# Pollution Incident Reduction Plan

2026

# Foreword

I know how important it is that we improve outcomes for rivers and communities by reducing pollution and discharges. In the last year, we have made significant steps forward in our pollution incident reduction plan; delivering a 10% reduction in total pollutions from all asset types, an 18% reduction from waste assets and a 27% reduction in serious pollutions. That said, there are still too many pollutions and storm discharges, and getting to where we want to be is going to take many years not months.

In 2025, we reached a critical milestone in the reduction of storm discharges into the tidal River Thames with the completion of the third phase of our London Tideway improvements. After major upgrades to wastewater treatment works in London in 2015 and the completion of the Lee Tunnel in 2016, the £4.6 billion Thames Tideway Tunnel was connected to our network this year. Together, these improvements are securing a 95% reduction in the amount of sewage entering the tidal River Thames, a huge step forward for the health of the River Thames in London.

We are an infrastructure company, and to get things right for customers and the environment, we are investing heavily in our ageing assets, planning to spend £8.7bn* between 2025-2030 in maintaining and enhancing our assets. If our plan was fully customer funded, this would equate to £80.33** on each customer's annual bill by 2030. In the last year, we have launched the biggest upgrade to our network in 150 years, to increase the resilience of our network, reduce our impact on rivers and support growth in our region.

## This Pollution Incident Reduction Plan

This, our next iteration of our PIRP, which I have reviewed and approved, continues to form part of our most ambitious plan yet with the largest level of investment since privatisation. It sets out how we will further improve our environmental performance by focusing on three key elements:

- Targeted initiatives to further prevent pollution incidents at source
- Improved response to incidents to prevent and minimise any impact
- A culture that encourages pollution-reducing behaviours among our colleagues and customers

The plan has been put together in the context of an evolving regulatory framework including changing how pollution incidents will be categorised, which will see incident numbers rise dramatically despite an actual reduction in environmental harm. It is clearly important to see consistency in recording and reporting of total and serious pollutions across the industry, to enable fairer comparison of individual company performance.

We recognise our ambition to reduce pollutions needs to be matched by sustained improvement and investment. We are reassured by the progress we have made in the last year and we remain focused on the delivery of this plan.

The PIRP meets all requirements under the Water Industry Act 1991 (as amended) and the Water (Special Measures) Act 2025 and all mandatory elements of the PIRP guidance.

Chris Weston
Chief Executive Officer

* this figure is subject to change in the event of a future recapitilisation of the business, or a CMA redetermination, or entering a Special Administration Regime

** Based on 2022/23 prices

# Contents







# Understanding pollution in the context of our region

# Our region and its challenges

Our diverse region follows the iconic River Thames and stretches from Gloucestershire to Essex, covering countryside, hamlets, villages, towns and London, our capital city. We serve 16 million customers and support hundreds of communities, all within an environment struggling to cope with constant change. We need to adapt quickly and tackle these challenges to continue to put our Purpose (to deliver life's essential service so our customers, communities and the environment can thrive) into practice and address these challenges in our planning.

Our operational area map

## Our services

Removing wastewater produced by our

**16** million

customers every day

Pumping wastewater from our

**5,169** pumping stations

to be treated at

**353** wastewater treatment works

from the largest in Europe in East London to assets serving hamlets in the Cotswolds

Treating

**4.7** billion

litres of wastewater every day and returning treated effluent safely back to our local rivers

Maintaining and enhancing our

**110,000** km

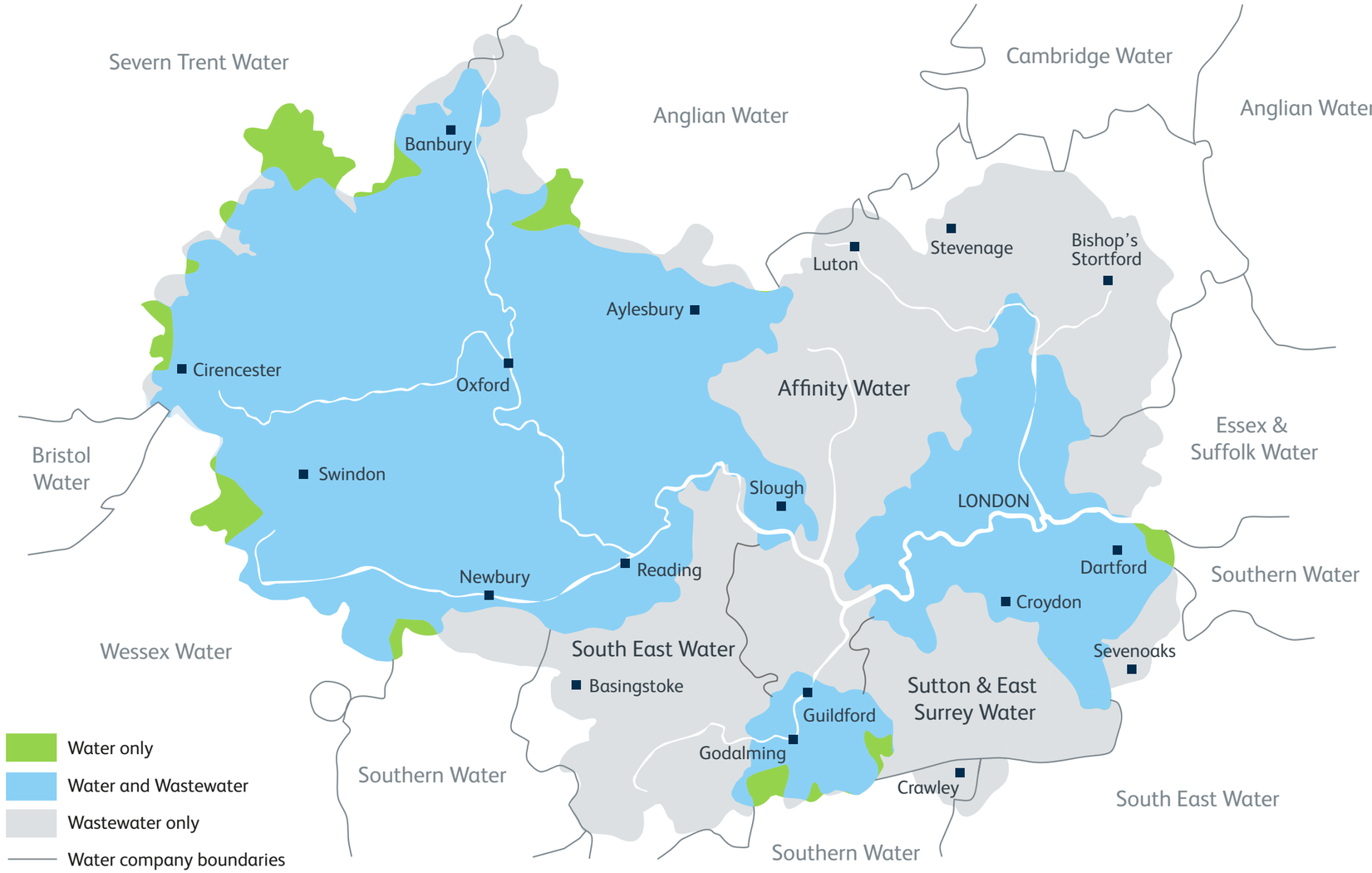
(which would stretch nearly 3 times around the Earth) through our

**1.79** million manholes

Providing more green spaces for communities to use and enjoy across our region

## Our challenges

- Ageing infrastructure: There has been a decline in asset health which has taken place over decades as we have stretched the life of our assets, repairing rather than replacing.
- A growing population: Our region's population is set to grow by 2.5 million people by 2050 (the equivalent of more than everyone currently living in Birmingham, Glasgow and Liverpool moving into our region), and we are going to have more tourists and short-term visitors needing our services too.
- A changing climate: Over the next 25 years, climate change will impact the weather patterns across our region. Extreme weather, such as heatwaves and flooding, is becoming more frequent and intense. For example in 2024 we experienced the wettest winter on record, 85 of the first 100 days had groundwater levels above the 'high' threshold and September was the wettest calendar month ever experienced in Oxfordshire. Our systems have not been designed to cope with such extremes.
- A loss of green areas: We are losing more green areas to new properties, extensions and paving, which all tend to use impermeable materials. This leads to more rainwater entering our sewer network, instead of naturally finding its way into our rivers and streams, which can cause property flooding and poor river water quality.
- An environment in need: We must protect and enhance our natural environment, particularly the health of our rivers and wetlands, while balancing the costs of meeting environmental standards and keeping customer bills affordable.


