious pollutions summary table

Table 24: 2025 Serious pollutions summary table, showing 70% are attributed to burst rising mains and 15% to blockages.

NIRS	Reported Date and Time	Asset Type	Area	Region	Watercourse	Seriousness	Failure Mode	Immediate Cause	Root Cause
2426498	7/9/2025 13:20	RM	Groombridge	Sussex	Unnamed Watercourse 1, River Grom, Unnamed Watercourse 2, River Medway	1W	Burst	Pipe Failure	End-of-life Asset
2423836	27/08/2025 01:44	RM	Hamble	Hampshire	River Hamble	2W	Burst	Pipe Failure	End-of-life Asset
2405388	8/7/2025 20:32	RM	Stubbington	Hampshire	The Solent	2W	Burst	Burst Rising Main	End-of-life Asset
2403164	2/7/2025 10:49	RM	Stubbington	Hampshire	The Solent	2W	Burst	Burst Rising Main	End-of-life Asset
2400064	23/06/2025 16:45	RM	Upstreet	Kent	Unnamed Ditch 1, Unnamed Ditch 2, Sarre Pen, Unnamed Lake	2W	Burst	Burst Rising Main	End-of-life Asset
2396612	14/06/2025 13:24	RM	Hamble	Hampshire	River Hamble	2W	Burst	Pipe Failure	Aged Infrastructure
2395574	11/6/2025 19:19	RM	Kennington	Kent	Unnamed Watercourse, Great Stour	2W	Burst	Pipe Failure	Aged Infrastructure
2380606	20/04/2025 10:12	RM	Storrington	Sussex	Unnamed Watercourse 1, Unnamed Watercourse 2, River Stor, River Chilt, River Arun	2W	Burst	Pipe Failure	End-of-life Asset
2453796	31/12/2025 15:29	RM	Andover	Hampshire	Unnamed Watercourse, Pillhill Brook	2W	Burst	Burst Rising Main	Asset Deterioration
2412355	25/07/2025 21:17	FS	Lymington	Hampshire	Unnamed Pond, Unnamed Watercourse, Avon Water	2W	Blockage	Pipe Collapse	Asset Deterioration
2390821	23/05/2025 17:08	FS	Petersfield	Hampshire	Unnamed Watercourse	2W	Blockage	Fat/Rag	Lack of Maintenance
2391023	24/05/2025 13:28	WPS	Portslade	Sussex	English Channel	2W	ICA	PLC Fault/Failure	Asset Deterioration
2440833 / 2441335/ 2439563	6/11/2025 11:37	WWTW	Rye	Sussex	English Channel	2W	Mechanical	Mesh Failure	Asset Deterioration

Section 2: What we did in 2025 to reduce pollution incidents

The delivery of the PIRP 2025 has strengthened operational resilience across wastewater pumping stations, rising mains and sewer level monitors, with the impact starting to show.

For some measures delays and process gaps mean full impact will rely on ongoing recruitment to be completed and increasing the speed of delivery,

In 2025, we implemented a range of measures including overarching measures and measures aimed at specific assets.

2.1 Steps taken to maintain the system in 2025

This is a summary of activities completed in 2025, including those started in 2024. In this section, impact covers the pollution reduction benefit delivered in year.

Foul sewer including combined sewer and surface water assets

Here we have outlined 2025 measures delivered to improve foul sewer resilience, increase early-warning capability and address known blockage pathways.

This section also includes measures addressing combined sewer overflows and surface water sewers as they are managed by the same operational teams.

Key measures included increased SLM coverage and data frequency, targeted cleaning and survey programmes, and initiation of I&I and dual-manhole interventions. These strengthened detection and localised asset condition, though overall blockage numbers rose, and 2026 efforts will concentrate on restoring expected SLM benefit and accelerating follow-up activity.

What we continued from 2024:

- Installed 8,000 extra sewer level monitors (SLMs) in key areas to help spot issues earlier.
- Improved how often SLMs send data so we can detect developing blockages sooner.
- Completed targeted cleaning and CCTV surveys in the worst performing areas for blockages.

What we started in 2025:

- Began fixing Infiltration & Inundation (I&I) issues using new modelling tools.
- Started identifying and planning repairs for dual manholes in a high-risk area to prevent pollution pathways.
- Launched surveys and cleaning for problem syphons, with repairs planned for 2026.

Impact of these measures:

Overall, our foul sewer blockage pollution incidents in 2025 (63) were slightly increased versus 2024 performance (58), despite a programme of targeted work. As part of PIRP 2026 planning we have undertaken a review of our SLM sustained pollution reduction benefit and found a shortfall, which will be addressed by **operational grip** sprints in early 2026. Where we have completed targeted surveys and cleaning, we have collected before and after evidence that demonstrates we have left assets in an improved state, reducing blockage risk for that specific section of sewer. The full impact of 2025 initiatives will be reviewed in 2026 once delivery is complete.

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Table 25: Summary of foul sewer measures started or delivered in 2025. PIRP year indicates start year, for example 2024 PIRP measures started in 2024.

PIRP Year or Start Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Delivery Status EOY	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2024	FS	SLM Data Frequency Optimisation	Optimised SLM data frequency and threshold-based alerts to enable faster detection of upstream blockages.	26,000 SLMs	4	Blockages	Delivered in Year	Bespoke	Tackling Blockages & Sewer Network Failures
2024	FS	SLMs Phase 2 (8,000 Installation)	Expanding sewer level monitoring to 8,000 high-priority locations to proactively detect failures.	8,000 manholes	11	Blockages	Delivered in Year	Telemetry installation.	Tackling Blockages & Sewer Network Failures
2024	FS	Survey Inspect and Remediate Worst 5 Catchments	Targeting the 5 worst-performing sewer network catchments with acoustic and camera inspections, followed by cleaning and remediation.	5 Network Catchments	4	Blockages	Delivered in Year	Bespoke	Tackling Blockages & Sewer Network Failures
2025	FS	I&I Tactical Interventions	Using Infiltration & Inundation modelling and targeted surveys to identify and resolve I&I issues.	10 I&I interventions will be completed	1	Network Overwhelmed	In Progress	Use of predictive analytics.	Strengthening Asset Health & Resilience
2025	FS	Specialist Compliance Interventions	Specialist team to verify and raise responses to pollution incidents in the sewer network.	Covers all Foul Sewer Incidents	1	Blockages	Delivered in Year	Bespoke	Improving Data, Modelling & Predictive Capability
2025	FS	Dual Manholes	Improving network integrity by identifying and repairing dual manholes, updating asset mapping and ensuring ongoing maintenance is in place.	9,900 manholes lifted and inspected	0	Blockages	In Progress	Dual Manhole Surveys and upgrades	
2025	FS	Survey and Clean problem syphons	Identification and mapping of network syphons, and making sure they are fit for purpose through isolation, cleaning, and CCTV inspections.	17 Syphon assets will be surveyed and cleaned.	0	Blockages	In Progress	Remedial capital asset improvements	

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Rising mains

What we started in 2025:

We added more smart sensors across the rising main network to quickly spot bursts or pressure changes – 720 SLMs and 35% of the additional pressure monitors were installed by December 2025. We also started repairing and replacing the highest risk rising mains to prevent bursts, reduce pollution risk, and improve overall network reliability. These replacements are planned in across AMP 8 (2025–30), with three completed in 2025.

Impact of these measures:

Both initiatives started in 2025 are still in delivery, and the full impact of these initiatives will be reviewed once this is complete. As of December 2025, the availability of 720 SLMs installed was 98%, which informs us that these devices are available to provide the potential detection of burst rising mains quicker, which will reduce the severity of these incidents. Of the three rising mains rehabilitated in year, none have polluted since October 2025 (post completion) and this will be regularly reviewed as part of ongoing benefits tracking. The ongoing work to rehabilitate a further 25 rising mains will support a reduction in burst rising main pollutions.

Table 26: Summary table of rising main measures started or delivered in 2025.

PIRP Year or Start Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Delivery Status EOY	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2025	RM	Rising Main Detection – additional sensors	Upgrading and installing smart sensors across our Rising Main network to quickly identify issues including bursts and pressure changes.	942 Additional Sensors	4	BRM	In Progress	Telemetry installation.	Strengthening Asset Health & Resilience
2025	RM	Rising Main Rehab (incl. Cap Del)	Proactively repairing or replacing the most high-risk rising mains to prevent bursts, protect the environment, and keep our network running reliably	28 Rising Mains	2	BRM	In Progress	Remedial capital asset improvements	Improving Wastewater Treatment Performance

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Wastewater pumping stations

What we continued from 2024:

We completed 10 wastewater pumping stations to beneficial use as part of wastewater pumping station resilience, with an additional 30 sites added to the scope in year that will be completed throughout 2026. We also installed 250 SAM4 units monitoring rotating assets at 50 sites, with an additional 32 assets in the environmentally sensitive areas of the New Forest.

What we started in 2025:

We restored full pump performance at six wastewater pumping stations, through repairs, improvements and replacements of pump assets.

Upgrades to monitoring at Bronze condition-based monitoring (CBM) standard sites was started, bringing these sites up to Silver standard where we can use proactive analytics to identify risk earlier and move away from reactive alerts only.

Impact of these measures:

Our 2025 performance showed a decline in electrical and mechanical pollutions, with a 5% reduction in proportional impact for each failure mode across all asset types.

For wastewater pumping station assets, a reduction of 13 pollutions versus 2024 performance indicates that our approach to tackle this failure mode has been successful, but the full impact will be assessed at the close of 2026 as

some initiatives are still in delivery. During the critical review of the PIRP 2025, we identified a shortfall in the sustained benefit associated with CBM initiatives – these are initiatives that use real-time data and analytics to monitor the health of assets such as pumps – and work will take place in 2026 to close the gap which will support further improvement in this space.

Where we have completed site-based initiatives – wastewater pumping station resilience – the approach has proven beneficial in reducing the number of pollutions and volume of wastewater pumping stations that have repeat incidents in year. As the additional sites are still in delivery, this will be reviewed once completed.

Table 27: Summary table of wastewater pumping station measures started or delivered in 2025.

PIRP Year or Start Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Delivery Status EOY	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2024	WPS	WPS Resilience incl. Advanced Back Up Control	Enhancing WPS resilience by eliminating single points of failure through backup control systems and targeted health checks.	10 WPS Sites	11	Electrical and Mechanical	Delivered in Year	Bespoke	
2024	WPS	WPS Resilience Additional Sites	Enhancing WPS resilience by eliminating single points of failure through backup control systems and targeted health checks at 30 additional sites.	30 WPS Sites	6	Electrical and Mechanical	In Progress	Remedial capital asset improvements	
2024	WPS	Samotics SAM4 Health CBM System	Deploying 250 SAM4 monitoring assets across 50 sites to predict pump failures using AI-driven alerts	250 assets	7	Electrical and Mechanical	Delivered in Year	Bespoke	
2024	WPS	Install New Forest CBM Package	Package of CBM devices installed on assets in specific environmentally sensitive areas.	32 assets	1	Electrical and Mechanical	Delivered in Year	Bespoke	Improving Data, Modelling & Predictive Capability
2025	WPS	Restore high risk WPS pumps to PFR	This project will fix or upgrade pumps at 6 WPSs to ensure they achieve their permitted flow rates.	6 WPSs	1	Mechanical – Pump Fault/ Failure	Delivered in Year	Remedial capital asset improvements	Improving Wastewater Treatment Performance
2025	WPS	CBM to silver	Upgrading remaining sites that were Bronze CBM standard (fully reactive) to Silver Standard allowing for proactive alerts to be generated.	200 Sites	0	Electrical and Mechanical	In Progress	Telemetry installation.	Improving Wastewater Treatment Performance

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Wastewater treatment works

What we continued from 2024:

We delivered a series of eight models to proactively detect emerging risk at our wastewater treatment works. This insight feeds into our Rapid Analytical Insights Desk and proactive work-orders are raised. To support this, a decision-making tool for managing final effluent quality risk was also delivered.

To improve asset health, a programme of remedial work was completed at six wastewater treatment works including asset replacements and improvements.

What we started in 2025:

- The installation of 22 BOD monitors at high-risk wastewater treatment works started, with the remaining sites due to complete early 2026.
- A third iteration of our Go to Green project started, with desktop and detailed site surveys completed, and detailed surveys identifying four remedial work programmes due to complete in 2026. Further surveys and investigations will continue in 2026.
- Work to improve our Flow Breach process and develop an Asset Criticality model for wastewater treatment works has started and will continue into 2026.

The impact of these measures:

In 2025 there was a significant reduction in electrical and mechanical wastewater treatment works pollution incidents, with a reduction of 20 incidents in this failure mode and an overall year-on-year reduction of five pollution incidents for all failure modes. This indicates greater control over electrical and mechanical failures at our wastewater treatment works, indicating the successful impact of our 2024 initiatives completed in 2025.

Remaining initiatives are underway and a review of the impact will be completed at the close of 2026.

Table 28: Summary table of wastewater treatment measures started or delivered in 2025.

PIRP Year or Start Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Delivery Status EOY	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2024	WWTW	Static Models WWTW (Sentrix) to Detect Emerging Risks and Issues	Developing static alert models for wastewater treatment works to provide real-time visibility of emerging risks and enable proactive interventions	8 Models	5	Electrical and Mechanical	Delivered in Year	Bespoke	Strengthening Asset Health & Resilience
2024	WWTW	Final Effluent Early Warning Model	Implementing a 24/7 early warning decision-making tool for wastewater treatment works to proactively manage effluent quality and reduce compliance risk	1 Decision Making Tool	5	FE Compliance	Delivered in Year	Bespoke	
2024	WWTW	Complete G2G Phase 2 Remedials	Remedial work completed at 6 high-risk WWTWs, including asset replacements and improvements to address risk.	6 WWTWs	2	Electrical and Mechanical	Delivered in Year	Bespoke	Improving Data, Modelling & Predictive Capability
2025	WWTW	BOD Monitoring	Installing BOD monitoring of Final Effluent (FE) at 22 WWTWs, improving visibility of FE quality.	22 WWTWs	1	FE Compliance	In Progress	Telemetry installation.	Improving Wastewater Treatment Performance
2025	WWTW	G2G Phase 3: Survey and Remedials	Reviewing and improving the highest-risk sites to prevent pollution, starting with detailed surveys and targeted fixes at priority locations	10 WWTWs	0	FE Compliance	In Progress	UT audit programme	Improving Wastewater Treatment Performance
2025	WWTW	Flow Breach Process Review	Conducting a review of our flow breach process, and implementing improvements to this process, ensuring we stay within permit conditions and protect the environment	Supporting Flow Investigations across our 357 WWTWs	0	Mechanical – Inlet Failures	In Progress	Staff training	Improving Wastewater Treatment Performance
2025	WWTW	WWTW Asset & Process Criticality Model	Build of a model that considers key risk factors such as location and permits, to identify critical assets and prioritise initiatives based on risk.	To include 357 WWTWs	Enabler	Risk Reduction	In Progress	Bespoke	Improving Wastewater Treatment Performance

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Overarching measures

What we continued from 2024:

- We completed a programme of targeted remedial work to reduce groundwater infiltration and inundation across 26 catchments, reducing risk in high groundwater years.
- Improvements in our Operational Control Centre (OCC) we made, including providing playbooks to support incident response and improving our incident training programmes.
- The installation of CBM devices across 500 assets at wastewater pumping stations and wastewater treatment works was completed to increase the volume of assets covered by proactive analytics.

What we started in 2025:

- Focused on high-risk root causes we embarked on a journey to survey 439 of our permanent generators, completing remedial works on electrical assets at 3 wastewater pumping stations following normal generator service to reduce risk and installing 500 monitoring devices to provide insight into our electrical asset health and lead to proactive measure before failures.
- To improve control of assets, we are planning to replace any level controllers – the equipment that reads and transmits the level of sewage in tanks and wells – that have failed or are not working properly, with newer more effective models, starting with our highest risk assets in early 2026.
- We are continuing to expand our CBM coverage by installing an additional 2,500 CBM devices across our wastewater pumping stations and WWTW estate.
- To enable us to tackle the increased volume of proactive alerts and work orders, we have taken a two-fold approach; we've provided our Proactive Control Centre (PCC) with a single pane of glass view of alerts – where all alerts are visible from one dashboard, pulling all the information into one place for easier access and action and increase work-order to alert ration. We've also started recruiting additional resource to support in the field in the form of Asset Reliability and CBM engineers.
- To improve our pollutions response and reporting, we are bringing in a new Pollution Management System due to roll out in the first quarter of 2026 and provided training for our Level 1 incident managers to support them in identifying and tackling risk earlier.

Impact of these measures:

Our overarching measures include enabling activity that has supported a small reduction in operational grip failures in 2025, and an overall year on year reduction in total pollutions of 6%.

The improvements in our OCC lead to a decrease in 2024 of pollutions impacted by the specific response and detection issues covered by the programme. This appears to have sustained into 2025 but will be reviewed again at the close of 2026 to confirm a lasting positive impact.

As part of our critical review of PIRP 2025 we have identified a shortfall in CBM benefits which will be tackled by operational grip sprints in 2026, helping us get closer to the full positive impact we expected to see from these initiatives. All measures still in delivery will have their impact reviewed in full at the close of 2026.

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Table 29: Steps taken to maintain the system – summary table of overarching wastewater measures delivered or started in 2025.
PIRP year indicates start year, for example 2024 PIRP measures started in 2024.

PIRP Year or Start Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Delivery Status EOY	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2024	Overarching Measures	Groundwater Planning Process & Remedials (Flooding taskforce)	Consolidated and prioritised flooding remedial programme targeting infiltration hotspots, inundation relief, and readiness for AMP8.	26 catchment areas	0	Groundwater	Delivered in Year	Bespoke	Tackling Blockages & Sewer Network Failures
2024	Overarching Measures	Control Room Pollution Awareness, RAID & Playbooks	Strengthening control centre resilience through ABC principles, training, and decision-support tools.	Support Tools for 75+ OCC employees	10	Detection and Response Issues	Delivered in Year	Bespoke	Tackling Blockages & Sewer Network Failures
2024	Overarching Measures	WW Incident Management Improvement Plan	Expanding SEMD and major incident training to include wastewater, improving emergency planning, response, and learning through workshops and simulations	6 new incident training programmes	2	Response Issues	Delivered in Year	Telemetry installation.	Tackling Blockages & Sewer Network Failures
2024	Overarching Measures	Upgrade CBM Bronze to Silver	Upgrading 54 WPS sites that were Bronze CBM standard (fully reactive) to Silver Standard allowing for proactive alerts to be generated.	54 WPS Sites	1	Electrical and Mechanical	Delivered in Year	Telemetry installation.	Tackling Blockages & Sewer Network Failures
2024	Overarching Measures	Install Samotics Next Phase Forward	Deploying 500 additional SAM4 monitoring assets across critical sites with high pollution risk.	500 assets	5	Electrical and Mechanical	Delivered in Year	Telemetry installation.	Enhancing Capacity to Handle Growth & Climate Change
2025	Overarching Measures	Generator & ACB Resilience	Upgrading alarms and monitoring systems on our generator assets at key pumping stations and treatment works.	439 Generators	6	Electrical – Generator Failure	In Progress	Power resilience improvements	Improving Data, Modelling & Predictive Capability
2025	Overarching Measures	DMC Power Resilience	Servicing all backup generators at pumping stations and treatment works to keep them reliable during power outages.	3 WPSs	0	Electrical – Generator Failure	In Progress	Power resilience improvements	
2025	Overarching Measures	VisNet Hubs	Installing 500 smart electrical monitoring devices at high risk sites, that monitor the condition of electrical circuits, check for water ingress and capacity issues.	500 devices	6	Electrical – Power Blips	In Progress	Power resilience improvements	
2025	Overarching Measures	Miltronics upgrade on obsolete units	Replacing failed and aged out level controls at our WPSs and WWTWs.	95 miltronics units	0	Electrical/ICA – Miltronics	In Progress	Remedial capital asset improvements	Strengthening Asset Health & Resilience
2025	Overarching Measures	SAMOTICS SAM4 (CBM) Phase 3	Deploying 2500 SAM4 monitoring assets across the WPS and WWTW estate to predict pump failures using AI-driven alerts	2500 assets	0	Mechanical – Pumps airlocked	In Progress	Telemetry installation.	Strengthening Asset Health & Resilience
2025	Overarching Measures	Asset Reliability Engineers	Recruiting additional resource to support ongoing asset maintenance and optimise benefit from CBM.	Overarching Measure	0	Asset Failure	In Progress	Bespoke	Strengthening Asset Health & Resilience
2025	Overarching Measures	CBM Engineers	Recruiting additional resource to process and get optimal benefit from CBM.	Overarching Measure	0	Asset Failure	In Progress	Bespoke	Strengthening Asset Health & Resilience
2025	Overarching Measures	Connected Network Proactive Analytics	Bringing together smart analysis of pumps, treatment works, and rising mains using AI and local rainfall data to predict issues	Overarching Measure	5	Electrical, Mechanical and Blockages	Delivered in Year	Use of predictive analytics.	Strengthening Asset Health & Resilience
2025	Overarching Measures	Training for Incident Roles (FEC)	Introduction of Level 1 incident manager role and training, to catch incidents at L1 before they escalate to L2.	Overarching Measure	Enabler	Risk Reduction	Delivered in Year	Staff training	Strengthening Asset Health & Resilience
2025	Overarching Measures	Pollution Management System	Improving how we manage pollution incidents with faster reporting, smarter analysis, and real-time tools to support early identification of pollutions and quicker response.	Overarching Measure	Enabler	Risk Reduction	In Progress	Improve root cause analysis techniques	Strengthening Asset Health & Resilience

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Water distribution network (WD)

This is a summary of the measures delivered in 2025 to improve leakage detection, strengthen operational awareness and reduce pollution risk across the water distribution network.

Activity focused on expanding noise and pressure logging, improving dashboards and job-closure processes, and rolling out the leakage-prediction model beyond the initial proof-of-concept. These measures supported a reduction in water-distribution and water-supply incidents, with full benefit to be confirmed once the model rollout completes in 2026. .

What we continued from 2023 and 2024:

- We delivered a programme of activities targeted at increasing leakage awareness, detection and repairs through improved dashboards, increasing the volume of noise and pressure loggers and implementing a job closure handbook.
- We also completed a proof-of-concept trial using a leakage prediction model to increase productivity and identify more leaks. This was successful and is being rolled out across the remaining counties in 2026.

What we started in 2025:

- Full roll out of the leakage prediction model to cover all our water supply operational areas was started in 2025 and will continue into 2026.
- We started our Water Main Replacement programme which will continue across AMP 8. We laid 15.2km of main in 2025 which included 4.6km that was taken out of service and replaced.

The impact of these measures:

In 2025 we have seen a reduction in water distribution incidents of 11 category 3 incidents and a reduction of five incidents from our water supply works. This shows an improvement in this space with a total reduction of 16 incidents, which is within the expected impact of the measures completed in 2025. To ensure this impact is sustained, this will be reviewed again at the end of 2026 to confirm the impact we have seen from these measures.

Table 30: Steps taken to maintain the system – summary table of WD measures delivered or started in 2025. The PIRP year indicates start year, for example 2024 PIRP measures started in 2024.

PIRP Year or Start Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Delivery Status EOY	Relevant Standard Measure
2023	WD	Leakage Recovery Plan – Locate & Mend	Programme to increase leakage detection and repairs including pressure management solutions, additional noise loggers, thermal imaging and a job closure handbook.	Cross Network Impact	1 to 5	Water Main Issue	Delivered in Year	Bespoke
2024	WD	Leakage Recovery Plan – Aware	Programme to improve leakage awareness by upgrading our situational awareness dashboard, install of 500 additional pressure loggers and resolving network issues.	Cross Network Impact	1 to 5	Water Main Issue	In Progress	Bespoke
2024	WD	Improved Leakage Detection POC	Trial of a proof of concept leakage prediction model, in one county. Aim in to increase productivity and improve leakage identification.	Trial in 1 county.	Proof of Concept	Water Main Issue	Delivered in Year	Use of predictive analytics
2025	WD	Increase to Leakage Job Volumes Per Day	Performance dashboard to support increase in large volume leaks fixed.	Cross Network Impact	1 to 5	Water Main Issue	Delivered in Year	Bespoke
2025	WD	Water Main Replacement Programme	Programme of replacing water mains, focused on tacking high risk assets informed by asset condition modelling, including 21km of worst performing mains.	360kms water mains replaced.	1 to 5	Water Main Issue	In Progress	Remedial capital asset improvements

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Water overarching measures

Steps taken to maintain the system: water overarching

This is a summary of the overarching measures delivered in 2025 to strengthen operational capability, improve visibility of water network risk and support more consistent performance across water supply works and water distribution.

Key actions included improvements to storeroom and materials management, enhanced operational capacity for front-line managers, rollout of root cause analysis for water incidents, replacement of the Water Network Controller database, early discovery work on Smart Systems, and consolidation of legacy GIS platforms – these are digital tools linking information to locations. These enablers improved information flow, reduced operational friction and supported the reduction in water related pollution incidents seen in 2025.

What we continued from 2023 and 2024:

- We made improvements to how we manage our storerooms and materials, improving access and availability of critical spares for quick repairs to be completed.
- We provided role clarity and support tools for our front-line operational managers, to enable proper performance management and increase operational capacity.
- Root cause analysis was rolled out to be completed for our water distribution network and water supply works incidents, improving our understanding of what went wrong and generating learnings to improve in the future.

What we started in 2025:

- To improve visibility and accessibility of information between our Operational Control Centre and front-line teams, we replaced our Water Network Controller Database to provide a reliable platform for information sharing.

- Initial discovery was started on the role Smart Systems – such as two-way pump control and remote plant operation – can play in the future of our clean water operations.
- Managing multiple systems can make tasks harder to complete, so we consolidated 5 legacy Geographical Information Systems (GIS) into one platform, improving accessibility, functionality and user experience for GIS related tasks.

Impact of these measures:

Our 2025 pollution performance shows a reduction of 16 category 3 incidents from our water distribution network and water supply works, an improvement that has been supported by the enabling measures we completed in 2025. The full impact of these measures will be re-assessed in 2026 to confirm the impact has sustained long term and continues to enable pollution reduction in the future.

* Estimated Annual Pollution Reduction Benefit for each measure.

Table 31: Steps taken to maintain the system – summary table of water overarching measures delivered or started in 2025.
PIRP year indicates start year, for example 2024 PIRP measures started in 2024.

PIRP Year or Start Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Delivery Status EOY	Relevant Standard Measure
2023	Water Overarching Measures	Store Rooms and Material Planning	Implementation of an integrated logistics function to manage store rooms and materials.	Overarching Measure	Enabling	All	Delivered in Year	Enhanced incident response
2024	Water Overarching Measures	Incident Root Cause Analysis Process	Implementation of Root Cause Analysis process for Water Supply Works and Water Distribution incidents.	1 Process Developed and Rolled Out	Enabling	All	Delivered in Year	Improve root cause analysis techniques
2024	Water Overarching Measures	Water Operational Capacity	Programme of activities to provide role clarity and support for FPMs, improving business processes and enabling performance management.	Pilot in Water Supply Works, before Operational roll out.	Enabling	All	In Progress	Enhanced incident response
2025	Water Overarching Measures	Water GIS Consolidation	Consolidation of 5 legacy GIS systems into one, single Enterprise GIS system.	Overarching Measure	Enabling	All	Delivered in Year	Bespoke
2025	Water Overarching Measures	Water Network Controller Database Replacement	Replacement of Water Network Controller Database, for improved ability to communicate and share information.	Overarching Measure	Enabling	All	Delivered in Year	Enhanced incident response
2025	Water Overarching Measures	Smart Systems Phase 1 – Discovery	Initial discovery and investigation into Smart Systems that could provide benefit if implemented in the future.	Discovery Only	Enabling	All	In Progress	Bespoke

Section 2: What we did in 2025 to reduce pollution incidents (continued)

2.2. Critical review of PIRP 2025 measures

PIRP 2025 delivery and critical review

Delivery of the PIRP 2025 has strengthened operational resilience across wastewater pumping stations, rising mains and SLMs, with early benefits now materialising. Some delays and process gaps mean full impact will rely on ongoing recruitment to be completed and increased delivery tempo into 2026 for our rising main works.

Network workstream

I&I tactical measures have completed one measure in 2025, with a further four scoped ready for 2026. The specialist compliance interventions team is in place and embedding to support quicker measures and smoother escalation of risk. Syphons and dual manhole investigations made significant progress in 2025, with remedial work planned in for 2026.

Electrical and mechanical workstream

Generator resilience is on track, following an accelerated start and over 300 asset shave been completed by close of 2025. Installs of VisNet and Samotics SAM4 units are underway, with VisNet set to continue into 2026. We also restored PFR (pass forward rate) at 6 wastewater pumping stations in 2025, completing this initiative.

Wastewater treatment works resilience workstream

Installation of 19 BOD monitors has been completed, with 4 now calibrated and providing accurate data. G2G and the review of the Flow Breach Process as underway.

People, processes and systems workstream

Recruitment to facilitate the Learning Cycle and Waste OCC embedment team has been completed and these roles are currently embedding. SOP videos are well planned and currently going through the recruitment process, this has led to a slight delay but is recoverable. The remaining items are underway with recruitment of additional resource.

Enablers and additional activity

The additional activities raised in year include work to improve SLM availability which has supported an increase to 95%. We have also delivered an enhanced Power Playbook to improve OCC response to power related pollutions and five additional CBM models to support earlier detection of electrical and mechanical risk.

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Figure 28: PIRP 2025 summary table showing measures delivered as part of the PIRP 2025, their total expected annual pollution reduction benefit once complete and their delivery status as of December 2025.

Work Stream	Work Stream Area	Project Description	Commence (L3)	Delivered By Date (L4)	Annual Pollution Benefit	Delivery Status
Network	Sewer	I&I Tactical Interventions	May-25	Jan-26	4	On Track
		Specialist Compliance Interventions	Aug-25	Sep-25	4	Completed
		Dual Manholes	Jun-25	Jan-26	1	On Track
		Survey and Clean problem syphons	Apr-25	Mar-27	2	On Track
	Rising Mains	Rising Main Detection – additional sensors	Jun-25	Jun-26	4	On Track
		Rising Main Rehab (incl. Cap Del)	May-25	Mar-27	10	On Track
Electrical & Mechanical	Power Resilience	Generator & ACB Resilience	Jun-25	Mar-26	6	On Track
		DMC Power Resilience	May-25	Mar-26	1	On Track
		VisNet Hubs	Apr-25	Mar-26	8	On Track
	Asset Resilience	Miltonic's upgrade on obsolete units	Mar-25	Oct-26	5	On Track
		Restore high risk WPS pumps to PFR	Apr-25	Jun-25	1	Completed
	Asset Visibility	SAMOTICS SAM4 (CBM) Phase 3	Apr-25	Mar-26	15	On Track
CBM to silver		Apr-25	Mar-26	2	On Track	
WWTW Resilience	WWTW Resilience	BOD Monitoring	Jul-25	Dec-25	2	On Track
		G2G Phase 3: Survey and Remedials	Jun-25	Apr-26	3	On Track
		Flow Breach Process Review	May-25	Mar-26	1	Off track, recoverable
People, Processes and Systems	People & Processes	Learning Cycle	May-25	Mar-26	2	On Track
		Waste OCC Embedment Team	May-25	Mar-26	1	On Track
		Videos for SOPs	May-25	Mar-26	1	Off track, recoverable
		Asset Reliability Engineers	May-25	Mar-26	2	On Track
		CBM Engineers	May-25	Mar-26	3	On Track
		Operational Grip	May-25	Dec-27	8	On Track
		WWN Additional Resources (6 FTE)	Sep-25	Aug-26	2	On Track
		Asset Maintenance Additional Resources (8 FTE)	Nov-25	Oct-26	5	On Track
	Systems	Connected Network Proactive Analytics	Apr-25	Jul-25	8	On Track
Enablers	Enablers	Training for Incident Roles (FEC)	May-25	Jun-25	–	Completed
		Pollution Management System	May-25	Aug-25	–	Off track, recoverable
		WWTW Asset & Process Criticality Model	May-25	Mar-26	–	Off track, recoverable
Additional Activity	Additional Activity	Additional Activity Raised in Year	Jun-25	Mar-26	1	On Track

Key

Completed	Completed
Off track, delay to benefit	Off track, delay to benefit
Off track, recoverable	Off track, recoverable
On Track	On Track

Section 2: What we did in 2025 to reduce pollution incidents (continued)

PIRP 2025 delivery – KPI status and measures of success

Initiatives raised in 2025 are underway, with five completed in year and a pollution reduction benefit of 39 delivered in year.

Maximo Permit Compliance – a digital tool to help us monitor whether a site is compliant with its permit, for example checking if we are passing forward the required volume of sewage to the treatment works – has been deferred into the future pipeline, as the scope review revealed more opportunities.

While we review the benefits of the CBM devices we have already installed, further installs are on hold heading into 2026 and will start again subject to the findings of this review.

Figure 29: PIRP 2025 summary table showing the delivery KPIs for each measure, and the KPI status as of December 2025. In addition, it includes measures of success to determine how successfully a measure is once fully implemented and the benefit delivered by each measure as of December 2025.

Work Stream	Work Stream Area	Project Description	Delivery KPI	KPI Status	Measure of Success	2025 Delivered Benefit
Network	Sewer	I&I Tactical Interventions	10 Full reviews completed by team.	In Progress	Reduction in infiltration and inundation pollutions from the areas with interventions completed.	1
		Specialist Pollution Compliance	Team recruited and in place.	Complete	Reduction in time to contain, and time to resolve incidents.	1
		Dual Manholes	100% of dual manholes in the selected areas surveyed.	In Progress	Reduction in pollutions via Dual Manholes in the areas completed to beneficial use status.	0
		Survey and Clean problem syphons	All known syphons surveyed and inspected.	In Progress	Reduction in pollutions on syphon assets.	0
	Rising Mains	Rising Main Detection – additional sensors	Installation of 92 pressure monitors and 850 SLMs.	In Progress	Improved pro-active detection rate on burst rising mains.	4
		Rising Main Rehab	Rehab or replacements completed on 28 high risk rising mains.	In Progress	Reduction in burst rising main pollutions.	2
Electrical and Mechanical	Power Resilience	Generator & ACB Resilience	All 405 assets surveyed for resilience.	In Progress	All remedial work completed as identified by surveys, improving asset health and resilience.	6
		DMC Power Resilience	Remedial works completed at high risk assets at 3 WPSs.	In Progress	Replacement or repair of 3 generators at critical sites.	0
		VisNet Hubs	Installation of VisNet devices at 500 sites.	In Progress	Proactive workorders addressing Power Supply risks completed, with before and after data.	6
	Asset Resilience	Miltonic's upgrade on obsolete units	Replacement of Multi-Ranger and Hydro range units.	In Progress	Reduction in false alarms on level controllers.	0
		Restore high risk WPS pumps to PFR	PFR restored at the 6 identified WPSs.	Complete	Completed remedial works at 6 WPPs to meet flow pass forward rate.	1
	Asset Visibility	SAMOTICS SAM4 (CBM) Phase 3	Install of Samotics SAM4 units on 2,500 assets.	On Hold	Proactive work orders completed with before and after data to track accuracy of alerts.	0
		CBM to silver	Install of 500 additional SAM4 units at 54 WPSs.	On Hold	Proactive work orders completed with before and after data to track accuracy of alerts.	0

Continued on next page...

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Figure 29: PIRP 2025 summary table showing the delivery KPIs for each measure, and the KPI status as of December 2025. In addition, it includes measures of success to determine how successfully a measure is once fully implemented and the benefit delivered by each measure as of December 2025 (continued).