Severn Trent Water
Anglian Water
Cambridge Water
Anglian Water
Banbury
Luton
Stevenage
Bishop's Stortford
Aylesbury
Cirencester
Oxford
Affinity Water
Bristol Water
Essex & Suffolk Water
Swindon
Slough
LONDON
Dartford
Southern Water
Newbury
Reading
Croydon
Wessex Water
South East Water
Sevenoaks
Basingstoke
Sutton & East Surrey Water
Guildford
Godalming
Southern Water
Crawley
South East Water
Southern Water
Water only
Water and Wastewater
Wastewater only
Water company boundaries

# Our pollution performance in 2025

Please note the 2025 data presented throughout this document have not been finalised at the time of publication as we await the EA outcome of a number of ongoing appeals which have the potential to reduce the number of total and serious pollution incidents.

# Summary of incident numbers

In 2025, our pollution incidents across all asset types (categories 1-3) totalled 471. This represented a 10% decrease from 523 in 2024 and was seen across most asset types. 24 of these were serious incidents (category 1 or 2); a reduction of 27% from 33 in 2024. Full details of our performance by asset type and seriousness are included in Appendix 2 - Tables 12 & 13. Please note that clean water pollution incidents do not contribute towards our performance commitment or Environmental Performance Assessment (EPA – more detail below) targets for total pollutions, but they do for serious pollutions. We achieved an 18% reduction (from 470 to 386) in Category 1-3 incidents from wastewater assets, which was slightly offset by an increase in clean water incidents.

Table 1: Pollution incident numbers by seriousness 2021-2025

| Seriousness | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| Category 1 | 1 | 3 | 1 | 7 | 1 |
| Category 2 | 11 | 14 | 13 | 26 | 23 |
| Category 3 | 292 | 380 | 379 | 490 | 447 |
| Waste total | 271 | 331 | 350 | 470 | 386 |
| Total (All Asset Types) | 304 | 397 | 393 | 523 | 471 |
| Serious Pollution Incidents per 10,000km sewer | 1.1 | 1.6 | 1.3 | 3.0 | 2.2 |
| Waste Total Pollution Incidents per 10,000km sewer | 24.9 | 30.4 | 32.1 | 43.1 | 35.4 |
| Total (All Asset Types) Pollution Incidents per 10,000km sewer | 27.9 | 36.4 | 36.1 | 48.0 | 43.2 |
| Category 4* | 459 | 386 | 369 | 459 | 378 |

Our pollution incidents (both total and serious) form part of the EA's Environmental Performance Assessment (EPA). The Environmental Performance Assessment is a tool used to evaluate and compare environmental performance between water companies and across years.

The most recently published EPA data, which allows comparison across the water industry is for 2024. In this year, our overall wastewater performance (43 incidents per 10,000km) was better than the sector average (47) for sewerage pollution incidents. Our performance at Wastewater Pumping Stations specifically remained industry-leading for the second year running, with our incident numbers outperforming the rest of the industry in terms of total numbers. Given the scale of our operation, this represents a notable outcome (we had 28 incidents compared to the average of 77). When this figure is normalised per 10,000km of sewer, we achieved a performance of 2.57 compared to an industry average of 17.58.

Figure 1: pollution incidents at all assets from 2021-2025 by seriousness

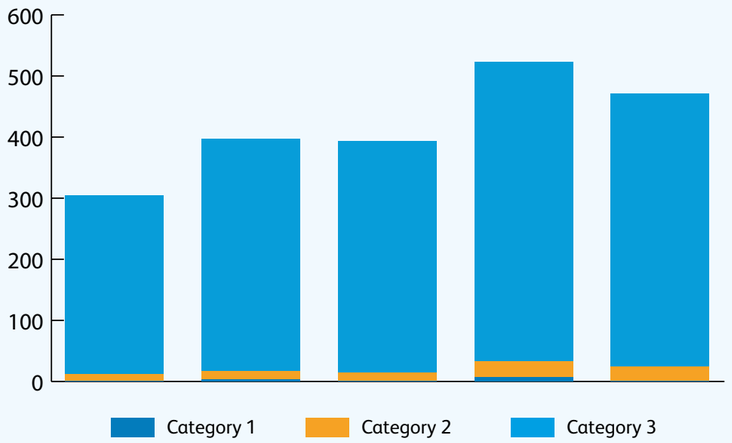



Figure 2: Map showing the distribution of waste Category 1-3 pollutions in 2025

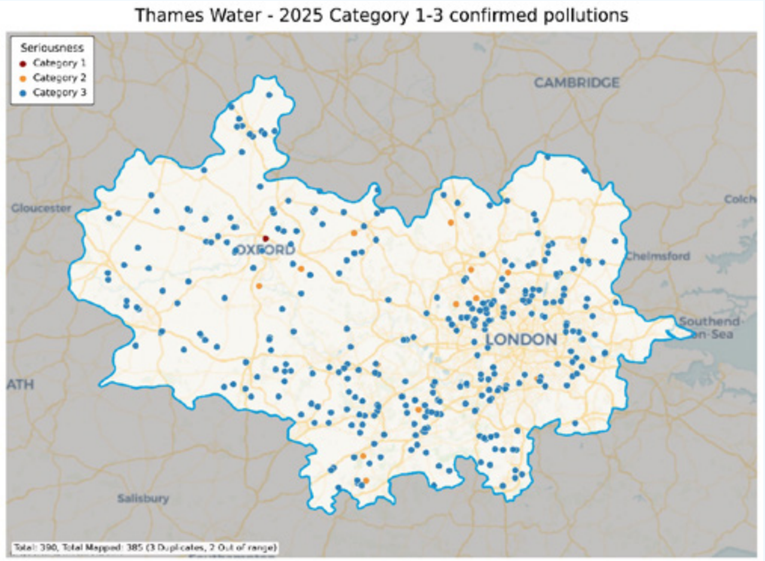



Figure 2 shows the distribution of our waste Category 1-3 pollution incidents for 2025. It demonstrates the widespread nature of pollutions across our 110,000km sewer network, with many incidents happening in areas which have no previous history (66% of waste 2025 pollution incidents had no pollution history in the preceding AMP). This highlights the challenge we face in predicting where incidents will happen in order to prevent and mitigate them.

As we move into 2026, there are some significant regulatory changes which will have a bearing on the number of pollution incidents reported across the sector. The implementation of the Environment Agency's guidance for reporting and assessing Water Industry Regulation Incidents (WIRI) will see a greater number of incidents being classified as category 1 to 3 incidents as any polluting substance entering the environment will be deemed to be causing impact.

* Category 4 numbers have been included. These do not currently count towards the total pollutions metric. However, based on new EA WIRI guidance, the definition of Category 4 is changing to no entry rather than no impact. This is likely to result in a significant number of Category 4 incidents being reclassified as Category 3 moving forwards.

Consequently, wastewater incidents previously classified as ‘no impact’ (288 category 4 waste incidents in 2025), will be included in the total pollutions count, along with other incident types such as spills on ‘dry days’.

Dry day spills* are a particular challenge for us as we estimate that around 30-40 % of our systems are significantly impacted by groundwater infiltration. This challenge is further compounded for us by our local geology, as groundwater in chalk catchments is especially responsive to rainfall and can lead to sustained infiltration pressures. Furthermore, the guidance introduces a higher bar on the assessment of third-party incidents. Incidents which would have historically been attributable to third parties (for example vandalism, accidental damage, fly tipping and foreign object blockages such as concrete, tarmac and bricks) will instead contribute to water company total pollution numbers under the new regulations.

These changes will make annual comparisons very challenging and are the reason why the Environment Agency will be shadow reporting total pollution incident numbers for 2026 and 2027. In this context, it should be noted that all targets quoted in this PIRP are relative to the historic baseline as the impact of the WIRI changes are still being quantified.

Serious pollutions remained a significant challenge with 2.2 per 10,000km of sewer (24 in total), although this did represent a 27 % reduction from 2024. We recognise that we have to do more in this area to continue this reduction in future years. A large proportion of the incidents happened in remote areas and, despite prompt attendance from the time of being reported, had already caused serious pollution impact by the time we arrived. We are doing more to proactively understand where these risks are and respond quicker.