Work Stream	Work Stream Area	Project Description	Delivery KPI	KPI Status	Measure of Success	2025 Delivered Benefit
WWTW Resilience	WWTW Resilience	BOD Monitoring	Install of BOD monitoring at 22 WWTWs.	In Progress	Proactive work orders raised and completed following BOD alert, reducing BOD breaches.	1
		G2G Phase 3: Survey and Remedials	Remedial works completed at 10 WWTWs.	In Progress	Completion of intervention and remedial work following detailed site reviews.	0
		Flow Breach Process Review	New process developed and embedded.	In Progress	Delivery and embedment of updated process, with improved data quality from reports.	0
People, Processes and Systems	People & Processes	Learning Cycle	Additional resource recruited and embedded,	Complete	Positive impact on volume and quality of Human Factors investigations completed and themed.	0
		Waste OCC Embedment Team	Additional resource recruited and embedded,	Complete	Reduction in time to resolve OCC actions, with an associated reduction in incident severity.	0
		Videos for SOPs	Delivery of 65 training videos.	In Progress	Delivery of 65 training videos resulting in improved task adherence and reduced maintenance errors	0
		Asset Reliability Engineers	Additional resource recruited and embedded,	In Progress	Roles recruited and embedded.	0
		CBM Engineers	Additional resource recruited and embedded,	In Progress	Roles recruited and embedded.	0
		WWN additional resource	Additional resource recruited and embedded,	In Progress	Roles recruited and embedded.	5
	Asset Maintenance additional resource	Additional resource recruited and embedded,	In Progress	Roles recruited and embedded.	0	
	Systems	Single Proactive Analytics Platform	Delivery and embedment of single-pane of glass view of proactive analytics.	In Progress	Improved alert to work-order ratio, optimising benefits from SLMs and CBM initiative.	5
Enablers	Enablers	Training for Incident Roles (FEC)	Training created and delivered to Level 1 Incident Managers.	Complete	Reduction in incidents raised to Level 2, through use of Level 1 structure.	0
		Maximo Permit Compliance – incl. other considerations	Delivery of Permit Compliance management solution.	Deferred	Reduction in permit breaches.	–
		Pollution Management System	Delivery of new Pollution Management System.	In Progress	Reduction in process delays improving ability to provide EA updates on time.	–
		WWTW Asset & Process Criticality Model	Delivery of WWTW Asset & Process Criticality Model.	In Progress	Reduction in high-risk incidents at critical sites.	–
Additional Activity		Additional Activities raised in year.	Completion of each activity.	In Progress	Reduction in time to contain, time to resolve and time to find incidents.	9

Section 2: What we did in 2025 to reduce pollution incidents (continued)

PIRP 2025 delivery and sustained benefit review

The slippage in sustained PIRP benefits has created a 39 pollution gap versus forecast, driven by reduced year-on-year benefit from site-specific, CBM and sewer level monitor initiatives. The PIRP 2026 will target the root causes of this shortfall by strengthening operational grip, improving alert follow up, and restoring lost benefit across the network.

PIRP sustained benefits loss

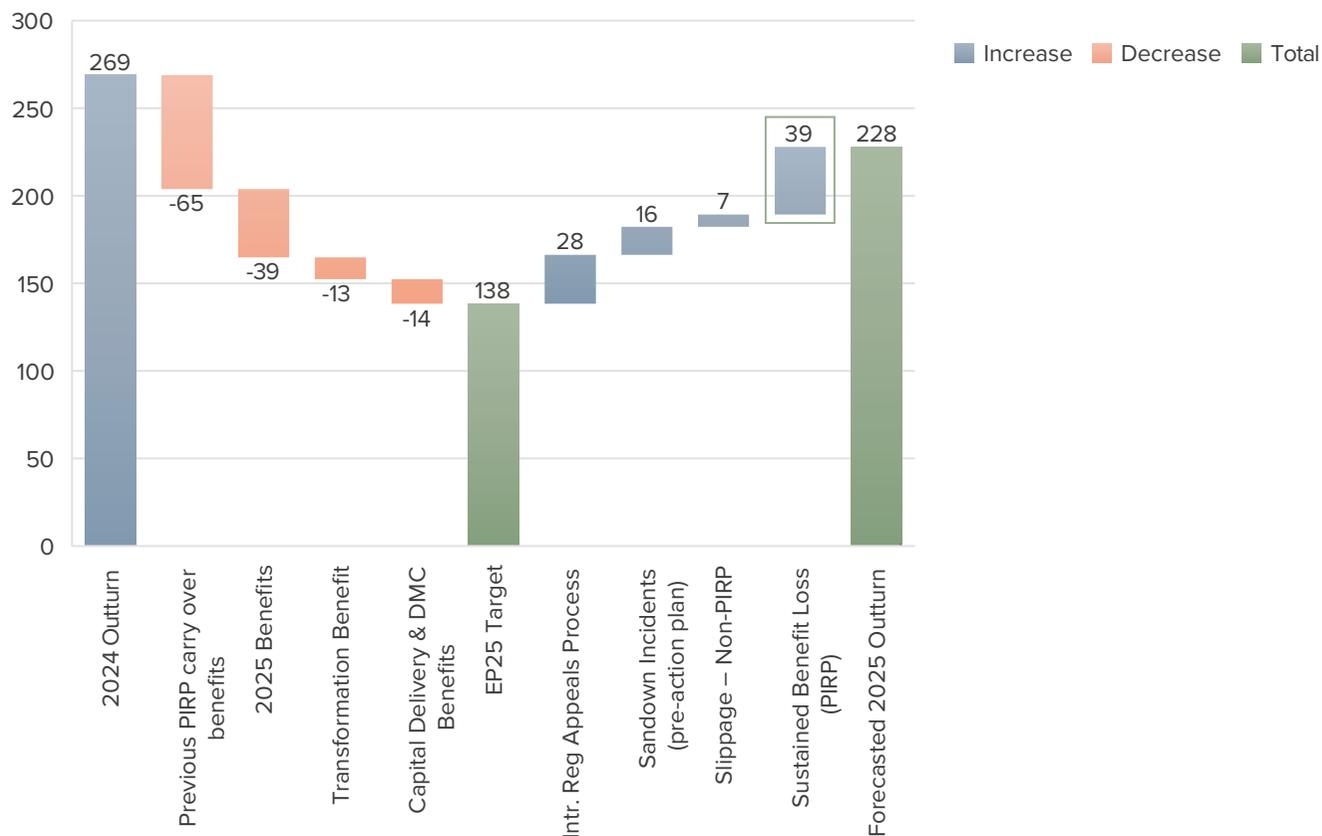
Benefits tracking confirms that PIRP benefits have been delivered as planned, with 39 attributed to 2025 initiatives. However, the sustained benefits review shows a 39 pollution shortfall due to lower than expected ongoing benefit from CBM and SLM initiatives and reduced sustained impact from 2023 site specific measures where earlier gains have not carried through into 2024–25.

Site specific measures

Rising main calming was completed in 2023–24 across 92 rising mains and initially reduced pollution incidents at these sites to two per year in 2024 and 2025. However, a spike in 2023 at sites included in the scope has reduced the overall sustained benefit, meaning the programme has delivered net zero reduction on average when comparing pre and post 2023 performance.

Other site specific measures have delivered positive and sustained benefit, particularly auto pump resets, which improved wet weather resilience at wastewater pumping station sites. Across all sites, these measures reduced average annual pollutions from 220 per year (2020–22) to 119 (2023–25).

Figure 30: Waterfall graph showing factors that have influenced 2025 pollution performance, including the benefits claimed from previous PIRPs and the identified gap in sustained benefit.



Sewer level monitor (SLM) and condition-based monitoring (CBM) initiatives

Across 2023–25, 34,000 SLMs and over 2,000 CBM devices were deployed, consistently delivering pollution reduction benefits of a total of 25 (SLM) and 17 (CBM) per year, but still below the sustained benefit expected (35 and 46 respectively).

Shortfalls come from alert processing backlogs, high volume ‘noisy’ models with low conversion to action and limited front-line capacity to complete follow on work. Operational grip sprints in the first and second quarter of 2026 are targeting these issues to recover lost sustained benefit.

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Case study 1:

Tactical infiltration and inundation activities – using sewer level monitor data

This initiative used the Storm-harvester Infiltration and Inundation (I&I) model to identify and resolve issues with network infiltration. At Ensign Park Wastewater Pumping Station, our investigations uncovered tidal infiltration risks and defective assets. This led to the removal of a seized penstock, closure of a faulty outfall, and planned reinforcement of the remaining structure.

A summary of the initiative – what we did:

This project uses the Storm-harvester I&I model to pinpoint and resolve issues with inflow and infiltration. A trained coordinator defines survey scopes through desktop assessment, guiding field teams to complete ground based, CCTV, and connectivity surveys. Findings are compiled into a report identifying I&I sources and recommending works to be delivered through a capital project route.

Ensign Park wastewater pumping station (Phase 1):

What the investigation found:

- Desktop analysis indicated potential tidal infiltration at the outfall.
- Field investigations confirmed a seized penstock and a defective low-level outfall, both compromising flow and tidal control.

Completed actions:

- The seized penstock was safely removed, eliminating a major restriction and reducing the risk of uncontrolled discharge.
- The low-level outfall was decommissioned, sealed, and reinforced to prevent future leakage, improving hydraulic performance and simplifying maintenance.
- Phase 1 has already delivered tangible benefits by removing defective assets and securing vulnerable outfalls.

Next steps:

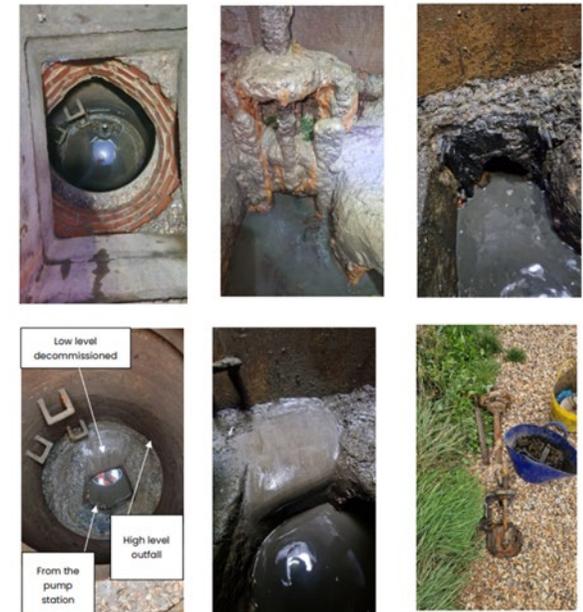
Phase 2 will focus on cleaning, sealing, and reinforcing the remaining high-level outfall, including structural lining to enhance long-term resilience.



New tidal flap on the high level outfall



Phase 1 works completed



Section 2: What we did in 2025 to reduce pollution incidents (continued)

Case study 2:

Reducing pollution pathways from dual manholes

We've been running a project focused on dual manholes. The aim is to reduce the risk of blockages or defects from wastewater drains, getting into adjacent surface water drains.

Dual manholes can be a source of pollution pathways – ways that pollution can get into our surface water drains and reach watercourses, such as rivers.

These dual manholes contain both foul and surface water drains, and can cause problems if they have any defects where wastewater gets into the surface water drains:

- If wastewater gets into the surface water drains, it can reach local rivers and streams, where the environment can be impacted.
- Surface water drains carry rainwater run-off from roads and roofs, which may be released through storm

overflows if the network gets overwhelmed, for example during heavy rain. So, it's important to keep the surface water drains for excess stormwater only.

This project focuses on:

- identifying all dual manholes in high-risk catchments
- assessing structural condition and identifying defects
- removing the pollution pathway by sealing, capping, or rebuilding chambers
- introducing removable slabs where ongoing access is required.

The work we're doing in Tunbridge Wells:

Our investigations in Tunbridge Wells in Kent, found:

- multiple dual manholes with structural defects requiring a range of repairs, from lining to full chamber rebuilds
- evidence of broken or damaged lines within some chambers, creating a direct pollution risk
- suspected misconnections where foul wastewater was entering surface water lines – these were then traced to identify the source and remedial works raised.

The following actions were taken:

- Ongoing contractor investigations to trace and confirm misconnections between foul and surface water systems.
- Visual inspections and checks were completed across the high risk area.
- Early-stage civil activities are underway to prepare the chambers for remediation work.

The next steps:

- Full remedial works to remove pollution pathways will take place, including sealing, capping, lining, or reconstruction.
- Completion of the Tunbridge Wells remediation.
- A second high-risk catchment has been identified, with survey and assessment works starting in 2026.



Open dual manhole



Dual manhole requiring maintenance



Capped dual manhole



Examples of dual manholes identified in 2025 with remediation planned for early 2026. Each manhole can be unique requiring bespoke solutions to achieve the goal of blocking the surface water pathway.

Previously identified dual manholes and types of repairs, middle demonstrating removable slabs and right showing permanent capping.

Section 2: What we did in 2025 to reduce pollution incidents (continued)

Case study 3:

Using power to understand asset health at Crossbush Wastewater Pumping Station

We rolled out a smart electrical monitoring device called a VisNet Hub, across 500 priority wastewater pumping stations and water treatment works.

We wanted to improve electrical risk detection and asset protection at these sites. We used electrical analysis to monitor circuit conditions, detect water ingress, and address load and capacity issues.

Benefits for Southern Water



Insight into cause of increased asset wear



Extending pump lifespan



Preventing pollution incidents

Following a successful trial at 12 sites, the full rollout used the Criticality Tool and pollution data, to select high-priority locations where this smart device could be installed.

One site where the smart device was successfully installed was Crossbush Wastewater Pumping Station. The device identified sustained high voltage issues and a potential reduction in pump lifespan as a result. This insight helped generate targeted actions to maintain asset health and prevent failures.

What the smart technology found:

- Sustained excessive voltage across all three phases.
- High voltage causing increased strain on pumps.
- Long-term operation above normal limits which threatens asset lifespan.
- An issue traced to incoming supply, requiring Distribution Network Operator (DNO) verification.

Actions recommended:

- Report to UK Power Networks (UKPN), supplying VisNet Hub voltage graphs as evidence.
- Initiate heightened monitoring and maintenance readiness.
- Coordinate with UKPN for potential network adjustments and verification.
- Continued voltage tracking using VisNet analytics.

Outcomes and benefits:

- Reduced risk of pump failure and pollution incidents.
- Extended pump lifespan and improved operational resilience.
- Enhanced visibility of electrical risks through continuous monitoring.

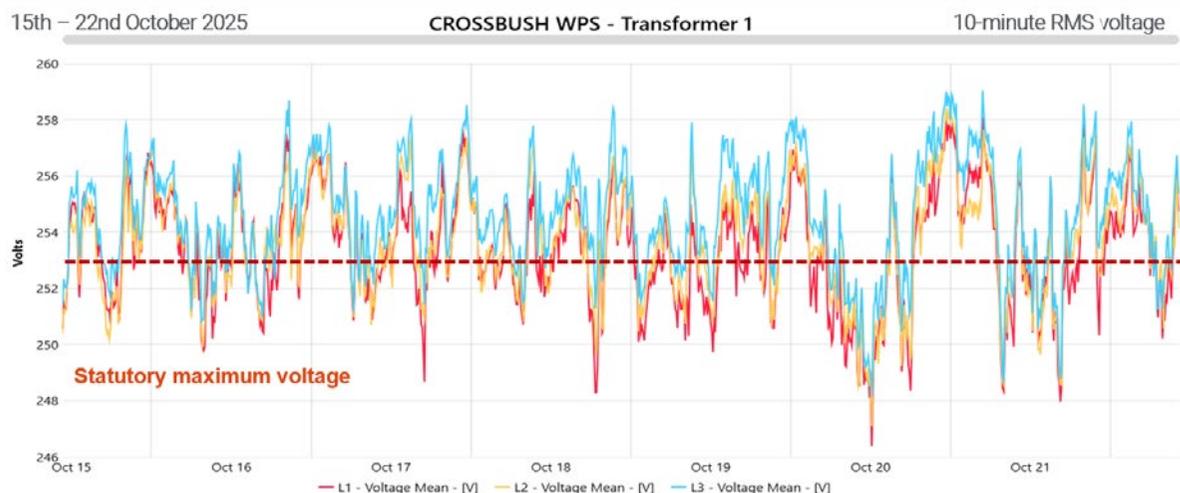
Through targeted asset surveys and remedial upgrades at key wastewater pumping station sites, this programme strengthens resilience, reduces pollution risk, and improves operational performance and carbon efficiency.

A summary of the initiative:

This project delivers asset condition surveys to identify assets at risk of failure or requiring improvement. Remedial works are then completed at priority wastewater pumping station sites across the Southern Water estate to strengthen resilience and meet Pollution targets. Delivery in 2025 continued the successful approach used in 2023–24.

Figure 31: Crossbush WPS transformer 1 - 10 minute voltage data.

The issues at this site were identified by:  High Volts (Average)



Section 2: What we did in 2025 to reduce pollution incidents (continued)

Case study 4:

Improving wastewater pumping station resilience

Through targeted asset surveys and remedial upgrades at key wastewater pumping station sites, this programme strengthens resilience, reduces pollution risk, and improves operational performance and carbon efficiency.

A summary of the initiative:

This project delivers asset condition surveys to identify assets at risk of failure or requiring improvement. Remedial works are then completed at priority wastewater pumping station sites across the Southern Water estate to strengthen resilience and meet Pollution targets. Delivery in 2025 continued the successful approach used in 2023–24.

What the investigation found:

The survey highlighted opportunities to improve site performance and resilience by enhancing flow visibility and control.

Recommended remedial works included:

- NRV Replacements
- Miltronics (level controller) replacements
- New back up timer and floats
- New Level Indicator ultrasonics

Actions:

- All remedial actions were completed and tested before the site was marked as completed to beneficial use.

Outcomes and benefits:

This investment reduces the risk of repeat pollution events and enhances environmental protection. The improved pump control performance lowers the site's carbon footprint and supports more efficient flow management.

The project also shows clear alignment with pollution improvement plans, by targeting results-focused investment.



Section 2: What we did in 2025 to reduce pollution incidents (continued)

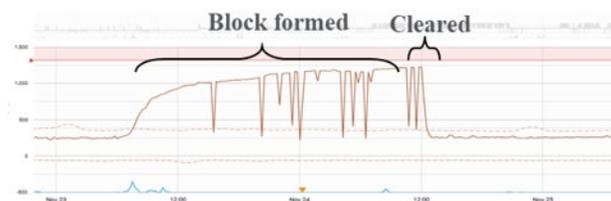
Case study 5:

Using an AI-enabled platform to prevent environmental incidents before they happen

We've been turning data into action using an AI-enabled platform. To improve efficiency and strengthen our proactive response capability, we wanted to help consolidate the analysis of pumping stations, treatment works and rising mains into one platform for the Proactive Control Centre to use. This platform is AI-enabled and using it can improve pump and sewer performance, and to prevent environmental incidents before they happen.

The chosen system, StormHarvester, combines machine learning, AI and hyper-local rainfall data. It has already been very effective in managing alerts across our network.

Two cases in Kent show how using this tool has helped our pollution performance. The first case looks at sewer level monitoring and the second at a wastewater pumping station.



1. Using the AI-platform for sewer level monitoring

Near Legacy Park in Kent, which is a well-used dog walking and hiking area, there was a rapidly developing blockage in the sewer. Using the AI platform, this blockage was identified as a top priority – a Priority 1 – so contractors were sent to clear the blockage on the same day. They removed a large root mass, which meant a potential foul spill from the nearby manhole was avoided, protecting both the environment and access to the area by the public.

2. How the AI-enabled platform helped at a wastewater pumping station

What was detected:

Changes in Pump Performance Indicators, signalling that both pumps on site might be operating ineffectively.

Action taken:

A desktop assessment confirmed reduced performance on pumps 1 and 2. A work order was raised for operators to lift, inspect and diagnose the issue.

Outcome:

Operators found ragging on the pumps' non-return valves, restricting performance. Once removed, both pumps were returned to service and confirmed to be operating effectively.

The site discharges into a surface water system that feeds a stream flowing into the River Teise, a tributary of the River Medway. This river supports species such as Brown Trout, Rainbow Trout and Grayling. Early action helped reduce the risk of environmental harm to this valued watercourse.



Pump 1



Pump 2



Section 3: Our Pollution Incident Reduction Plan 2026

This summary includes how we will translate insights into action.

Our plan for 2026

The PIRP 2026 focuses on addressing serious pollution incidents and total pollution incident numbers pre-WIRI changes (see page 96 for more about WIRI changes).

Past PIRP activity has also had a positive impact on category 4 pollutions, but while the impact of our 2026 plans may reduce total pollutions under WIRI its primary focus is to tackle serious pollution failure modes, improve asset resilience and complete enabling works for future reduction. Dry day spills are being tackled by our Clean Rivers and Seas taskforce.

Our 2026 plans are split into four key workstreams, addressing pollution risk across all the asset types.

The PCL set by Ofwat is under review. This plan brings us closer to the existing target, but we do not expect performance to meet the existing PCL at the close of 2026, but we will have continued to reduce like-for-like pollutions.

What we're doing differently in 2026:

Learning from the critical review of our PIRP 2025, we are focused on addressing serious pollution root causes, targeting a reduction in total pollutions and enabling our people with improved processes.

Previous PIRPs have included site-specific initiatives that while effective, have a reduced efficacy over time, suggesting we need to target the broader asset base outside of sites that have previously polluted. To do this, we are using existing – and new – criticality models to target critical assets across the region, focusing on sensitive locations to prevent pollutions rather than preventing repeat pollutions.

We have also noted lower-than-expected benefits from our CBM and SLM initiatives. We plan to recover this gap by improving operational grip, improving training provisions, reducing 'noise' in the OCC and reducing time to repair our SLMs. We are going to install more CBM devices, however we are not attributing additional benefit to these devices and instead will focus on optimising the benefit we can achieve from the overall CBM estate.

Serious pollution incidents

Initiatives to reduce serious pollution incidents focus on several areas. These are burst rising mains, blockages, bead containment at wastewater treatment works, and removing Single Points of Failure at sensitive sites such as bathing waters and shellfish areas. Centralising mobile-generator logistics will also speed up the response to any power failures, as well as addressing key failure modes seen in 2025 and improving resilience against power-related instability/making the network more robust if there is a loss of power.

Total pollution incidents

The work being done to reduce the total number of pollution incidents covers several areas:

- Strengthening pump performance
- Improving incident management
- Accelerating the amount of time it takes to repair sewer level monitors
- Enhancing the maintenance and replacement of air valves.

While targeting the wider asset base, we prioritise activities around the high-risk locations. To further reduce pollution risks related to power issues, there will be additional electrical monitoring and new generator sockets will be fitted.

People and process

Building on what we learned from 2024–25, we are introducing a central repository for incident learnings, adding an OCC training capacity, and developing live and dry run training for first responders. Improvements to evidence capture will support faster, more consistent and effective pollution response.

Future pipeline

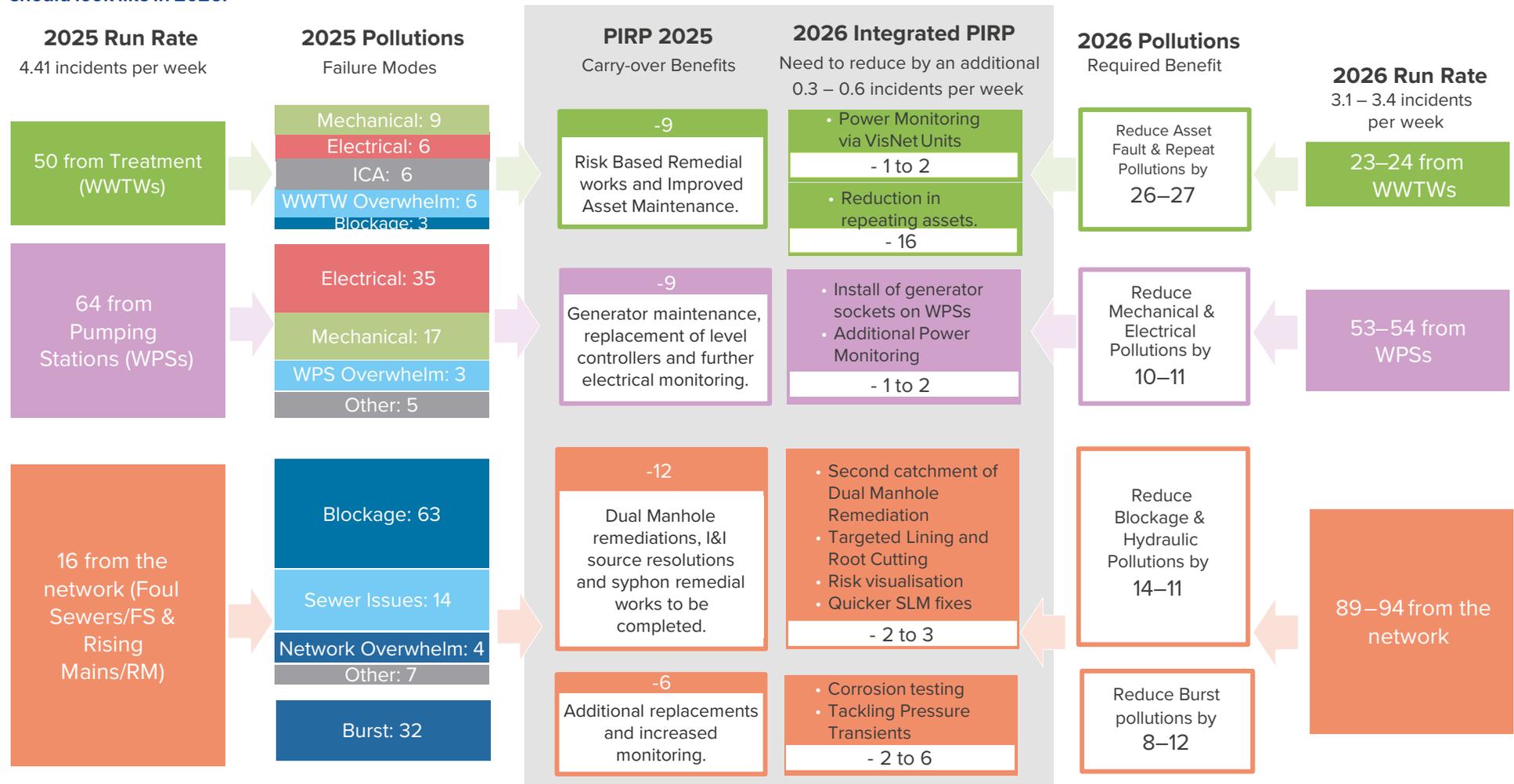
Planning for the remainder of the Business Plan for 2025–30 includes initiatives being explored for 2026 or requiring further scoping for 2027–28 start. These include enabling activities such as enhanced WWN training and BAU improvements such as resolving tidal flap issues and remaining network syphons.

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Reverse engineered solution – 2025 run rate to 2026 target run rate

The PIRP 2026 focuses on tackling serious pollutions, with a focus on high-risk assets. To support a reduction in total pollutions, the rest of our PIRP 2026 plans focuses on enabling the most benefit from previous measures, a better understanding of asset health and addressing specific problems in the network.

Figure 32: PIRP 2026 used a reversed engineering approach to consider both historic performance and future performance targets, to determine what the plan should look like in 2026.



Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Category 1 to 3 2025 pollution root cause review – turning insights into action

PIRP 2026 directly targets the dominant 2025 pollution immediate causes – blockages, electrical/mechanical failures, and rising main bursts – through focused interventions such as root cutting, dual-manhole remediation, improved power resilience, and expanded rising-main monitoring. These measures shift insight into action by strengthening detection, shortening response times, and improving asset condition to prevent repeat failures.

Blockages

Our PIRP 2026 projects include:

- **Targeted root cutting and pipe lining** – tackling an increasing risk factor presented by root ingress into our network.
- **Dual manholes** – improving the condition of dual manholes in a second problem catchment to seal off surface water pathways and protect watercourses.
- **Risk visualisation and prioritisation tool** – using data to highlight risk and target initiatives including ongoing customer campaigns and business as usual risk management activities such as cleaning.
- **Accelerated time to recover failed SLMs** – to optimise pollution reduction benefit from our SLM estate we need to fix SLMs faster, to maintain availability and incoming alerts.

Electrical and mechanical

This will be addressed through improving power and asset resilience with the following projects:

- **Install of generator sockets on wastewater pumping stations** – reducing the time it takes to restore power at smaller wastewater pumping stations without a permanent generator.
- **Logistics management of mobile generators** – making sure we know where the assets are and can transport them to sites quicker.
- **Additional VisNet hubs** – Phase monitoring technology will allow us to identify and remediate electrical issues on our sites
- **Implementation of advance back-up control** – upgrading of back-up control systems as part of business-as-usual improvements such as projects and incident response minimum standards.
- **Single point of failure removals** – providing resilience at our bathing water and shellfish sites.
- **Two-way pump control** – allowing us to control assets remotely, reducing time to restore service and demand on operator resource.

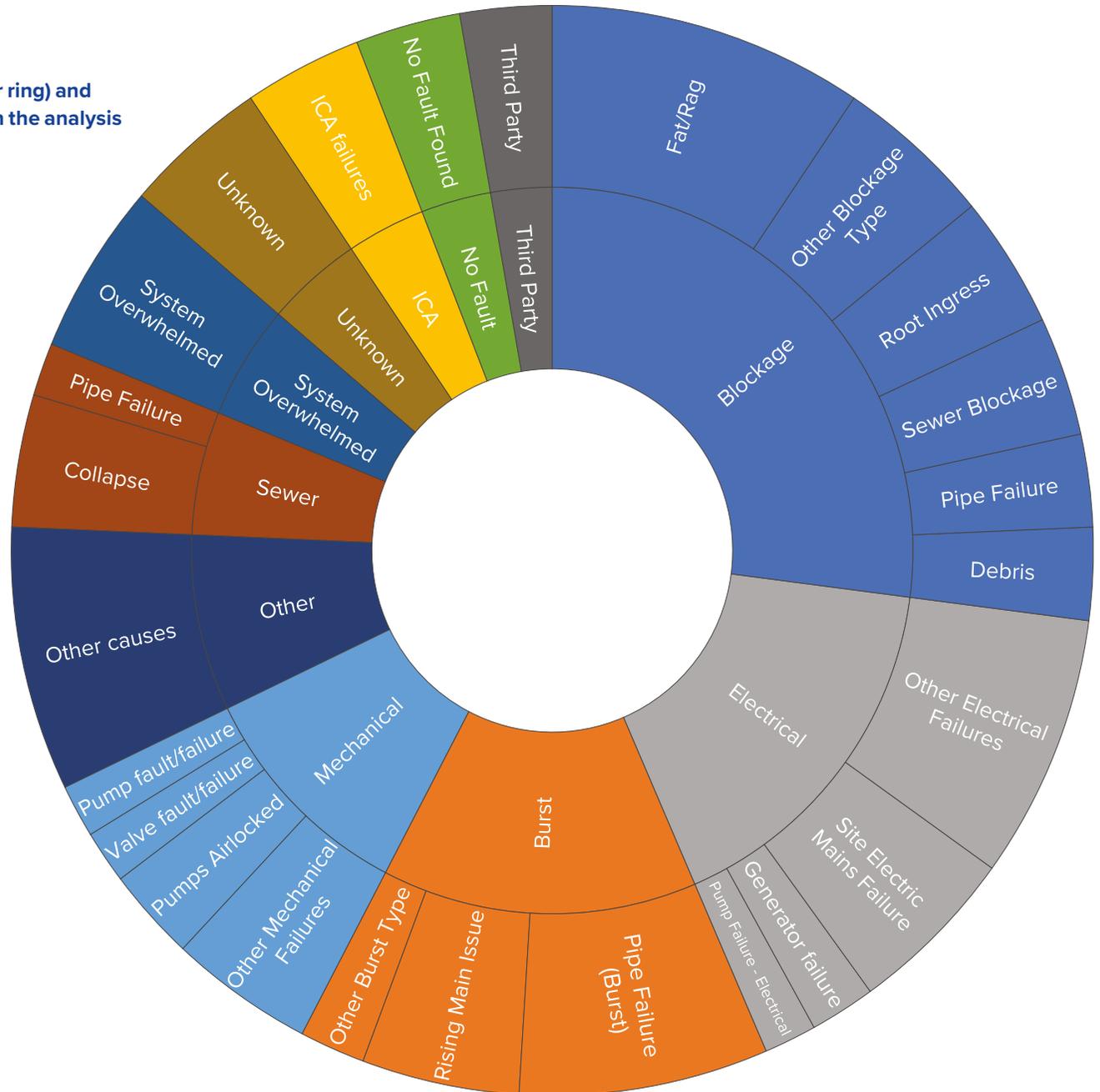
Bursts

In addition to the continuation of the 2025 plans to repair and rehabilitate 28 of our rising mains we are including the following in our 2026 plans:

- **Five additional mains to be repaired/replaced** – increasing the scope of the rehab work.
- **Corrosion test programme** – to better understand our rising main asset health and risk.
- **Rising main criticality model** – to highlight and visualise risk, allowing us to strategically target initiatives in the future.
- **Active pressure control and vibration sensors** – proof of concept trails to identify improved detection and maintenance methods for our assets.

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Figure 33: 2025 category 1–3 Pollution failure modes (inner ring) and Immediate causes (outer ring) for 256 pollutions included in the analysis



Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Category 4 2025 root cause review – aligning plans for wider impact

Category 4 pollution incidents show the same core failure modes as category 1–3 events, confirming that the underlying drivers of pollution are consistent across categories. This reinforces that the PIRP 2026 focus areas directly target the problems that influence both category 1–3 and category 4 performance.

2025 category 4 Pollution Review – the same drivers as category 1–3

Category 4 pollution incidents in 2025 mirror the root cause pattern seen in category 1–3 incidents, with blockages, electrical and mechanical failures, and bursts consistently appearing across both categories. Although category 4 investigations require less detail, the failure modes align closely with the category 3 analysis, highlighting shared systemic weaknesses in network condition and asset reliability.

Key insights

- Blockages remain the most prevalent root cause, consistent with the category 1–3 review, though category 4 blockages are more frequently recorded as simple sewer blockages due to lighter investigation requirements.
- Electrical and mechanical failures show similar proportional impacts to category 1–3 events, indicating that asset reliability issues affect both higher and lower impact incidents.
- Burst rising mains continue to feature as a critical failure mode, again consistent with the category 1–3 trends and reinforcing the need for condition assessment, pressure control and risk based replacement.
- Network overwhelm appears more prominently in category 4, reflecting wet weather effects where environmental impact is diluted and classification remains lower – but still signals infrastructure resilience gaps.

Why this matters for the PIRP 2026

The strong overlap between category 1–3 and category 4 failure modes shows that one set of targeted measures can reduce pollutions across all categories.