In 2024, 104 wastewater incidents (around 22 %) were attributed to hydraulic overload (when the capacity of a sewer is exceeded) during periods of extreme wet weather and high groundwater. In 2025, this has reduced to 36 incidents (around 9 % of all waste incidents)

Power-related incidents have also fallen materially from last year (26 fewer incidents). This was in part because of the work we have been doing to improve power resilience across our assets, although we recognise there was also a reduction in the number of named storms that occurred in this period. We recognise the continuing risk posed by an unreliable power supply network therefore we are continuing to improve our resilience to power interruptions.

These reductions help show where operational efforts are working. By excluding external impacts, the underlying performance baseline indicates that the network is experiencing fewer avoidable pollution incidents, and performance is tracking closer to our expectations.

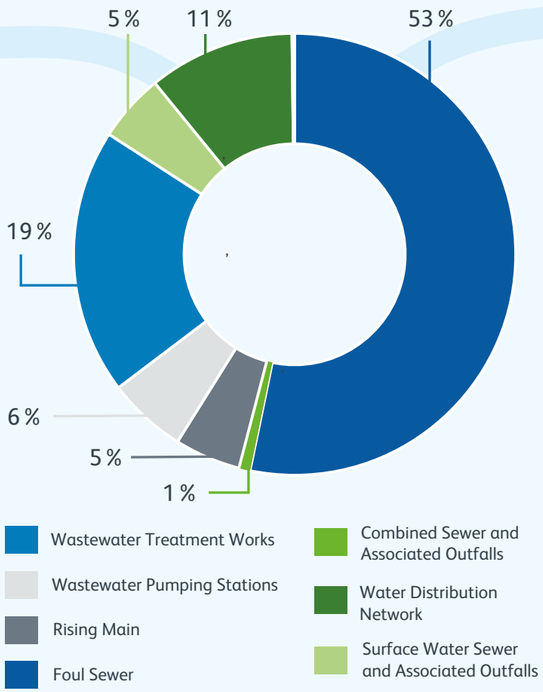
* Spills which occur on a day with less than 0.25mm rainfall in the previous 24 hours

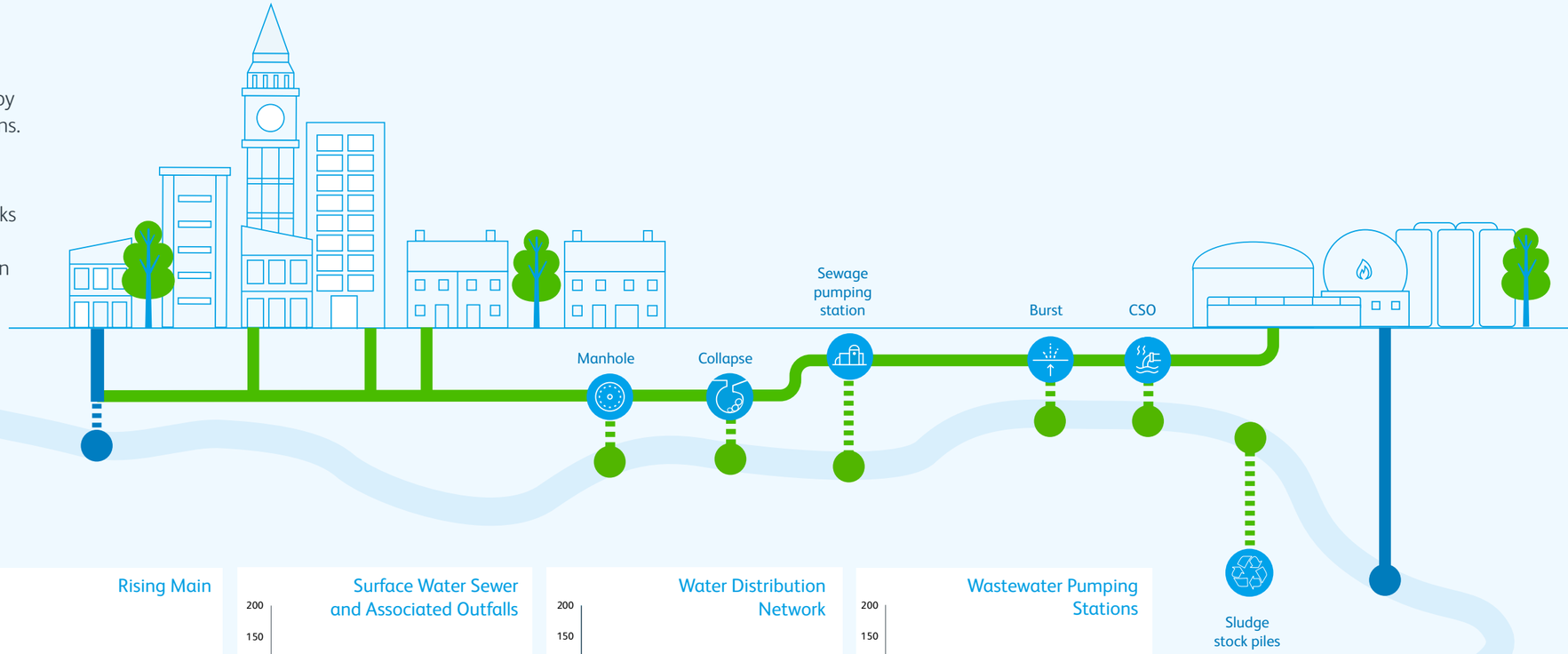
# Total pollutions by asset type

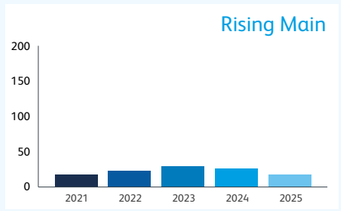
The diagram and graphs on this page show the breakdown of total pollutions (categories 1-3) by asset type from 2021 to 2025 as recorded by the EA. This shows which of our assets are implicated in the most pollutions.

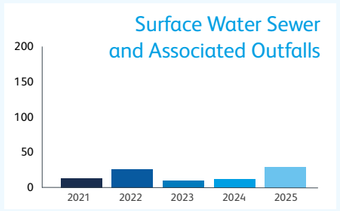
2025 saw a decrease in pollution incidents across most asset types, particularly apparent for pumping stations and wastewater treatment works, with a 24% reduction in incidents from wastewater treatment works and a 29% reduction from pumping stations. Our vast sewer network continues to be the biggest contributor, with 65% of wastewater pollution incidents originating from this asset type, although we still managed to achieve a 14% decrease here.

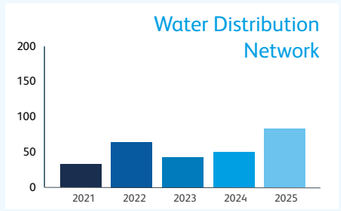
Figure 3: breakdown of total pollutions (Categories 1-3) by asset type

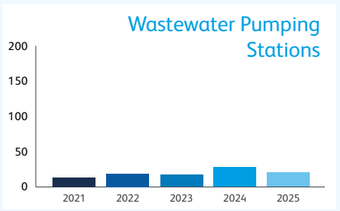


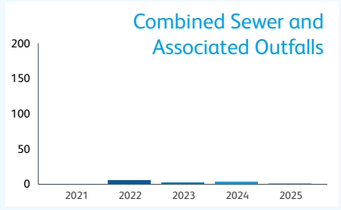



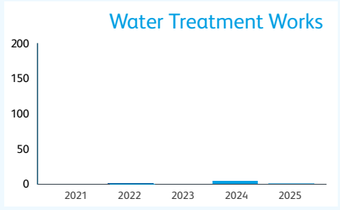



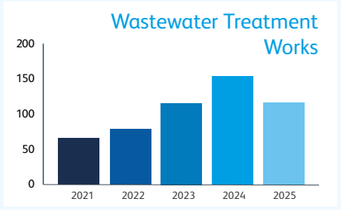



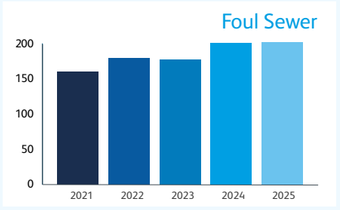



# Targets

During this AMP period (2025-2030), we have set ourselves targets to reduce total pollution incidents by 35% and serious incidents by 27%, which we consider to be ambitious.

Table 2 sets out these targets and shows the targets which have been set as Performance Commitments by Ofwat as part of its PR24 process. We have not accepted our PR24 final determination from Ofwat and have asked them to refer the matter to the Competition & Markets Authority (CMA) for redetermination, although we have subsequently agreed with Ofwat that it would defer making this referral. This delay is to allow time and space for discussions to take place about regulatory arrangements in the context of our recapitalisation.