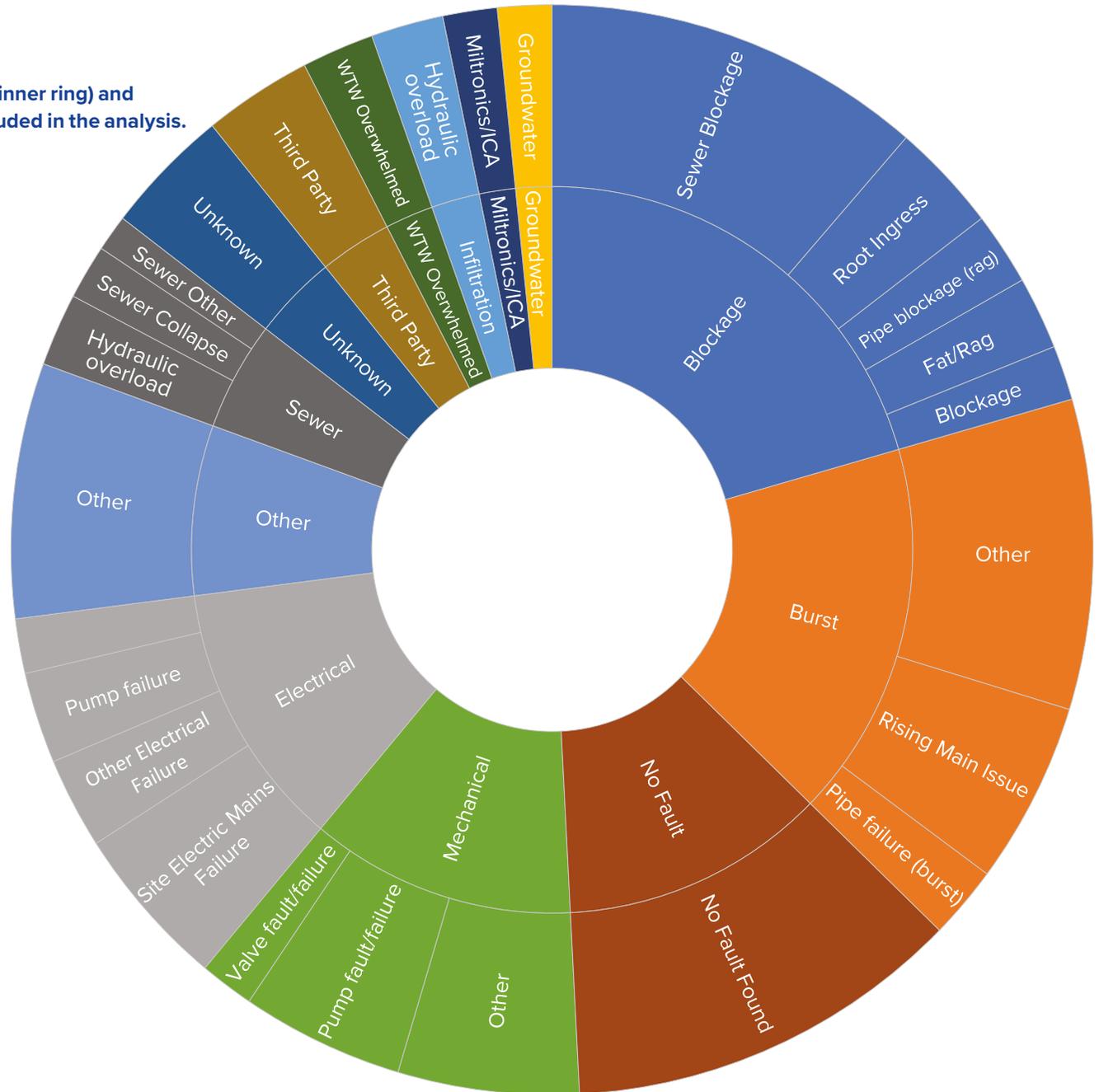
The PIRP 2026 plan directly addresses these shared issues through:

- Blockage reduction (root cutting, lining, targeted cleansing, customer education)
- Rising main resilience (rehab, criticality modelling, corrosion testing, pressure management)
- Electrical and mechanical reliability (power resilience, VisNet upgrades, generator sockets)

These measures will therefore deliver improvements across the full pollution spectrum, not just category 1–3.

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Figure 34: 2025 Category 4 pollution failure modes (inner ring) and immediate causes (outer ring) for 256 pollutions included in the analysis.



Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Serious pollution incidents – linking 2025 serious pollution and immediate cause insights to PIRP 2026 actions

PIRP 2026 links to failure modes identified from pollution investigations into 256 category 1 to 3 and category three near misses in 2025, with a focus on tackling serious pollutions and having a positive impact on total pollution numbers.

Key		Covered by Plan
		Not covered by Plan

Table 32: PIRP 2026 immediate cause plan alignment – how the plan links to key causes of pollutions.

Asset Type	Work Stream	Work Stream Area	Project Name	Blockage	Roots	Burst	Power Failure	Pump Blockage	Bead Release	Operational Grip	Response	Human Factors	Water Main Issue	Pipe Failure (WD)		
Foul Sewer	Serious Pollutions	Foul Sewer Improvements	Dual Manholes Phase 2 – Sussex													
			Targeted Lining and Root Cutting Programme													
		Enabler	Project Sophia – Risk Visualisation and Prioritisation													
			Regular Data Monitoring of Phase 2 SLMs													
	Total Pollutions	Enabler	Accelerated Time to Recover Failed SLMs													
		Customer Engagement	FOG and Unflushables Campaign													
Rising Mains	Serious Pollutions	Rising Main Improvements	Additional Risk Based RM Replacements													
			Corrosion Test Programme													
			Tackling Pressure Transients in RM													
			Air Valve Maintenance and Replacement													
		Enabler	Rising Main Criticality Model													
	Future PIRP Pipeline	Rising Main Improvements	Active Pressure Control on Rising Mains (POC)													
		Enabler	Vibration Sensors on Rising Mains (POC)													
WPS	Total Pollutions	Power Resilience	Install of Generator Sockets for Mobile Generators													
		BAU Improvements	Implementation of Advanced Back-Up Control and APR													
		Enabler	Standardised WWN Training													
WWTW	Serious Pollutions	WWTW Resilience	Bead Containment Measures													

Continued on next page...

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Table 32: PIRP 2026 immediate cause plan alignment – how the plan links to key causes of pollutions (continued).

Key		Covered by Plan
		Not covered by Plan

Asset Type	Work Stream	Work Stream Area	Project Name	Blockage	Roots	Burst	Power Failure	Pump Blockage	Bead Release	Operational Grip	Response	Human Factors	Water Main Issue	Pipe Failure (WD)		
Wastewater Overarching Measures	Serious Pollutions	Power Resilience	Logistics Management of Mobile Generators													
		Serious Pollutions	Single Point of Failure Removed at Sensitive sites													
		Operational Grip	Two-Way Pump Control													
	Total Pollutions	Power Resilience	Additional VisNet Devices Installed													
		Power Resilience	Battery Energy Storage System (BESS)													
		Asset Maintenance Strategy	Asset Maintenance Strategy													
		Enabler	PMS Phase 2&3													
	Pump Performance	Proactive Wet Well Cleaning Programme														
	People and Process	Enabler	Technical Process Training for Project Teams													
			Embedded Ongoing RCA Training													
		Evidence Capture	Improvements to Evidence Capture Processes													
		Asset Visibility	Top end alarm logic – optimising alarm insight													
		Operational Grip	Situational Awareness													
			Central Repository and Process for Learnings													
			OCC Training Resource													
	Response Improvements	Sustained Benefit Recovery														
		Response Improvements	Programme of Live and Dry Run Simulated Pollution Training													
	WD	Total Pollutions	Leakage Reduction	Enhanced Leakage Detection Tools												
Future PIRP Pipeline		Leakage Reduction	Smart Systems Phase 2 & 3													
		Enabler	Water Mains Network Calming													
Water Overarching Measures	Future PIRP Pipeline	Continuous BAU Improvement	Sniffer Dogs trail for Trunk Mains													
	Enablers	Enabler	Water Pollution Management Training													
			Tracing and Sampling Procedures													
			Containment Guidance and Kit Provision													

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Serious pollution incidents – linking 2025 serious pollution insights to PIRP 2026 actions

The PIRP 2026 initiatives in conjunction with BAU – business as usual – activities address 100% of 2025 serious pollution failure modes.

To combat the most common themes associated with serious pollutions, the PIRP 2026 focuses on

addressing key failure modes that contribute to serious incidents, alongside the development and integration of improved systems, processes and training frameworks to ensure appropriate response to incidents, minimising environmental impact.

*Forecast finalised 2025 serious pollutions included

Table 33: PIRP 2026 serious pollution alignment – how the plan links to our 2025 serious pollutions. We had no serious pollutions from our water distribution and water supply works assets in 2025, the measures addressing these assets are not included in the table.

Key		Covered by Plan	Incident	Incident 1	Incident 2	Incident 3	Incident 4	Incident 5	Incident 6	Incident 7	Incident 8	Incident 9	Incident 10	Incident 11	Incident 12	Incident 13			
		Not covered by Plan	Failure Mode	Burst	Burst	Burst	Burst	Burst	Burst	Burst	Burst	Burst	Blockage	Blockage	ICA	Mechanical			
Asset Type	Work Stream	Work Stream Area	Project Name	Root Cause	Burst Rising Main	Pipe Failure	Pipe Failure	Burst Rising Main	Burst Rising Main	Burst Rising Main	Pipe Failure	Pipe Failure	Pipe Failure	Pipe Collapse	Fat/Rag	PLC Fault/Failure	Mesh Failure		
Foul Sewer	Serious Pollutions	Foul Sewer Improvements	Dual Manholes Phase 2 – Sussex																
			Targeted Lining and Root Cutting Programme																
	Serious Pollutions	Enabler	Project Sophia – Risk Visualisation and Prioritisation																
			Regular Data Monitoring of Phase 2 SLMs																
Total Pollutions	Enabler	Customer Engagement	Accelerated Time to Recover Failed SLMs																
			FOG and Unflushables Campaign																
Rising Mains	Serious Pollutions	Rising Main Improvements	Additional Risk Based RM Replacements																
			Corrosion Test Programme																
			Tackling Pressure Transients in RM																
			Air Valve Maintenance and Replacement																
	Future PIRP	Enabler	Rising Main Criticality Model																
			Active Pressure Control on Rising Mains (POC)																
			Vibration Sensors on Rising Mains (POC)																

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Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

PIRP 2026 – Targeting a benefits range of 50 to 89 Pollution incidents

Our PIRP 2026 has been built using **pareto** to target failure modes seen in 2025, and focuses on serious pollution failure modes, sensitive sites and tackling total pollutions. Key Directorates contributing to the successful delivery of PIRP are Operations, Digital, Training and Development and People.

What is pareto?

Pareto analysis is a way of identifying the small number of failure modes that cause the majority of pollution incidents. By ranking all 2025 failure modes from highest to lowest impact, we focused the 2026 PIRP on the most impactful failure modes that will deliver the biggest reduction in pollution when fixed.

Table 34: PIRP 2026 Summary table – three workstreams across all assets; Serious pollutions, Total Pollutions and People and Processes. We have identified and included future needs in our Future PIRP Pipeline workstream.

Asset Type	Work Stream	Work Stream Area	Measure	Impact Range	Cost (£k)	Funding Route	Supporting Directorate
Foul Sewer	Serious Pollutions	Foul Sewer Improvements	Dual Manholes Phase 2 – Sussex	1 to 2	£1,000	PIRP	Networks
		Foul Sewer Improvements	Targeted Lining and Root Cutting Programme.	4 to 7	£1,000	PIRP	Digital
		Enabler	Project Sophia – Risk Visualisation and Prioritisation	Enabler	£0	Lanes	Digital
		Enabler	Regular Data Monitoring of Phase 2 SLMs	Enabler	–	Digital	Digital
	Total Pollutions	Enabler	Accelerated Time to Recover Failed SLMs	Enabler	£250	Digital	Digital
		Customer Engagement	FOG and Unflushables Campaign	1 to 2	£248	PIRP	
Rising Mains	Serious Pollutions	Rising Main Improvements	Additional Risk Based RM Replacements	3 to 12	£5,000	PIRP	Networks
		Rising Main Improvements	Corrosion Test Programme	3 to 9	£272	PIRP	Digital
		Rising Main Improvements	Tackling Pressure Transients in RM	1 to 3	£150	Opex	Digital
		Enabler	Rising Main Criticality Model	Enabler	£0	–	Digital
	Total Pollutions	Rising Main Improvements	Air Valve Maintenance and Replacement	2 to 6	£1,050	Opex	–
	Future PIRP Pipeline	Rising Main Improvements	Active Pressure Control on Rising Mains (POC)	Enabler	£25	PIRP	Digital
		Enabler	Vibration Sensors on Rising Mains (POC)	Enabler	–	–	–
WPS	Total Pollutions	Power Resilience	Install of Generator Sockets for Mobile Generators	1	£500	PIRP	–
	Future PIRP Pipeline	Enabler	Standardised WWN Training	Enabler	–	–	Talent & Development
WWTW	Serious Pollutions	WWTW Resilience	Bead Containment Measures	Enabler	£40	PIRP	–

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Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Table 34: PIRP 2026 Summary table – three workstreams across all assets; Serious pollutions, Total Pollutions and People and Processes.
We have identified and included future needs in our Future PIRP Pipeline workstream (continued).

Asset Type	Work Stream	Work Stream Area	Measure	Impact Range	Cost (£k)	Funding Route	Supporting Directorate
Wastewater Overarching	Serious Pollutions	Serious Pollutions	Single Point of Failure Removal and Control Improvements at Sensitive sites	3 to 5	£975	PIRP	–
		Operational Grip	Two-Way Pump Control	1	£900	PIRP	Digital
		Power Resilience	Logistics Management of Mobile Generators	Enabler	£500	Opex	Digital
	Total Pollutions	Power Resilience	Additional VisNet Devices Installed	1 to 3	£750	PIRP	Digital
		Power Resilience	Battery Energy Storage System (BESS)	3	£500	PIRP	
		Pump Performance	Proactive Wet Well Cleaning Programme	Enabler	–	–	Operations
		Enabler	PMS Phase 2&3	Enabler	£1,950	PIRP	Digital
		Asset Maintenance Strategy	Asset Maintenance Strategy	6 to 10	–		
		Continuous BAU Improvements	Implementation of Advanced Back-Up Control and APR	Enabler	–	–	Asset Maintenance
		People and Process	Asset Visibility	Top end alarm logic – optimising alarm insight	5 to 10	£294	PIRP
	Response Improvements		Programme of Live and Dry Run Simulated Pollution Training	Enabler	£200	PIRP	–
	Evidence Capture		Improvements to Evidence Capture Processes	Enabler	£0	–	–
	Operational Grip		OCC Training Resource	Enabler	£72	PIRP	–
	Operational Grip		Situational Awareness	Enabler	£200	–	Digital
	Operational Grip		Sustained Benefit Recovery	17 to 19	£300	PIRP	
	Enabler		Technical Process Training for Project Teams	Enabler	£0	–	Talent & Development
	Enabler	Embedded Ongoing RCA Training	Enabler	£0	–	Talent & Development	
Future PIRP Pipeline	Operational Grip	Central Repository and Process for Learnings	Enabler	–	–	Digital	
Water Distribution	Total Pollutions	Leakage Reduction	Water Mains Network Calming	1 to 5	–	–	
	Future PIRP Pipeline	Leakage Reduction	Sniffer Dogs trail for Trunk Mains	Enabler	–	–	
		Enabler	Enhanced Leakage Detection Tools	Enabler	–	–	Digital
Water Overarching	Future PIRP Pipeline	Continuous BAU Improvement	Smart Systems Phase 2&3	Enabler	–	–	Digital
	Enablers	Enabler	Water Pollution Management Training	Enabler	–	–	
		Enabler	Tracing and Sampling Procedures	Enabler	–	–	
		Enabler	Containment Guidance and Kit Provision	Enabler	–	–	
Total				50-89	£16,176		

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Mission 4 Hours: Faster action to protect the environment

Mission 4 Hours delivers critical improvements to detection, mobilisation and containment, reducing the time it takes to stop pollution reaching the environment. It underpins the impact of our planned additional measures outlined in Section 3, strengthening our ability to prevent escalation and improve pollution performance.

What is Mission 4 Hours:

When something goes wrong on our network, acting quickly is the best way to protect local rivers, streams and coastal waters. In 2025, serious pollution incidents took an average of 13 hours to contain. Our new ambition is to reduce this to four hours by improving how we spot risks, respond, and deploy equipment. To do this we are implementing the Mission 4 Hours plan, which started in 2025 with full delivery completed in 2026.

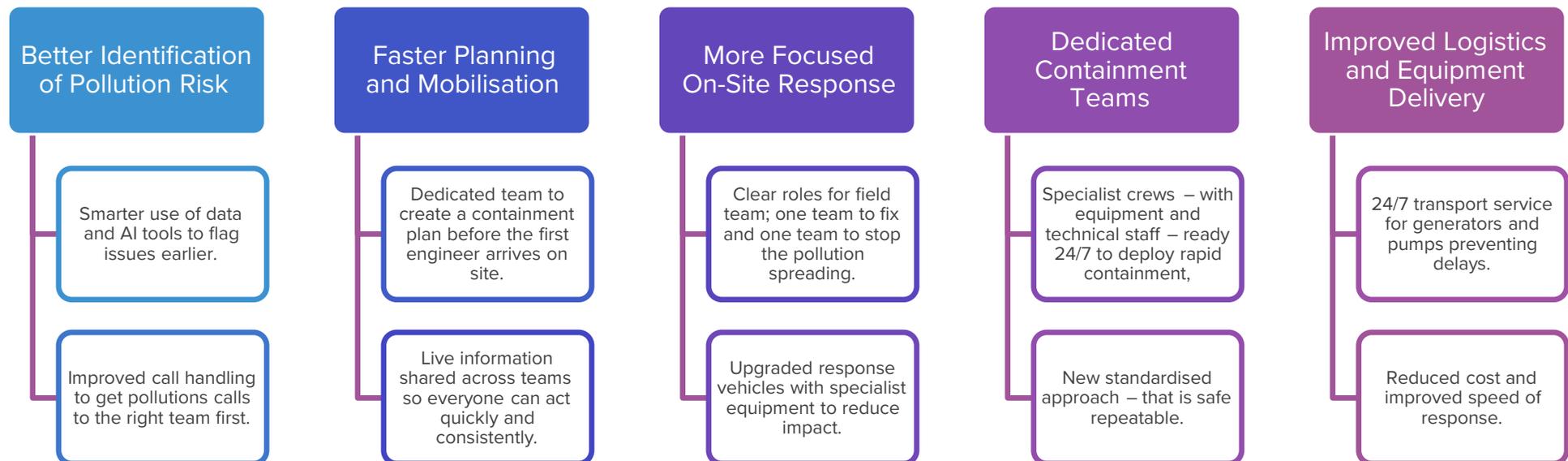
Why we're doing this:

When something goes wrong on our network, acting quickly is the best way to protect local rivers, streams and coastal waters. In 2025, serious pollution incidents took an average of 13 hours to contain. Our new ambition is to reduce this to four hours by improving how we spot risks, respond, and deploy equipment.

What this means for the environment:

- Quicker containment to stop pollution reaching watercourses.
- Stronger response during storms, power issues or equipment failures.
- Improved protection for rivers, streams and bathing waters across the region.

Figure 35: Mission 4 Hours plan summary.



Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

3.2 Measures by asset type

Throughout this section, impact refers to the full impact expected to be delivered by the measure, once complete and fully embedded.

Planned additional measures: foul sewer

Here we outline the additional foul sewer measures planned for 2026, focused on strengthening blockage prevention, improving early detection and addressing known structural risks within the network.

This section also includes measures addressing combined sewer overflows and surface water sewers as they are managed by the same operational teams.

Key actions include extending dual manhole remediation into a second catchment, delivering targeted root cutting and lining supported by risk based CCTV surveys, increasing monitoring frequency for new SLMs, accelerating SLM repair times, and launching a targeted FOG and unflushables campaign. These measures will reduce blockage and root ingress incidents in high risk areas and enhance system visibility, building on insights from 2025 performance.

What are 'unflushables'?

Unflushables are any items that shouldn't be flushed down the toilet because they can block pipes, damage plumbing, or cause problems in the sewage system.

Our work in this area is supported by our FOG and Unflushables team, who work with customers and explain the importance of only flushing the three Ps – pee, poo and paper.

What we plan to continue from 2025:

- We plan to complete the remedial works on our syphon asset surveyed in 2025.
- We will continue to complete tactical interventions in areas where an infiltration and inundation issue is identified.
- Completing the work for dual manholes phase 1, by doing the remaining remedial work.

What we plan to start in 2026:

- Extend the dual manholes work into a second catchment, identifying defects and planning remediation for early 2027.
- Use risk based modelling to prioritise CCTV surveys for root ingress and complete cutting/lining where needed to prevent recurrence.
- Increase monitoring frequency on new SLMs and reduce mean time to repair to nine days to strengthen early detection of sewer network risks.
- Deliver a targeted TV campaign to reduce FOG and rag related blockages by promoting clearly 'the 3 Ps' – 'Only Pee, Paper and Poo Down the Loo' guidance and proper disposal behaviours.

What our plans include from 2027:

Introduce specialist syphon training, develop a network maintenance strategy, trial leak detection sniffer dogs, and review maintenance tasks for improved efficiency. These remain unfunded and subject to review in the funding next cycle.

The expected impact of additional measures:

Blockages

- Enabling measures – faster SLM repairs and enhanced data monitoring will significantly improve early blockage detection and reduce network risk.
- Direct benefit measures, including dual manholes and behaviour change campaigns are expected to reduce like for like blockage pollutions by 11% (based on 53 blockage pollutions in 2025) once delivered in full.
- Some blockages will remain unavoidable, but these measures will target high risk and hotspot locations rather than the whole network.

Roots

- Targeted root cutting and lining is expected to reduce like for like root ingress blockages by 40% once delivered in full, based on the 10 root related pollutions recorded in 2025.
- This programme will deliver substantial improvements in the areas treated but will not eliminate all future root blockages as the measure does not cover the entire network.

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Table 35: PIRP 2026 foul sewer measures summary table.

PIRP Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Start Date	Completed by Date	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2025	FS	Survey and Clean problem syphons	Identification and mapping of network syphons, and making sure they are fit for purpose through isolation, cleaning, and CCTV inspections.	17 Syphon assets will be surveyed & cleaned	2	Blockages	Apr-25	Mar-27	Remedial capital asset improvements	Tackling Blockages & Sewer Network Failures
2025	FS	I&I Tactical Interventions	Using Infiltration & Inundation modelling and targeted surveys to identify and resolve I&I issues.	10 I&I interventions will be completed	4	Network Overwhelmed	May-25	Jun-26	Use of predictive analytics.	Tackling Blockages & Sewer Network Failures
2025	FS	Dual Manholes	Improving network integrity by identifying and repairing dual manholes, updating asset mapping and ensuring ongoing maintenance is in place.	9900 manholes lifted and inspected	1	Blockages	Jun-25	Jun-26	Dual Manhole Surveys and upgrades	Tackling Blockages & Sewer Network Failures
2026	FS	Dual Manholes Phase 2 – Sussex	Improving network integrity by identifying and repairing dual manholes, updating asset mapping and ensuring ongoing maintenance is in place.	100% of Dual Manholes in 1 high risk catchment	1 to 2	Blockages	Apr-26	Mar-27	Dual Manhole Surveys and Upgrades	Tackling Blockages & Sewer Network Failures
2026	FS	Targeted Lining and Root Cutting Programme.	Completing site investigations, CCTV Surveys, cutting and lining at high risk locations for root blockages.	Approx. 1,000km of sewer surveyed	4 to 7	Roots	May-26	Apr-27	Implementation of proactive cleaning and maintenance	Tackling Blockages & Sewer Network Failures
2026	FS	Project Sophia – Risk Visualisation and Prioritisation	Digital tool built to visualise risk and support prioritisation of business as usual and project activities.	1 digital tool	Enabler	Blockages	Mar-26	Mar-27	Use of predictive analytics	Tackling Blockages & Sewer Network Failures
2026	FS	Regular Data Monitoring of Phase 2 SLMs	Transition from offline to online monitoring of SLM data for new devices, allowing quicker identification of risk.	8,000 SLMs included in scope	Enabler	Blockages	Jan-26	Jan-26	Use of predictive analytics	Tackling Blockages & Sewer Network Failures
2026	FS	Accelerated Time to Recover Failed SLMs	Deploy a field-based Android application enabling on-site updates, reducing mean time to repair from 9 weeks to 10 days.	34,000 SLMs included in scope	Enabler	Blockages	Apr-26	Jan-27	Use of predictive analytics	Tackling Blockages & Sewer Network Failures
2026	FS	FOG and Unflushables Campaign	Delivery of a TV or Social Media advertising campaign promoting clear behavioural messages, including targeting for households in known hot spots.	1 campaign	1 to 2	Blockages	Apr-26	Dec-26	Customer Engagement	Tackling Blockages & Sewer Network Failures

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Planned additional measures: rising mains

This slide outlines the additional 2026 measures designed to strengthen rising main resilience, improve burst detection and enhance understanding of asset condition.

Planned activity includes delivering five further high risk rising main repairs/replacements, introducing in service corrosion testing, using pressure data insights to guide calming interventions, and developing a rising main criticality model to prioritise future investment. Two proof of concept trials – active pressure control and vibration sensors – will also begin, supporting improvements in early detection and proactive maintenance.

What we plan to continue from 2025:

- Continuing the replacement of the identified high-risk rising mains, prioritised based on risk.
- Finishing the installation of additional pressure monitors, giving us a better understanding of the pressure in our rising main network and the associated risk.

What we plan to start in 2026:

- Deliver an additional five high risk rising main repairs/replacements in late 2026, continuing the wider capital programme through the Business Plan period 2025–30.
- Strengthen understanding of rising main risk by introducing in service corrosion testing, using pressure data insights to guide calming activities, and developing a criticality model to prioritise future interventions.

What our plans include from 2027:

Complete two proof of concept trials in 2026:

- Active pressure control, targeting bursts linked to pressure transients.
- Vibration sensors, aimed at improving detection of burst or high risk sections.

Wider rollout will depend on trial outcomes and future funding.

Expected impact of additional measures:

Burst rising mains

- 2026 enabling activities will significantly improve network insight, supporting better targeting of future investment.
- Proof of concept trials will deliver localised short term benefit, with wider impact dependent on later rollout.
- Direct interventions are expected to reduce burst rising main incidents by 25% (based on 35 incidents in 2025).
- Measures will also support reductions in serious pollutions, as 22% of 2025 burst events were serious.
- These activities target known high risk assets, so while overall risk reduces, some burst likelihood remains until full network condition data is available.

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Table 36: PIRP 2026 rising main planned additional measures summary table.

PIRP Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Start Date	Completed by Date	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2025	RM	Rising Main Detection – additional sensors	Upgrading and installing smart sensors across our Rising Main network to quickly identify issues including bursts and pressure changes.	942 Additional Sensors	4	BRM	Jun-25	Jun-26	Telemetry installation.	Strengthening Asset Health & Resilience
2025	RM	Rising Main Rehab (incl. Cap Del)	Proactively repairing or replacing the most high-risk rising mains to prevent bursts, protect the environment, and keep our network running reliably	28 Rising Mains	10	BRM	May-27	Mar-27	Remedial capital asset improvements	Strengthening Asset Health & Resilience
2026	RM	Additional Risk Based RM Replacements	Proactively repairing or replacing the most high-risk rising mains to prevent bursts, protect the environment, and keep our network running reliably	5 Additional RMs.	3 to 12	Burst	Oct-26	Mar-30	Remedial capital asset improvements	Strengthening Asset Health & Resilience
2026	RM	Corrosion Test Programme	In-service inspection of RMs, identifying unexpected high-risk sections, enabling proactive repair & preventing burst-related pollution.	Start on 3 RMs.	3 to 9	Burst	Jan-26	Jan-26	Bespoke	
2026	RM	Tackling Pressure Transients in RM	Dedicated resource to address pressure related issues and further enhance rising main calming activities.	2 Additional Roles.	1 to 3	Burst	Apr-26	Mar-27	Pressure calming	Strengthening Asset Health & Resilience
2026	RM	Rising Main Criticality Model	Development of a suitable scoring system and weightings to give a criticality score to our RM assets with a supporting dashboard.	All RMs.	Enabler	Burst	Apr-26	Mar-27	Bespoke	
2026	RM	Air Valve Maintenance and Replacement	Project to find, check, and upgrade where need all the air valves in the network so they work properly and give us better information.	At least 1000 air valves.	2 to 6	Burst	Jan-26	Jan-27	Air Valve Maintenance	
2026	RM	Active Pressure Control on Rising Mains (POC)	Proof of Concept trial controlling pumps at WPSs based on the pressure in the downstream RM.	1 trial.	POC	Burst	Apr-26	Mar-29	Pressure Calming	
2026	RM	Vibration Sensors on Rising Mains (POC)	Proof of Concept trial testing the use of vibration sensors on rising mains to identify risk and asset deterioration in our rising main estate.	1 trial.	POC	Burst	Apr-26	Mar-27	Pressure calming	Strengthening Asset Health & Resilience

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Planned additional measures: wastewater pumping stations

This is a summary of the 2026 measures planned to strengthen wastewater pumping station resilience, particularly during power failure events where rapid reinstatement is critical to preventing pollution.

Planned work includes installing generator sockets at priority wastewater pumping stations to enable quicker connection of mobile generators, reducing downtime and spill duration during outages. While this measure improves resilience against on site power loss, wider electrical supply issues will continue to require broader system level interventions.

What we plan to continue from 2025:

- Completion of the final wastewater pumping station sites included in wastewater pumping station resilience.
- Embedding and finishing installation of CBM to Silver which will bring in total 200 additional sites into proactive alters, in addition to reactive.

What we plan to start in 2026:

- Install generator sockets at priority wastewater pumping station sites that do not have permanent generators, enabling faster connection of mobile units and reducing pollution duration and pump down time during power outages.
- This measure is in addition to the overarching measures detailed later.

Expected impact of additional measures:

Power failures

- Generator sockets will significantly reduce restoration time, allow faster power reinstatement and minimise the environmental impact of spills.
- This measure improves resilience at sites most affected by electrical interruptions and strengthens our ability to respond rapidly during outages.
- While effective for reducing pollution risk linked to on site power loss, external electrical faults (e.g., DNO supply issues) will still require wider system interventions, and this measure does not cover all at risk wastewater pumping stations.

Description of actions

- Enhancing WPS resilience by eliminating single points of failure through backup control systems and targeted health checks at 30 additional sites.
- Upgrading remaining sites that were Bronze CBM standard (fully reactive) to Silver Standard allowing for proactive alerts to be generated.
- Install of plug-in generator points at critical WPSs without permanent generators.

Table 37: PIRP 2026 wastewater pumping station measures summary table

PIRP Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Start Date	Completed by Date	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2024	WPS	WPS Resilience Additional Sites	Enhancing WPS resilience by eliminating single points of failure through backup control systems and targeted health checks at 30 additional sites.	30 WPS Sites	6	Electrical and Mechanical	Aug-24	Mar-26	Remedial capital asset improvements	Strengthening Asset Health & Resilience
2025	WPS	CBM to silver	Upgrading remaining sites that were Bronze CBM standard (fully reactive) to Silver Standard allowing for proactive alerts to be generated.	200 Sites	2	Electrical and Mechanical	Apr-25	Mar-26	Telemetry installation.	Strengthening Asset Health & Resilience
2026	WPS	Install of Generator Sockets for Mobile Generators	Install of Plug in generator points at critical WPSs without permanent generators.	60 Generator Sockets.	1	Power Failure	Apr-26	Mar-27	Power Resilience Improvements	Improving Data, Modelling & Predictive Capability

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Planned additional measures: wastewater treatment works

This sets out the additional 2026 measures planned to strengthen wastewater treatment works resilience by improving early detection of bio bead loss and enabling quicker incident response.

In November 2025, beads were accidentally released into the sea from our Eastbourne treatment site.

A visual intelligence monitoring system will be deployed at a selected wastewater treatment works, to identify bead loss earlier and support operational teams in containing spills more effectively. This is an enabling measure that enhances monitoring and response, with full risk reduction continuing to depend on robust asset condition, maintenance and operational controls. It will reduce the likelihood of undetected releases, though bead loss risk cannot be eliminated entirely.

What we plan to continue from 2025:

- Completing the installation of the remaining BOD monitors.
- Bringing Go to Green Phase 3 to a close, finishing all remedial works identified through site surveys.
- Roll out and embedment of updated flow breach process and wastewater treatment works criticality model to support prioritisation of work and understand risk better.

What we plan to start in 2026:

- Deploy a visual intelligence monitoring system at a selected wastewater treatment works to detect bio bead loss earlier and support quicker incident response.
- This measure is in addition to the overarching measures detailed later.

Expected impact of additional measures:

- Earlier detection will improve our ability to identify and contain bead loss, reducing the likelihood of environmental impact.
- This is an enabling measure – it strengthens monitoring and response, but full risk reduction also relies on effective asset condition, maintenance, and operational controls.
- The measure will reduce the chance of undetected releases but does not eliminate bead loss risk entirely.

Table 38: PIRP 2026 wastewater treatment works measures summary table.

PIRP Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Start Date	Completed by Date	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2026	WWTW	Bead Containment Measures	Deployment of visual intelligence solution to enable biobead visual detection.	12 cameras.	Enabler	Bead Release	Jan-26	Mar-26	Bespoke	
2025	WWTW	BOD Monitoring	Installing BOD monitoring of Final Effluent (FE) at 22 WWTWs, improving visibility of FE quality.	22 WWTWs	2	FE Compliance	Jul-25	Feb-26	Telemetry installation.	Improving Data, Modelling & Predictive Capability
2025	WWTW	G2G Phase 3: Survey and Remedials	Reviewing and improving the highest-risk sites to prevent pollution, starting with detailed surveys and targeted fixes at priority locations	10 WWTWs	3	FE Compliance	Jul-25	Apr-26	UT audit programme	Improving Wastewater Treatment Performance
2025	WWTW	Flow Breach Process Review	Conducting a review of our flow breach process, and implementing improvements to this process, ensuring we stay within permit conditions and protect the environment	Supporting Flow Investigations for 357 sites	1	Mechanical – Inlet Failures	May-25	Mar-26	Staff training	
2025	WWTW	WWTW Asset & Process Criticality Model	Build of a model that considers key risk factors such as location and permits, to identify critical assets and prioritise initiatives based on risk.	To include 357 WWTWs	Enabler	Risk Reduction	May-26	Mar-26	Bespoke	

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Planned additional measures: wastewater treatment works final effluent compliance plan

A total of five of the 48 wastewater treatment works pollutions in 2025 were linked to Final Effluent (FE) compliance breaches. The PIRP 2026 does not directly target FE compliance, as this is being addressed through the dedicated Wastewater Treatment Compliance Plan for 2026, which will in turn support reductions in wastewater treatment works pollution risk.

Our 2026 Compliance Plan focuses on the main FE breach failure modes and includes:

- Reducing risk from Plant Out of Action through improved availability of critical spares.
- Strengthening operational grip via improved OCC processes, enhanced alarm handling and a formal learning cycle.
- Root cause analysis training for process teams and site managers.
- A maturity assessment to ensure skill and experience are aligned to risk.
- Increasing field presence by reducing administrative workload for Process Scientists.

Supporting improvements will also be delivered through:

- Streamlined maintenance workflows and better tracking of planned operational tasks.
- Digital enablers that simplify on site data capture, reporting and visibility of risk.
- Improved management of temporary plant and stronger collaboration with contractors during scheme activity.

These improvements are expected to reduce FE breach risk and therefore support overall reductions in wastewater treatment works pollution numbers through 2026.