The latter targets are based on the Water Industry Strategic Environmental Requirements (WISER), which set out specific targets for water companies in the UK. WISER was produced by Defra and is based on objectives which the EA and Natural England expect water companies to achieve, specifically targeting a 40% reduction in total pollutions by 2025 against 2016 reference levels.

Our internal targets have been set based on a more recent and realistic reference point: the 2024 out turn, assuming average weather conditions and reflect the funding committed as part of our Integrated Business Plan (IBP).

It should be noted that these may be subject to change in the event of a future recapitalisation of the Thames Water business. We also expect both internal and Ofwat targets to be updated, and likely materially increased, once the impact of WIRI on pollution numbers is better understood. There is an ongoing Ofwat consultation regarding pollution targets. The targets included here are based on the pre-WIRI regulatory environment.

Table 2: Internal and Performance Commitment pollution targets by seriousness and year

| Source | Metric | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|
| Internal | Total pollutions | 384 | 352 | 339 | 325 | 306 |
| | Serious pollutions | 29 | 27 | 27 | 26 | 24 |
| Ofwat | Total pollutions | 272 | 255 | 237 | 220 | 203 |
| | Serious pollutions | 0 | 0 | 0 | 0 | 0 |

# Serious pollutions

In 2025, we had 24 serious pollutions. This is a decrease of 27% from 33 in 2024. We experienced drought conditions in Summer 2025 with extremely low river levels and high temperatures, and the start of the year was extremely wet with exceptionally high groundwater levels. Challenging external factors were therefore encountered throughout the year, which evidences the improvements we have achieved through investment and network management.

Blockages in the sewer network, caused by sewer abuse (paper/rag and fat and grease), have been the primary root cause of 12 serious incidents.

There was a reduction in serious pollutions caused by too much flow in the network (also known as hydraulic overload), with 2, down from 12 in 2024. Both of these incidents were from treatment sites which were compliant with the flow (volume of treatment) conditions in their Environmental Permits and in periods of heavy rainfall. The remaining 4 treatment incidents were due to issues at treatment sites with root causes related to asset failure and the knock-on impact of compromised process capacity.

Other causes included burst rising mains (1) or water mains (1), sewer defects (1) and issues we consider to be third party in nature (3).

Of the 24 serious pollutions, 3 incidents had a direct impact on wildlife. The other incidents were classified as serious due to the extent of water quality impact, according to the EA's Common Incident Classification System (CICS). There was a seasonal variation recorded across the summer months (April to August), with the impact exacerbated by hotter, drier weather and low-flowing watercourses. In 2025 we recorded two serious incidents from clean drinking water assets. This reflects the impact of drought conditions on our water network, with more ground movement occurring and the resulting 26% increase in bursts from 2024 to 2025.

Table 14 in Appendix 2 provides more detail on each of the serious pollution incidents in 2025, and Figure 4 shows the fault and cause.

We undertook a series of initiatives in 2025 to address serious pollutions including customer education with both household and non-household customers, an increase in planned sewer maintenance and installation of additional sewer depth monitors. Our clean water activities have focused on reducing pressure fluctuations in the network (calm networks) to reduce the likelihood of bursts occurring. We have also focused on increasing awareness of pollutions amongst clean water teams and providing them with the correct equipment to effectively mitigate incidents. Whilst more awareness is likely to result in more reports and an increase in incident numbers, it will allow a better response and more effective containment, reducing the actual environmental impact.

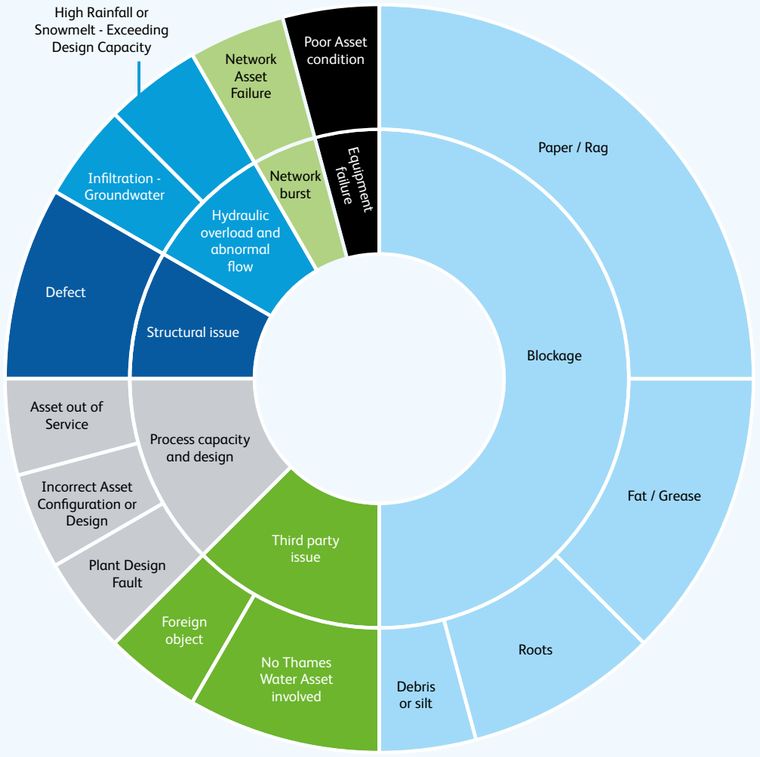



Figure 4: Fault and cause for serious pollution incidents in 2025

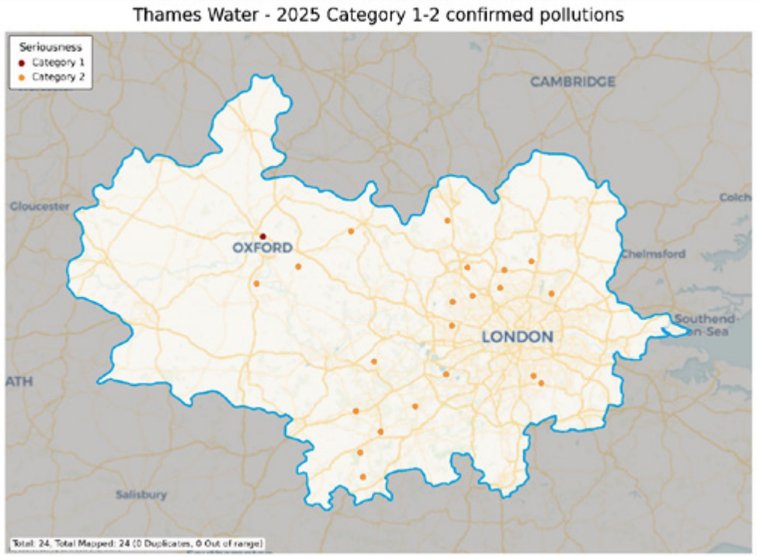



Figure 5: Map showing distribution of category 1-2 Clean & Waste Pollutions in 2025

Building on the expansion of the coverage of our sampling teams (who independently assess the environmental impact of an incident) and our 24-7 pollution desk (who help coordinate the response once an incident has been reported), in 2025, we have invested heavily in increasing the number of people on the ground to reduce pollutions. We are mobilising over 150 more frontline staff to increase our focus on preventative maintenance and improve our speed of response; increased numbers of colleagues within our Network Protection team by over 50%, to improve fat and grease control with fast food businesses; increased the number of colleagues in the Environmental Protection team by 80%, to work on more surface water outfall misconnection cases; and created a new serious pollution investigation team, to assure and enhance pollution investigation procedures.

The direct impact of lower groundwater levels in 2025 is likely to have partly contributed to improved performance compared against 2024, and our longer-term investment plans are in place to mitigate these impacts. However, the work is complex, iterative and will take time. We also need to consider the high costs of this work and affordability for customers over the longer term. Water companies in England and Wales have worked collaboratively with Defra and the EA to conduct trials on alternative nature based solutions (NBS) to managing groundwater impacted systems. These trials are scheduled to take place throughout AMP8, with NBS to be potentially considered for use in AMP9.

Figure 5 shows the widespread distribution of our serious incidents and demonstrates the challenge we face in predicting where a serious pollution will occur, and therefore being able to prevent and mitigate incidents.

# Total Pollution Incident causes

Understanding the causes of our incidents is critical to ensuring our improvement plans address the true drivers of our pollutions.