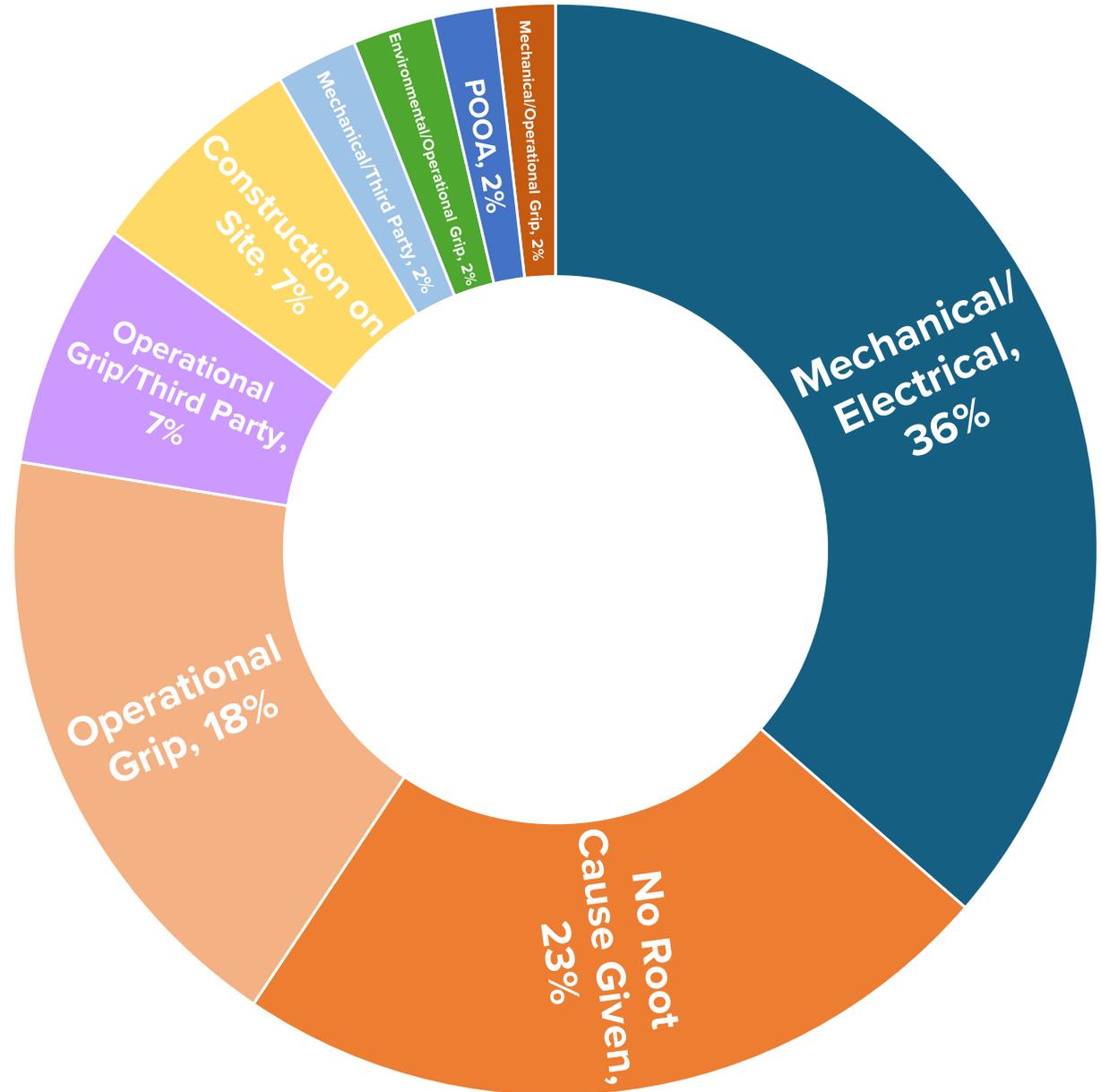
Figure 36: Wastewater treatment works compliance plan key workstreams and actions.



Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Planned additional measures: WWTW FE compliance continued

Figure 37:
2025 numeric breaches by high level failure modes and alignment with the Wastewater Treatment Compliance Plan main workstreams. Some workstreams address multiple commonly identified failure modes.



Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Planned additional measures: overarching measures

This summary sets out the 2026 overarching measures designed to strengthen system wide resilience, improve operational grip and enhance proactive management of pollution risk across wastewater operations.

Planned activity includes further development of the Pollution Management System, centralised logistics for mobile generators, installation of BESS units – these are Battery Energy Storage systems – and expanded VisNet coverage, removal of single points of failure at sensitive sites, and strengthening people based capability through improved alarm logic, enhanced training and better evidence capture. These enablers will support earlier detection, faster response and more consistent delivery across the network, forming the foundation for long-term pollution reduction benefits.

What we plan to continue from 2025:

- Installing the remaining planned CBM devices – Samotics and VisNet before moving onto optimising the benefit from these alerts.
- Recruiting, training and embedding all CBM and Asset reliability engineers to support optimised benefits in this space.
- Roll out of our new Pollution Management System, supporting better incident visibility and starting the journey to a systemised pollution management approach.
- Completion of remaining power resilience asset improvements.

What we plan to start in 2026:

- Continue development of our Pollution Management System (Phases 2 & 3) to streamline reporting, strengthen learning cycles and speed up insight to action.

- Improve power resilience by centralising mobile generator logistics, installing Battery Energy Storage Systems at small sites, and expanding VisNet monitoring to give earlier visibility of electrical risks
- Reduce serious pollution risks by removing single points of failure at environmentally sensitive sites and introducing two way pump control to shorten pump restart times and reduce spill duration
- Strengthen people based prevention and response by optimising alarm loads in the OCC, expanding pollution response and RCA training, and improving evidence capture so field teams gather the right information, first time
- We know FOG and rag in the wastewater systems can cause blockages in the sewer network and in pump assets. To reduce pump blockage risk we have expanded the proactive wet well cleaning programme targeted at high risk and critical sites.

What our plans include from 2027:

- Develop a centralised learning repository so insights from incidents are shared and embedded more consistently.
- Build a long term Asset Maintenance Strategy across AMP8 – the Business Plan 2025–30 – covering proactive pump maintenance, critical spares management and clearer processes for plant out of action.

Expected impact of additional measures:

Response

- Improved spill containment and faster first responder action through removal of single points of failure, enhanced OCC capability and remote pump control.
- Expected net reduction of 4–6 pollutions, though not all response related risks can be fully eliminated.

Detection

- Better identification of emerging risk through reduced alarm ‘noise’ and improved OCC capacity.
- Top end alarm logic expected to contribute to lower total pollutions, though some detection issues remain outside scope.

Power failure

- Up to 33% reduction in power related incidents (18 recorded in 2025) through improved generator logistics, BESS units and expanded VisNet coverage.
- External supply issues may still limit full mitigation, The additional insight from VisNet monitoring will increase understanding of the power network supplying our operation over time, enabling future pollution reduction.

Pump blockage

- Proactive wet well cleaning continues to reduce rag related pump blockages, though it does not cover all assets.

Electrical and mechanical and back-up control failure

Measures reinforce asset visibility, control and resilience, but do not address every underlying risk. Benefits will increase as broader maintenance and operational grip work matures through the Business Plan 2025–30.

Operational grip and measures addressing all root causes

Enabler measures focus on strengthening how we handle pollution incidents, learn from them, and understand their root causes. While these actions are not expected to directly reduce pollution numbers, improved insight and more consistent learning will help shape future PIRPs and reduce repeat incidents over time.

- A key part of this space is recovering lost sustained benefit through our operational grip sprints. These sprints are expected to deliver a meaningful reduction in pollution incidents during 2026 and into the wider AMP, with benefits seen through improved performance of both the SLM and CBM estates.

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Table 39: PIRP 2026 wastewater overarching measures summary table.

PIRP Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Start Date	Completed by Date	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2025	Overarching	SAMOTICS SAM4 (CBM) Phase 3	Deploying 2500 SAM4 monitoring assets across the WPS and WWTW estate to predict pump failures using AI-driven alerts	2500 assets	15	Mechanical – Pumps airlocked	Apr-25	Mar-26	Telemetry installation.	Strengthening Asset Health & Resilience
2025	Overarching	Asset Reliability Engineers	Recruiting additional resource to support ongoing asset maintenance and optimise benefit from CBM.	Overarching Measure	2	Asset Failure	Mar-25	Mar-26	Bespoke	
2025	Overarching	CBM Engineers	Recruiting additional resource to process and get optimal benefit from CBM.	Overarching Measure	3	Asset Failure	May-25	Mar-26	Bespoke	
2025	Overarching	Pollution Management System	Improving how we manage pollution incidents with faster reporting, smarter analysis, and real-time tools to support early identification of pollutions and quicker response.	Overarching Measure	Enabler	Risk Reduction	May-25	Feb-26	Improve root cause analysis techniques	Improving Data, Modelling & Predictive Capability
2025	Overarching	Miltronics's upgrade on obsolete units	Replacing failed and aged out level controls at our WPSs and WWTWs.	95 miltronics units	5	Electrical/ICA – Miltronics	Mar-25	Oct-26	Remedial capital asset improvements	
2025	Overarching	Generator & ACB Resilience	Upgrading alarms and monitoring systems on our generator assets at key pumping stations and treatment works.	439 Generators	6	Electrical – Generator Failure	Jun-25	Mar-26	Power resilience improvements	
2025	Overarching	DMC Power Resilience	Servicing all backup generators at pumping stations and treatment works to keep them reliable during power outages.	3 WPSs	1	Electrical – Generator Failure	May-25	Mar-26	Power resilience improvements	
2025	Overarching	VisNet Hubs	Installing 500 smart electrical monitoring devices at high risk sites, that monitor the condition of electrical circuits, check for water ingress and capacity issues.	500 devices	8	Electrical – Power Blips	Apr-25	Mar-26	Power resilience improvements	
2026	Overarching	Single Point of Failure Removal and Control Improvements at Sensitive sites	Strengthening resilience at Environmentally Sensitive locations by adding critical backups, smarter monitoring, and upgraded controls.	62 sites.	3 to 5	Response	Apr-26	Mar-27	Remedial capital asset improvements	Strengthening Asset Health & Resilience
2026	Overarching	Two-Way Pump Control	Enabling our Operational Control Centre to Start, Stop and Reset pumps remotely, reducing response time and optimising resource use.	60 sites.	1	Response	Apr-26	Mar-27	Enhanced incident response	
2026	Overarching	Logistics Management of Mobile Generators	We're rolling out a 24/7 transport service for mobile generators and critical kit so we can respond faster to power failures.	All mobile generators.	Enabler	Power Failure	Sep-26	Aug-27	Power Resilience Improvements	
2026	Overarching	Additional VisNet Devices Installed	Installing smart electrical monitoring devices at high risk sites, to monitor the condition of electrical circuits, check for water ingress & capacity issues.	140 devices.	0 to 3	Power Failure	Apr-26	Mar-27	Power Resilience Improvements	
2026	Overarching	Battery Energy Storage System (BESS)	Install battery storage units to keep pumps running during power cuts, reducing spill risk at hard-to-reach sites.	5 sites.	0 to 3	Power Failure	Apr-26	Mar-27	Power Resilience Improvements	

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Table 39: PIRP 2026 wastewater overarching measures summary table (continued).

PIRP Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Start Date	Completed by Date	Relevant Standard Measure	Relevant Theme Identified in the DWMP
2026	Overarching	Battery Energy Storage System (BESS)	Install battery storage units to keep pumps running during power cuts, reducing spill risk at hard-to-reach sites.	5 sites	0 to 3	Power Failure	Apr-26	Mar-27	Power Resilience Improvements	
2026	Overarching	Proactive Wet Well Cleaning Programme	Proactive cleaning of key wet wells across our WPS and WWTW estate to remove rag before it blocks pumps or causes network blockages.	1080 sites included	BAU	Pump Blockage	Mar-26	Mar-27	Enhanced proactive wet well cleaning programme	
2026	Overarching	PMS Phase 2&3	Continue development of our single, integrated pollution-management system with standardised processes, better data, and consistent workflows.	1 System	Enabler	All	Feb-26	Mar-27	Enhanced incident response	
2026	Overarching	Asset Maintenance Strategy	Programme of activities to build a resilient asset maintenance strategy, delivering multiple projects over AMP-8.	1 Strategy	6 to 10	Electrical & Mechanical	Apr-26	Mar-30	Bespoke	
2026	Overarching	Implementation of Advanced Back-Up Control and APR	Updated process for the inclusion of advanced back-up control and Auto-Pump Reset installation when repairing or replacing pump assets.	BAU Process Update	Enabler	Back-up Control Failure	Jan-26	Mar-27	Remedial capital asset improvements	
2026	Overarching	Top end alarm logic – optimising alarm insight	Accelerated delivery of top-end logic application to alarms coming into the OCC, reducing volumes and improving prioritisation.	All Telemetry Alarms	9 to 10	Detection	Apr-26	Dec-27	Bespoke	Improving Data, Modelling & Predictive Capability
2026	Overarching	Live and Dry Run Simulated Pollution Training	Programme of live and dry run simulated pollution training, providing real-world experience in a safe 'sand-box' setting.	1 Training Programme	Enabler	Response	Oct-26	Mar-30	Staff Training	
2026	Overarching	Improvements to Evidence Capture Processes	Improving how incident evidence and samples are collected by giving responders better tools, clearer processes, stronger training, and consistent best-practice standards.	All 1st Responders	Enabler	Response	Apr-26	Mar-28	Enhanced incident response	
2026	Overarching	Central Repository and Process for Learnings	Creating a single digital system that captures, stores, and shares learnings from all investigations and tracks improvements.	1 System.	Enabler	Operational Grip	Mar-27	Mar-30	Enhanced incident response	
2026	Overarching	OCC Training Resource	Employee an additional Technical Trainer to design, develop e and deliver training in the OCC.	1 Additional Role	Enabler	Response	Nov-26	Mar-27	Staff Training	
2026	Overarching	Situational Awareness	Adding data feeds and integrations to expand Situational Awareness so teams can see more real-time operational and pollution-risk information in one place.	1 System	Enabler	Detection	Apr-26	Oct-26	Bespoke	Strengthening Asset Health & Resilience
2026	Overarching	Sustained Benefit Recovery	Programme of operational grip improvement activities to reclaim pollution reduction benefit delivered in earlier PIRPs.	1 Programme	17 to 19	All	Jan-26	Mar-28	Bespoke	
2026	Overarching	Technical Process Training for Project Teams	Develop and deliver a customised Technical Process training programme for Capital Delivery Project Managers.	1 Training Programme	Enabler	All	May-26	Sep-26	Staff Training	
2026	Overarching	Embedded Ongoing RCA Training	Development and delivery of an ongoing Root Cause Analysis training programme.	1 Training Programme	Enabler	All	Apr-26	Apr-27	Staff Training	Improving Data, Modelling & Predictive Capability

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Planned additional measures: overarching measures for water distribution and water

This is a summary of the 2026 clean water measures focused on strengthening leakage detection and building future capability across the water distribution and water supply works network.

The programme includes the rollout of an improved leakage detection tool, to identify leaks earlier and reduce environmental impact. This is alongside early scoping work for smart systems that will enable more advanced operational control across the Business Plan 2025–30.

These measures will help drive down leakage related pollutions and support improved situational awareness, though the full benefits of smart networks will build gradually as discovery and delivery progress.

What we plan to continue from 2025 and before:

- We are embedding the leakage recovery plan and operational capacity improvements, confirming its sustained long term before these measures are completed.
- Our initial discovery for smart systems is due to complete in March 2026 and will be followed by phase 2 and 3.
- We will continue replacing our water rising mains, with a plan to replace 360kms by the of the AMP.

What we plan to start in 2026:

- We are rolling out an improved leakage detection tool to help us find leaks quicker and get them repaired sooner reducing overall leakage into the environment.

What our plans include from 2027:

- In early 2026 we started to explore how smart systems can be used in our water distribution network and water supply works, once this scoping exercise is complete, we will proceed with the identified solutions. This project will deliver across AMP 8 – our Business Plan period 2020–25 and is subject to future funding.

Expected impact of additional measures:

- These measures will help reduce pollution incidents from both our water distribution network and water supply works, with the full benefits of Smart Networks expected to build progressively across the Business Plan period 2025–30.
- As we continue improving our understanding of pollution events and reduce leakage, we expect a downward trend in incidents from these assets. However, because awareness and reporting of clean water pollutions is increasing, the true impact of these measures cannot be fully assessed at this time. .

Section 3: Our Pollution Incident Reduction Plan 2026 (continued)

Table 40: PIRP 2026 water distribution and water overarching measures summary table.