In 2025, we strengthened our approach to investigating and capturing the root cause. These improvements included:

- Additional oversight and governance to encourage peer review and senior management understanding of pollution drivers
- Improved data insight to provide visibility of trends, input performance and underlying factors
- New forums to deep dive into specific root cause categories, improving the depth of insight and understanding

We investigate the root cause of every pollution incident. In many cases, the cause is a complex combination of factors, with both causal and contributory elements. For example, a pollution incident may result from a blockage caused by paper and rag that became caught on tree roots that entered the sewer due to a misaligned joint. While we capture this full complexity and take learning from all aspects of our investigations, this document presents a high level view of primary and secondary causes for the previous 5 years for category 1–3 incidents only (as recorded on the National Incident Recording System governed by the Environment Agency).

We also recognise that asset health may be a factor which underpins a number of pollution incidents, but this is not always represented in the primary or secondary cause presented here, since this focuses on the immediate incident cause. We have included a blockage root cause deep dive (Section 3.5.1) which demonstrates how we use systemic root cause analysis across all incidents to inform our interventions. We are taking action to improve and maintain the condition of our assets. More detail available in our business plan.

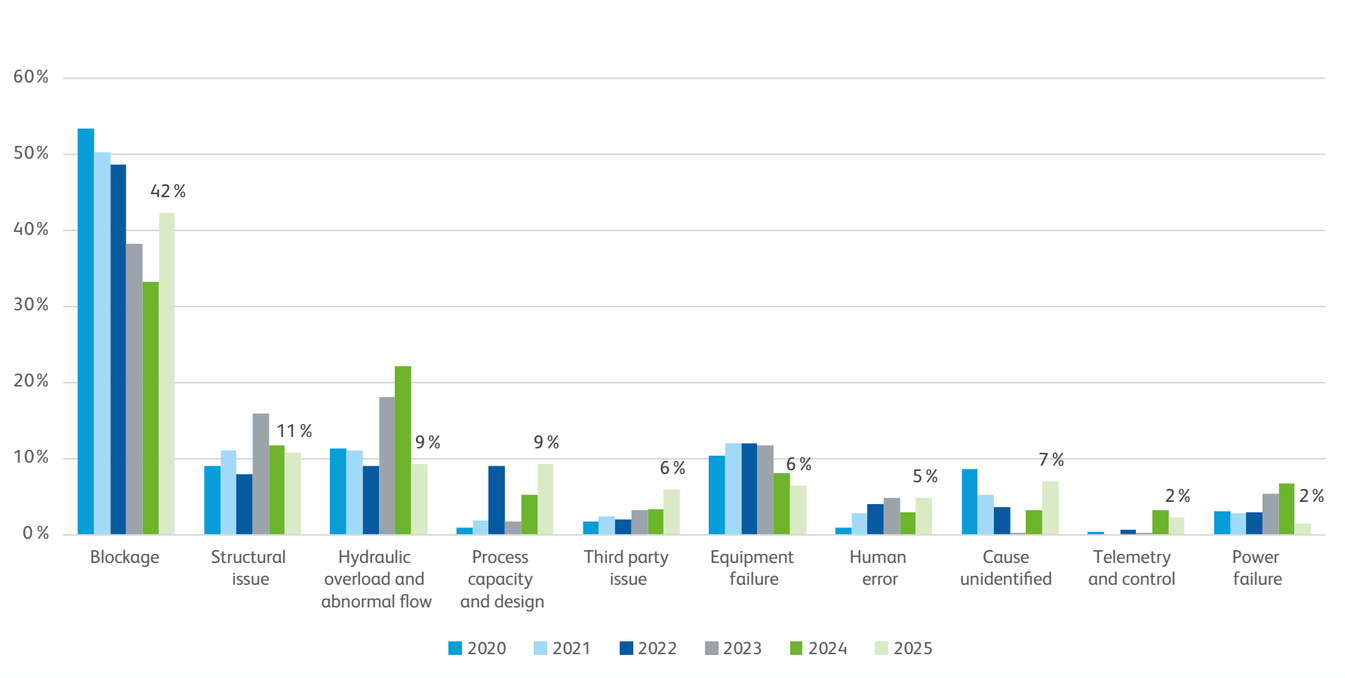



Figure 6: Total pollution incident causes from 2021-2025 across waste asset types

Figure 6 shows the primary fault for all incidents from 2021-2025. This shows that blockages were the main driver of pollution incidents in 2025 causing 42% of wastewater incidents. One significant difference to call out is the reduction in pollutions caused by hydraulic overload with 68 fewer incidents in 2025 than 2024 (65% reduction). This is due to 2024 experiencing one of the wettest winters on record. Full details of primary and secondary causes for all 2025 incidents by asset type are presented in Appendix 2 – Table 15.

To demonstrate transparency and depth of understanding, we have included one example of a detailed review of blockage root causes for the most significant root causes. This highlights how we go beyond primary and secondary categorisation to explore the broader organisational or systemic factors contributing to all incidents, and demonstrates the richness of information we use to inform our interventions. The sections following this delve into the primary and secondary causes by asset type to provide additional detail on our pollution drivers.

# Waste networks

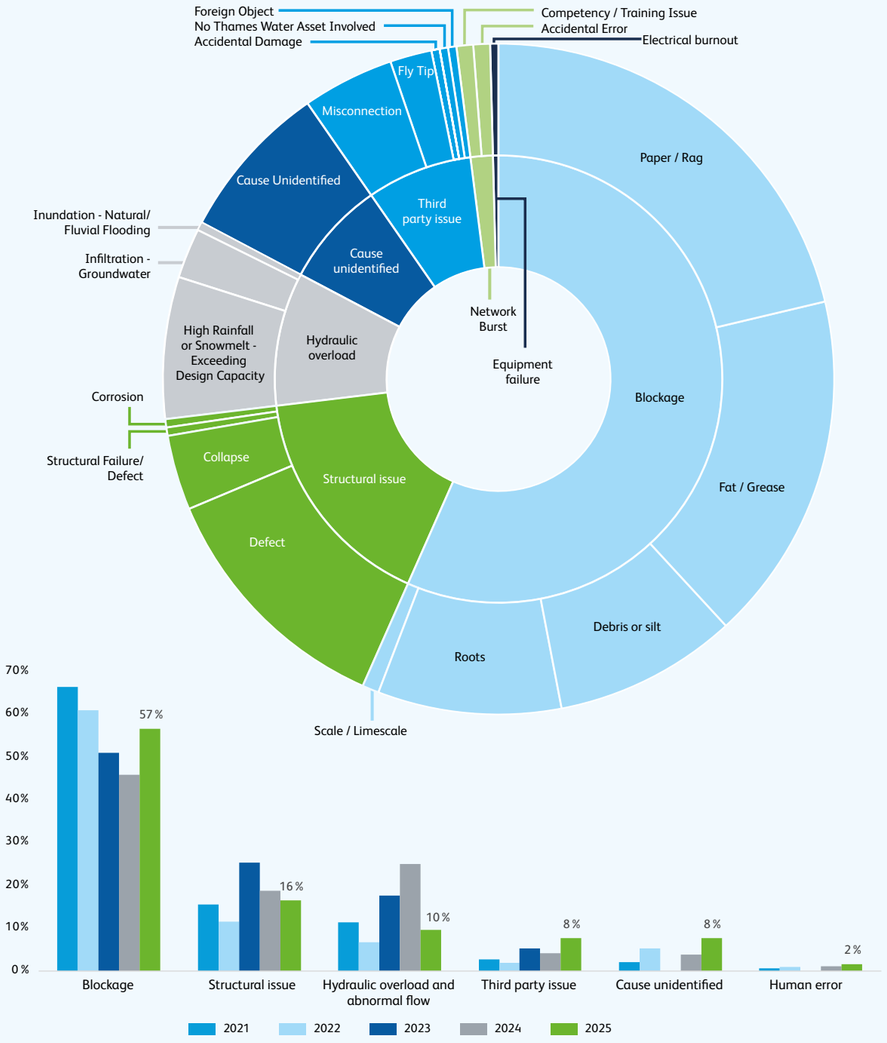
Our network is vast, with nearly 110,000km of sewers mapped – nearly long enough to stretch around the Earth three times. 65% of our wastewater incidents originate from our sewer network, with most of them being caused by blockages, followed by structural issues, hydraulic overload and third-party issues. These incidents occur across only 2% of our network in any given year, making anticipation of incident locations a significant challenge given the scale of the network. We have summarised some key insights for each of the main causes:

- Blockages: The biggest cause of blockages is paper/rag and fat/grease. This includes things like wet wipes, sanitary products, nappies and other unflushables that should not be put down the drain. We remove an estimated 3.8 billion wipes from our network every year. Thanks to our network of ~23,000 sewer depth monitors (SDMs), we successfully identified and cleared over 4,500 blockages in 2025, contributing to the steady reduction in pollutions caused by blockages.
- Structural issue: Defects cause most of the pollutions related to structural issues. This is when a crack or hole in the pipe forms, which may lead to a sewage leak. These instances can come in the scale of large bursts or small leaks and mostly occur from our foul sewers and rising mains.
- Hydraulic overload: 2025 saw a reduction in incidents caused by hydraulic overload compared to 2024 – mainly due to drier weather and lower groundwater levels. Hydraulic overload happens when the capacity of a sewer is exceeded due to excessive rainfall or other inflows. These incidents will take many years and significant investment to resolve (our latest estimates indicate ~£22bn would be required for network hydraulic overload) and will require a multi-angle approach, including relining sewer pipes to prevent groundwater from infiltrating them, creating additional capacity for storm water at our WwTWs and disconnecting surface water drains from our foul network.
- Cause unidentified: These are incidents where we have not been able to pinpoint the exact root cause but have established it was not caused by a third party, and that a polluting substance did enter the environment. They are closely monitored and investigated vigorously to ensure we identify all evidence and consider every possibility.
- Third-party issue: 8% of our waste network incidents were caused by third-party issues, with the majority of these related to misconnections (where the waste pipes are plumbed into the surface water drains). Our Surface Water Outfall Programme (more detail of which can be found in Section 4.1) aims to resolve misconnections, pro actively identifying their source and working across different agencies to get them resolved.

## Blockage root cause deep dive

We have included this detailed review of blockage root causes (57% of all network incidents) as an example. This highlights our drive to go beyond primary and secondary categorisation to explore the broader organisational or systemic factors contributing to incidents. When completing the root cause analysis of an incident, our teams are required to select a primary and secondary root cause as shared in Table 15 (Appendix 2). They then go on to review a series of causal and contributory factors that may have contributed to the incident. Figure 9 demonstrates this process for blockages caused by paper or rag (for illustrative purposes only). Table 16 (Appendix 2) shows the causal and contributory factors for our blockage incidents in 2025 as a percentage.

Alongside our business-as-usual analysis of pollution incidents, we also review trends and insights at a wider level. This allows us to understand both individual incidents and broader patterns, helping us identify what is happening and why.




Figures 7 & 8: Sunburst showing 2025 fault and cause for waste network incidents, and bar chart showing primary fault for waste network incidents from 2021-2025

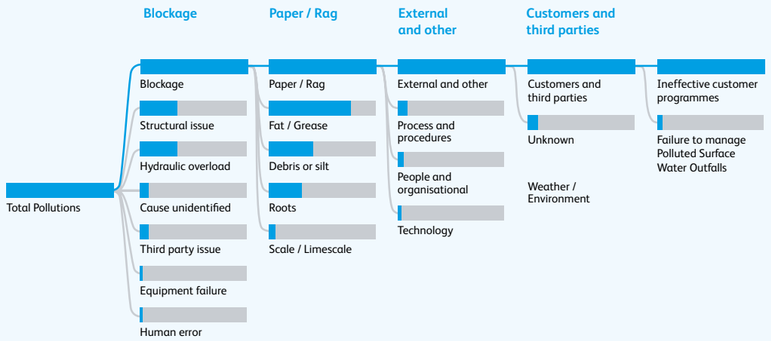



Figure 9: Example of full root cause analysis for a network paper/rag blockage, showing extent of causal & contributory factors considered

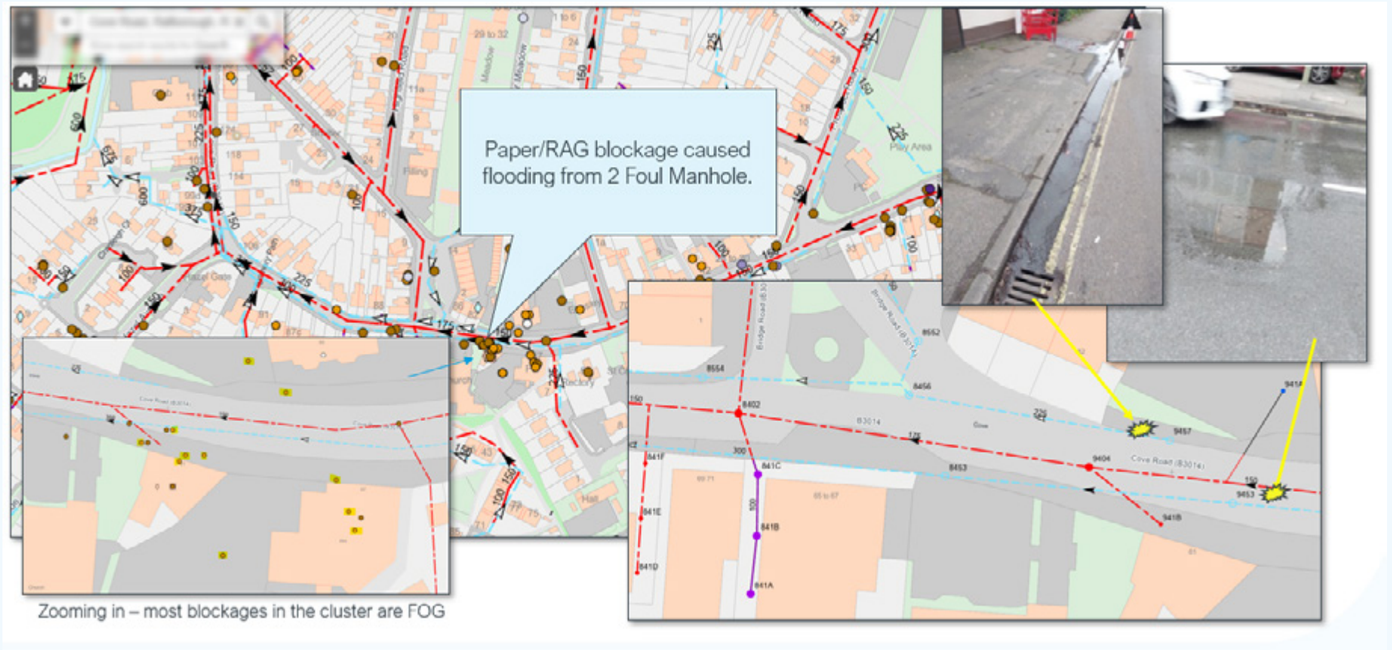
We hold a monthly deep dive forum where specific fault categories are reviewed alongside incident case reviews. This supports shared learning across teams. As blockages are the biggest cause of pollution incidents, we run regular working sessions focused specifically on blockage related events to build a detailed understanding of the drivers.

We carry out targeted deep dive analysis in areas with high blockage rates to understand what is causing incidents and whether they were preventable. Each blockage-related incident is reviewed in detail using on site evidence, including photos from the incident. Where wet wipes are involved, we assess the type of wipes present and look for repeat patterns across incidents. We also consider local factors which contribute to blockage formation such as network condition, asset type, and the presence of nearby businesses or institutions.

We then review how effective existing programmes are in these areas, including planned cleaning, targeted catchment investigations, sewer depth monitoring, and customer education activity. This helps us identify whether further action is required to reduce repeat blockages. A recent example includes analysing the highest blockage postcodes within a region and holding focused working sessions on priority areas to identify targeted actions. Resulting actions could include increasing network protection activities beyond food service establishments to care homes, schools/colleges and prisons.

Industry evidence shows that blockages are commonly caused by inappropriate items entering the sewer network, including wet wipes and fats, oils and grease. These materials can accumulate within sewers, leading to blockages and pollution incidents. Our approach aligns with wider industry practice by combining targeted operational activity with detailed, evidence-led investigation and customer behaviour change initiatives in high-risk areas.