PIRP Year	Asset Type	Measure	Description of action(s)	Scale of action(s)	Impact*	Root Cause Addressed	Start Date	Completed by Date	Relevant Standard Measure
2023	WD	Leakage Recovery Plan – Aware	Programme to improve leakage awareness by upgrading our situational awareness dashboard, install of 500 additional pressure loggers and resolving network issues.	Cross Network Impact	1 to 5	Water Main Issue	Aug-23	Feb-26	Bespoke
2024	Water Overarching	Water Operational Capacity	Programme of activities to provide role clarity and support for FPMs, improving business processes and enabling performance management.	Pilot in WSWs, before Operational roll out	Enabling	All	Aug-24	Mar-26	Enhanced incident response
2025	Water Overarching	Smart Systems Phase 1 – Discovery	Initial discovery and investigation into Smart Systems that could provide benefit if implemented in the future.	Discovery Only	Enabling	All	Nov-25	Mar-26	Enhanced incident response
2025	WD	Water Main Replacement Programme	Programme of replacing water mains, focused on tackling high risk assets informed by asset condition modelling, including 21km of worst performing mains.	360kms water mains replaced.	1 to 5	Water Main Issue	Apr-25	Mar-30	Remedial capital asset improvements
2026	WD	Enhanced Leakage Detection Tools	Roll out of improved leakage detection tools to identify leaks quicker.	Cross Network Impact	Enabler	Water Main Issue	Mar-26	Aug-26	Use of predictive analytics
2026	WD	Water Mains Network Calming	Optimisation of existing pressure management scheme, installation of new pressure management valves and transient mitigation schemes.	170 installs over AMP 8	1 to 5	Water Main Issue	Apr-26	Mar-30	Telemetry installation
2026	WD	Sniffer Dogs trail for Trunk Mains	Trialling the use of Sniffer Dogs to detect leaks on trunks mains that are rural, or difficult to monitor.	1 POC trial	Enabler	Water Main Issue	Jan-26	Jul-26	Bespoke
2026	Water Overarching	Water Pollution Management Training	Updates to the Pollution Management training, including the provision of guidance and kits for sampling.	1 Training plan	Enabler	All	Mar-26	Mar-27	Staff Training
2026	Water Overarching	Tracing and Sampling Procedures	Roll out of defined sampling procedure in respond to a pollution, including resource gap analysis and contractor support.	1 pollution sampling procedure.	Enabler	All	Mar-26	Mar-27	Bespoke
2026	Water Overarching	Containment Guidance and Kit Provision	Provision of containment guidance for water pollution 1st responders and providing responders with containment kits to contain spills quicker.	Distribution of containment kits.	1 to 5	Response	Mar-26	Mar-27	Staff Training
2026	Water Overarching	Smart Systems Phase 2&3	Detailed design and delivery of the appropriate Smart Systems approach defined in phase 1.	Scale to be agreed	1 to 5	All	Jan-26	Mar-30	Bespoke

Glossary

AMP8	The eighth asset management period planned by the UK water industry and running from April 2025 to March 2030.
BESS	Battery Energy Storage System – it allows us to use stored power to run plant or equipment if there is a power outage on sites that are too small or remote for generator access.
BOD monitor	A monitor that indicates how effective the wastewater treatment process has been when we discharge treated sewage or final effluent from our wastewater treatment works by measuring Biochemical Oxygen Demand.
Cat 1	Category 1 pollution incident – major, serious, persistent and/or extensive impact or effect on the environment, people and/or property.
Cat 2	Category 2 pollution incident – significant impact or effect on the environment, people and/or property under the Common Incident Classification Scheme (CICS).
Cat 3	Category 3 pollution incident – minor or minimal impact or effect on the environment, people and/or property under the Common Incident Classification Scheme (CICS).
Cat 4	Category 4 pollution incident – no impact on the environment under the Common Incident Classification Scheme (CICS).
CBC	Condition-based cleaning of the sewer network.
CBM	Condition-based monitoring (by Sentrix & Samotics SAM4 systems).
CICS	Common Incident Classification Scheme
Dry day spill	This is when a storm overflow operates despite dry weather conditions.
EA	Environment Agency

EPA	EA Environmental Performance Assessment – WaSC performance.
FOG	Fats, Oil and Grease – from domestic and commercial cooking.
FS	Foul Sewer
ICA	Instrumentation, Control and Automation
Level controller	Equipment that reads and transmits the level of sewage in tanks and wells.
NRV	Non-Return Valve
Ofwat	Office of Water – The Water Services Regulation Authority.
Operational grip	This measures the level of control across operations, including monitoring asset health, tracking network performance and identifying issues early.
PHC	Platinum Health Check
PIRP	Pollution Incident Reduction Plan
PIRS	Pollution Investigation Report System
PR19	Ofwat's Price Review 2019 for AMP7.
PR24	Ofwat's Price Review 2024 for AMP8.
PSRV	Pumping station risk viewer (now replaced by Southern Water's Sentrix system).
Rag	Rag refers to items that don't break down in the pipes, that can cause blockages in pumps and sewers.

Glossary (continued)

RAID	Reactive Analytics Insights Desk in the Control Room.
RCA	Root cause analysis
RM	Rising main
Run rate	The number of pollutions per week over 52 weeks of the year.
Samotics	Samotics is an AI powered condition monitoring system monitoring pumps and other rotating assets to prevent equipment failures, reduce pollution incidents, and improve reliability.
Seized penstock	A large pipe or gate that controls wastewater flow, which has become stuck, meaning it can no longer open or close as it should.
Single pane of glass view	A dashboard where all alerts are visible on one, or a few screens as possible to improve alert accessibility.
SLM	Sewer level monitor
Spill	When a harmful substance accidentally leaks, overflows, or is released into the environment.
Sprint	A short, fixed period of focused work with a specific set of tasks to achieve.
Surface water outfall	Surface water outfall – and associated surface water sewers – are the pipe network that takes surface water from roads for example, downstream to the outfall where it is released into the river, stream or sea.

Unflushables	Items which should be disposed of in the bin, NOT the toilet.
VisNet	Monitoring and analytics equipment to identify electrical problems that cause operational disruptions, including pump failures, irregular start-ups, or power quality issues.
WaSC	Water and Sewerage Companies
WIRI	WIRI is the EA's <i>Guidance for Reporting and Assessing Water Industry Regulation Incidents</i> .
WSW	Water supply works
WPS	Wastewater pumping station
WWTW	Wastewater treatment works

Annexes

Annex 1: Regulatory changes

Purpose

The EA published new guidance on 15 October 2025, entitled *Guidance for Reporting and Assessing Water Industry Regulation Incidents* ('WIRI guidance').¹ This guidance replaces the EA'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. According to the EA, the update is intended to provide greater transparency around water company pollution performance.

The key features of the guidance include:

- Incorporation of new storm overflow Event Duration Monitoring (EDM) technology;
- Clarification of when 'no impact' claims can be made;
- Increased reporting requirements; and
- Amendments to reflect recently updated regulatory approaches.

Alongside the revised guidance, the EA has also released an updated methodology for the Environmental Performance Assessment (EPA) covering 2026–30.² Future assessments of water company environmental performance will use eight metrics to determine an overall rating, ranging from 1 (worst) to 5 (best).

Although numbers and RAG rating for total pollution incidents will still be included in the EPA, it will not contribute to the EPA 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 toward the EPA rating. During this period the Ofwat Performance Commitment Levels (PCL) will still apply and these under review for 2026 and previous PCLs are detailed in the plan.

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 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

What will the performance impact be?

The changes will increase the number of reported pollution incidents irrespective of deterioration in the water environment. In fact, it is possible that some water companies will actually reduce environmental harm while seeing the number of reported pollution incidents increase. We do not expect the changes to the WIRI guidance to have a significant 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 incidents that were previously undetected. Therefore, the EA 'expect 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 able to be downgraded to a category 4 if pollution has reached the watercourse.'

¹ [Guidance for reporting and assessing water industry regulation incidents \(WIRI\)](#).

² [Water and sewerage companies: EPA methodology for 2026 to 2030 - GOV.UK](#)

Annex 2: The integration of Drainage and Wastewater Management Plans (DWMP)

Links Between the Pollution Incident Reduction Plan (PIRP) and Drainage and Wastewater Management Plan (DWMP)

Southern Water’s Pollution Incident Reduction Plan (PIRP) and Drainage and Wastewater Management Plan (DWMP) are closely interlinked strategic programmes. Together, these plans underpin compliance with regulations, enhance resilience, and drive environmental improvement across the wastewater network.

Purpose of the DWMP and PIRP

The DWMP provides a long-term strategy for managing and developing drainage and wastewater systems. Its primary aim is to ensure Southern Water continues to meet its statutory obligations under the Water Industry Act 1991. It is a long-term plan which identifies risks, forecasts future pressures, establishes long-term pathways, and sets out the actions that will be taken. Furthermore, it supplies the data and evidence base necessary for the Water Industry National Environment Programme (WINEP) and the Price Review process.

The PIRP is a tactical plan produced annually to set out the actions to be taken over the next year to deliver near-term pollution reduction. Actions are determined using short- and long-term root cause analysis to target current and emerging pollution risks. It tackles immediate causes of pollution and delivers measurable interventions to address them. Insight used to generate the PIRP can also identify strategic investment needs which informs annual DWMP reviews.

1.2 How the DWMP and the PIRP work together

Figure 38 illustrates how the DWMP and PIRP are integrated into Southern Water’s planning process, informing the actions taken to reduce pollution incidents.

The PIRP 2026 addresses pollution related themes and risk drivers that have been highlighted in the latest DWMP, including:

- **Asset health and resilience:** The DWMP identifies current performance issues and long-term risks associated with deteriorating asset health, highlighting where future investment is needed. The PIRP addresses the pollution risks by delivering rising main rehabilitation, criticality modelling, and power resilience improvements.
- **Hydraulic capacity and climate change:** The DWMP assesses system performance and predicts risks due to climate change, creep, and growth, identifying actions needed to improve performance and reduce these risks. The PIRP implements infiltration and inundation (I&I) interventions, dual manhole remediation, and network cleansing to protect network capacity and mitigate hydraulic issues.
- **Network condition and blockages:** The DWMP uses current performance data and modelling to identify ongoing blockage risks and the need for additional future investment in asset improvements and customer education. The PIRP responds by expanding Sewer Level Monitoring (SLM) coverage, deploying targeted cleansing, and improving operational response to reduce the frequency and impact of blockages.
- **Environmental protection:** The DWMP evaluates the performance of wastewater treatment works (WWTW) and storm overflows, their environmental impacts, and the future investment needed to meet current and future permits, prioritising sensitive areas and preventing ecological harm from discharges. The PIRP strengthens power and operational resilience in these crucial locations.

1.3 PIRP’s feedback into the DWMP

The DWMP is reviewed annually. Insights from PIRP analysis – especially where new risks are identified or where short- to mid-term PIRP actions are insufficient – are fed into the next DWMP cycle. This process ensures:

- new and emerging risks are incorporated
- future funding requirements are substantiated with evidence, and
- long-term solutions are planned and prioritised through DWMP investment pathways.

1.4 DWMP and PIRP relationship summary

Table 39 summarises how the long-term priorities set out in the DWMP are translated into annual actions delivered through the PIRP.

Table 41: DWMP and PIRP relationship summary

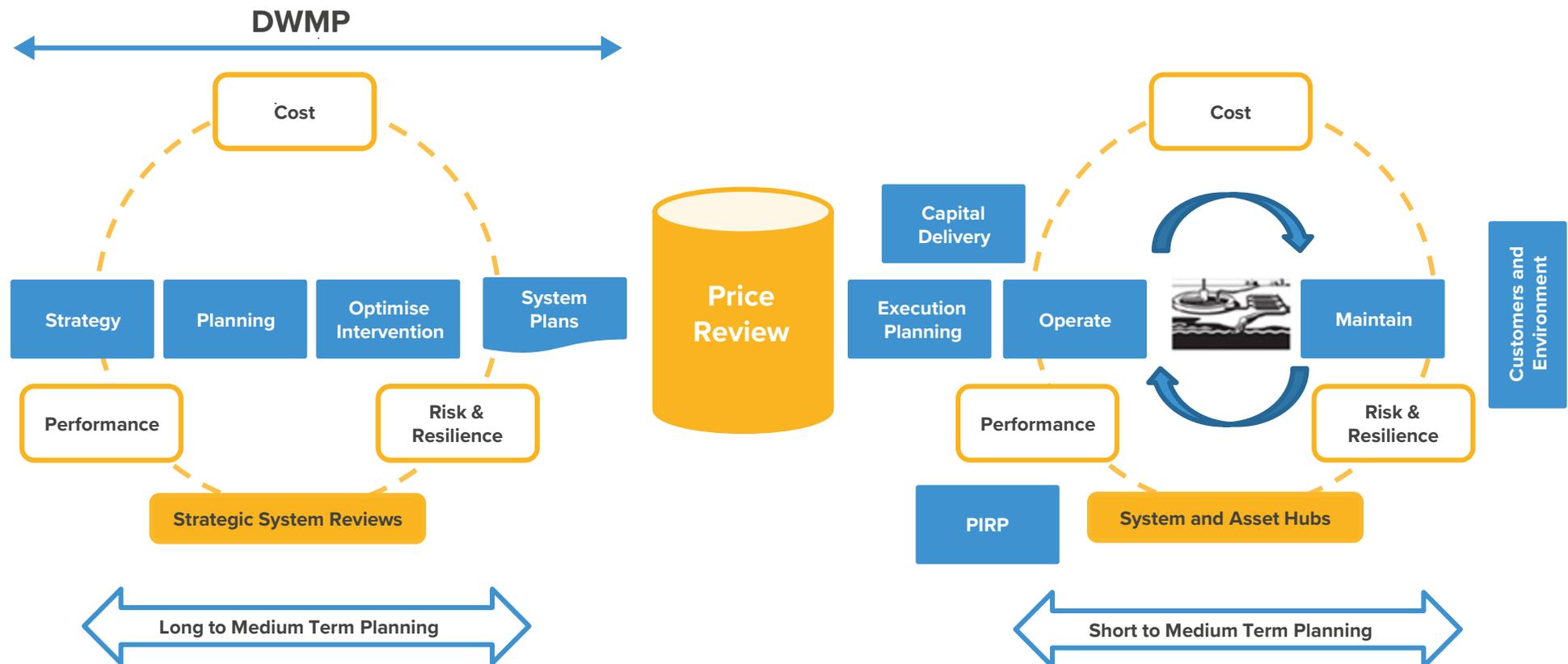
DWMP	PIRP
Long-term strategic risk identification	Tactical, targeted interventions
Identifies priority catchments and failure modes	Deploys year-on-year operational activity
Looks 25 years ahead	Addresses immediate performance gaps and PCLs
Considers growth, climate resilience, future needs	Improves today’s asset reliability and incident response
Sets high-level investment pathways	Provides evidence and data to shape future AMP investment
Provides the evidence base for the WINEP programme of enhancement to the current wastewater systems	Identifies actions to maintain current system performance
Identifies the investment needs for Wastewater for the following AMP for inclusion in the Price Review	Addresses immediate performance gaps and PCLs

The integration of Drainage and Wastewater Management Plans (DWMP) (continued)

1.5 Conclusion

In summary, the DWMP establishes the strategic direction and actions to be taken in future investment periods (asset management plan cycles), while the PIRP delivers the practical in-AMP actions. Both programmes are essential for improving environmental outcomes, meeting regulatory expectations, and moving Southern Water towards a resilient, pollution-free network. You can read more about Southern Water's DWMP [here](#).

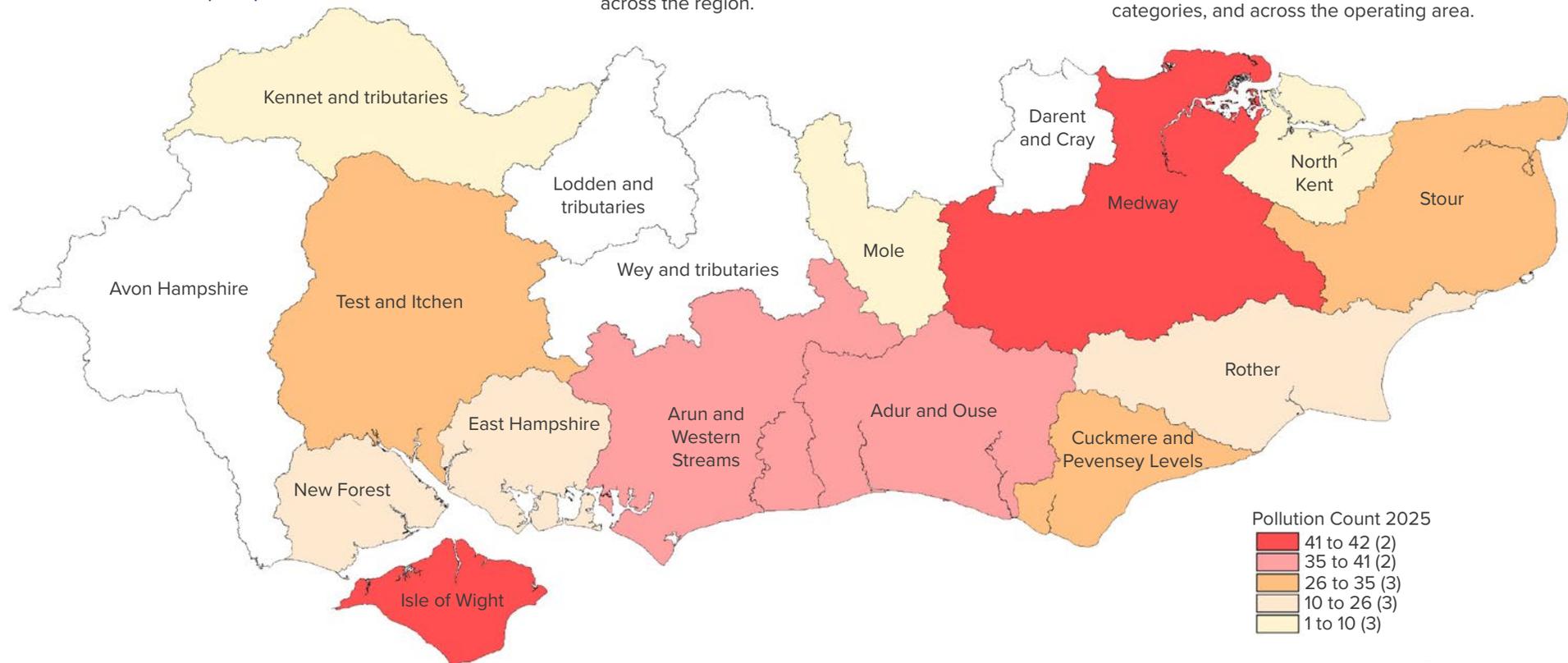
Figure 38: How the DWMP and PIRP are integrated in our planning process to inform our actions to reduce pollution incidents.



Annex 3: An analysis of Category 1 to 3 pollutions and their distribution within the 17 river catchments over 2025

The distribution of category 1–3 pollution incidents recorded across the 17 river catchments during 2025 is shown in figure 39.

Figure 39: Distribution of category 1–3 pollution incidents across river catchments (2025).



Pollution incidents are not evenly distributed geographically, with a small number of catchments accounting for a higher proportion of total incidents:

- Higher numbers of incidents are concentrated in several eastern and coastal catchments, while other catchments show comparatively lower numbers of recorded pollutions.
- The variation in the distribution of incidents reflects differences in how many assets there are, network complexity and environmental sensitivity across the region.

However, the presence of pollution incidents across all categories in most catchments, shows that pollution risk exists across the wider wastewater network – it’s not isolated to individual locations. The geographical spread shown reinforces the need for a region-wide approach to pollution reduction, alongside targeted interventions in higher-risk catchments.

This catchment-based view supports the focus of the PIRP 2026 to address underlying failure modes that drive both serious and non-serious pollution incidents. This ensures that planned measures deliver benefits across all pollution categories, and across the operating area.



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