Figure 10: Pollution caused by a sewer blockage from rag materials (wipes and tissue)



# Waste treatment

We have 353 WwTWs, ranging from Europe's largest in East London to assets serving hamlets in the Cotswolds. Every day, they treat 4.7 billion litres of wastewater. In 2025, 30% of our wastewater pollution incidents originated from our WwTWs, with the highest root cause being process capacity and design. We have summarised some key insights:

- Process capacity and design: 31% of WwTW incidents were due to issues with process capacity and or design. Most of these were due to a plant design fault or capacity being compromised due to an asset being out of service. Resolving these incidents often requires a large-scale project to upgrade the site, costing significant time and investment.
- Blockage: Blockages do not just cause pollutions in our network – they also lead to incidents at our WwTWs. 17% of WwTW incidents in 2025 were caused by blockages. Most of these were caused by paper/rag, which includes things like wet wipes and sanitary products. These block pumps or other parts of the process.
- Equipment failure: This has historically been the biggest cause of incidents at our WwTWs. In 2025, it caused 15% of all WwTW incidents, mostly due to poor condition or end-of-life assets. This demonstrates the importance of an effective maintenance plan, a comprehensive long-term asset renewals plan and explains why it forms a key part of our plan.
- Human error: 13% of our incidents were caused by human error. While we need to address this, we are encouraged to see incidents logged under human error, as it demonstrates an open and learning-focused culture. Our training and culture initiatives strongly focus on supporting our colleagues to do their jobs well.
- Hydraulic overload: 2025 saw a reduction in the proportion of incidents caused by hydraulic overload due to drier weather and lower groundwater levels than in 2024. These were mostly due to groundwater infiltration, which happens when groundwater enters our pipes below ground, overwhelming our WwTWs and preventing them from fully treating the incoming flow. These incidents will take time and investment to resolve and will require a multi-angle approach, including relining sewer pipes to prevent groundwater from infiltrating them, creating additional capacity for storm water at our WwTWs and disconnecting surface water drains from our network.
- Power failure: 2025 saw a reduction in incidents caused by power failure, with 2% compared to 14% in 2024. Whilst we experienced fewer named storms during 2025 – a key driver of power interruptions – becoming more resilient to power problems is an important focus for us. We are doing this by installing backup generators, using automatic restart switches and running power cut drills to test the site's ability to recover from a power cut.

Figure 12: Sunburst showing 2025 fault and cause for waste treatment incidents

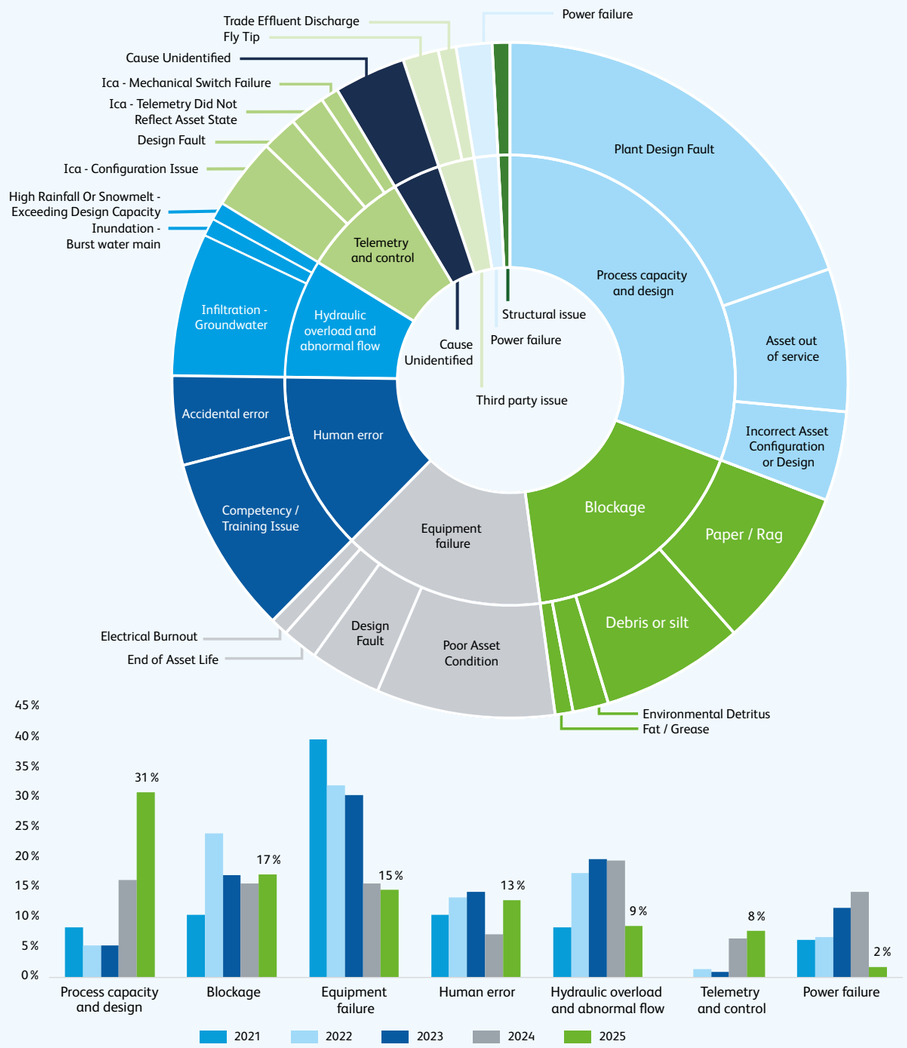



Figure 13: Primary fault for waste treatment incidents from 2021-2025

# Waste pumping

We have 5,169 wastewater pumping stations (WwPSs), which help transport 4.7 billion litres of wastewater to our WwTWs every day. Just 0.4 % of these sites had a pollution incident in 2025. Problems at WwPSs caused 5 % of our wastewater pollution incidents in 2025, with equipment failure causing the most. Due to the extremely low numbers at pumping stations, the root cause trends can show a lot more volatility between years compared to other asset groups. We have summarised some key insights for each of the main causes:

- Equipment failure: Equipment failure led to 44% of WwPS pollution incidents, with half of those incidents caused by motor control failure. This happens when there is a failure or issue with the control system for the motor (e.g. for a pump). This demonstrates the importance of backup control systems, which has been a major focus of the Asset Improvement Programme delivered historically and throughout 2025. It also highlights the important role of effective maintenance plans, which is why our operational team's KPIs focus heavily on maintenance.
- Power failure: Power failure issues or power problems led to 25% of our incidents, with most of these caused by power cuts or voltage fluctuations from the grid. Creating more resilience to power problems is an important focus for us, and we can do this by installing standby generators, using automatic restart switches and carrying out 'black start testing', which tests the site's ability to recover from a power cut. We are also investing in technologies like 'Automated Voltage Control' which will balance voltage fluctuations impacting our sites as a trial and we are in early stages of identifying where 'Battery Energy Storage Systems' can be commissioned as an innovation trial, which will mitigate voltage fluctuations and protect against Power interruptions.
- Third party: In 2025, we had one incident caused by a third-party issue, where a surface water pumping station was operating as designed but the upstream catchment was contaminated by wastewater. This resulted in the discharge of polluting matter from the pumping station to the watercourse. We have a strong focus on addressing wastewater contamination of our surface water systems (mostly focused on misconnections), to avoid this type of incident.
- Blockage: Finally, we had two incidents due to blockages of debris and silt and paper/rag. Pollutions caused by blockages at our pumping stations are rare, with only 3 in the last 5 years, demonstrating our industry-leading operational grip of these assets and the benefit of our pumping station cleaning programme.

Figure 14: Sunburst showing fault and cause for waste pumping incidents in 2025

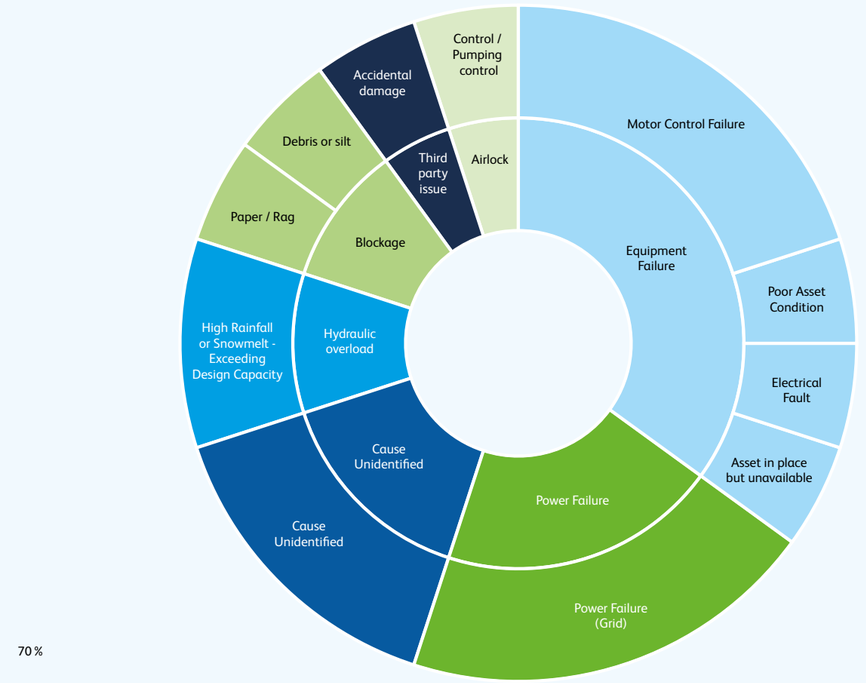
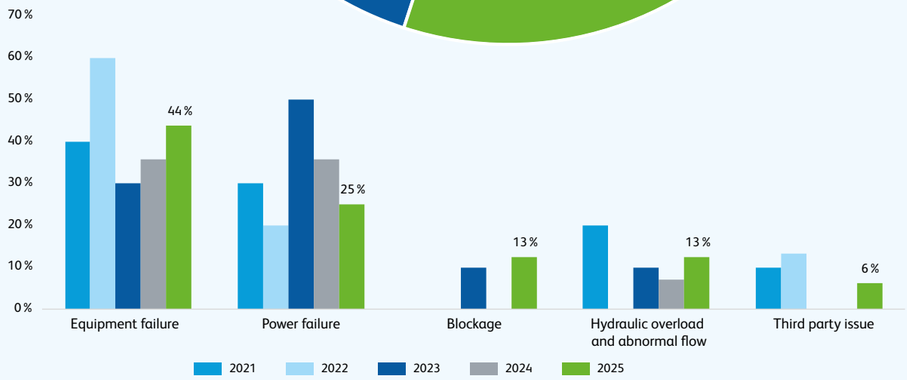



Figure 15: Primary fault for waste pumping incidents from 2021-2025



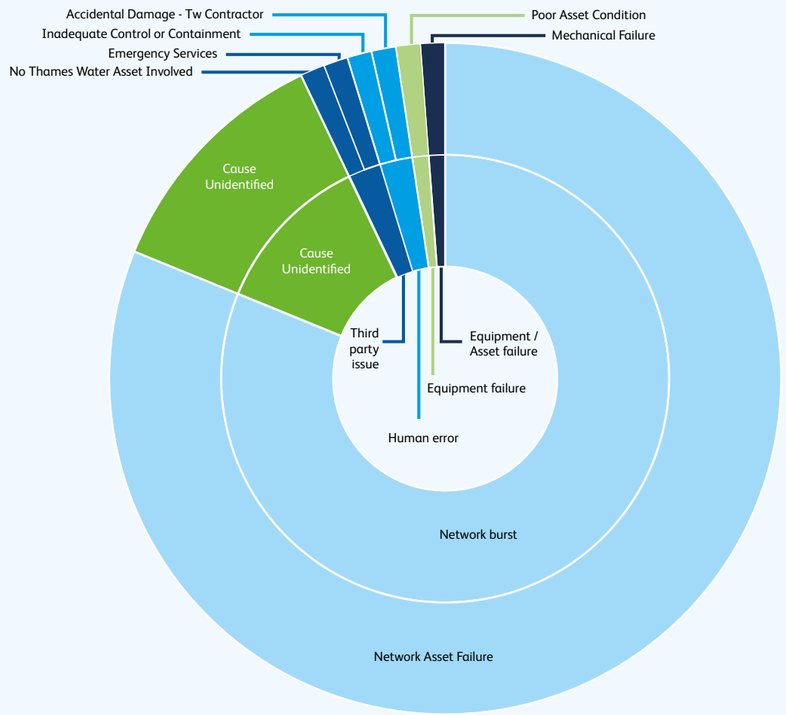
# Clean water

We have 88 water treatment works supported by 32,000km of water network, which, to put it in context, is further than the distance from London to Sydney and back. While pollutions from clean water assets are not included in our total pollutions performance commitment set by Ofwat, they make up 18% of our total pollution incidents, and we continue to focus on reducing their impact. Most of our incidents from clean water assets are caused by bursts from our network. We have summarised some key insights for each of the main causes:

- Network burst: 93% of incidents were because of a network burst. These events typically take the form of a catastrophic structural failure event of the pipe, resulting in large volumes of water being discharged. Occasionally they can also be caused by smaller, lower volume leaks running over longer periods. As a matter of course, we identify and report events that lead to a pollution, pinpointing the failed asset. Under most circumstances, it is impossible to go beyond this to pinpoint the exact root cause of an asset failure, especially that of a pipe. However, a failure can happen because of many highly localised issues that lead to a particular asset failing at a particular location and time. The water network is deep underground, and catastrophic burst events can be highly destructive to the pipe and its surroundings, losing much of the evidence our team needs to do their analysis.
- Human error: Incidents caused by human error, more specifically, inadequate containment or control, led to 3% of our incidents. This describes a situation where the measures to prevent potable water from entering the watercourse, such as sandbags or silt socks (long, mesh fabric tubes filled with material such as wood chips, compost or gravel used to prevent sediment pollution), are insufficient or ineffective. As a consequence of the continued focus on pollution awareness with our clean water teams, we expect these numbers to continue to rise as our frontline colleagues improve their understanding of the impact of clean water on river health. We will continue to harvest learning from these incidents to understand how we can better apply containment and control strategies.

Section 4.3.5 provides more detail on how we are tackling these pollution drivers.

Figure 16: Sunburst showing fault and cause for clean incidents in 2025



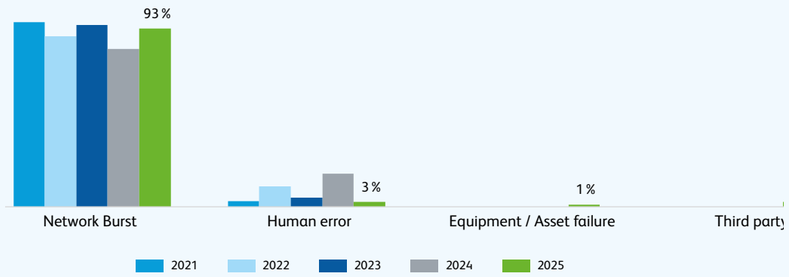




Figure 17: Bar chart showing primary fault for clean incidents from 2021-2025

# Steps taken to maintain the system

In this section, we explain the measures and actions which we have already put in place and progressed this year, based on the initiatives we shared in our 2025 PIRP. We describe how these actions have impacted our performance and whether they were effective in allowing us to apply learning to our priorities for 2026.
We have broken down this section by asset type.

In the 2025 PIRP, we listed initiative targets based on a delivery period of April 2025-March 2026. This 2026 PIRP now has a calendar year focus, in order for us to align with the new PIRP creation guidelines issued by the EA in December 2025. The 2025 initiatives refer now to the targets we set based on a shorter window of April 2025-December 2025 and focus on what we have achieved during this time.

The scale and impact of these initiatives are the incremental figures delivered only during this period and do not take into account any delivery in previous years or planned delivery in future years.

Throughout this section we refer to the ‘impact’ of our interventions. This is defined as the number of pollutions prevented in-year by the measure and uses a scale rather than absolute numbers as follows. Low = <1 pollutions, Medium = ≥1 and <5 pollutions, High = ≥5 pollutions.

# Wastewater Networks

We have made strong progress on our waste network initiatives in 2025 with most achieving the targets set out in our 2025 PIRP (for the new prorated period of April-December 2025). Table 3 provides a view of the performance of our Waste Network initiatives that were featured in our PIRP last year. We have provided more detail on these initiatives including what they are, their impact as well as some information on additional activity undertaken in 2025 to improve pollution performance.

| Asset type | Measure | Action | Description | Scale (Apr-Dec 25) | Cause | Delivery status | Impact |
|---|---|---|---|---|---|---|---|
| Foul sewer | Implementation of proactive cleaning and maintenance | Planned Sewer Maintenance | Routine inspection, jetting, and cleaning of foul water sewers to remove silt, debris, and to clear blockages before they cause an escape of sewage | 1398km completed | Public behaviour | Pre-existing | Med |
| Combined Sewer and associated outfalls | CSO Investigations | Investigate high frequency spilling combined sewer overflows | Investigate high frequency spilling overflows in accordance with the v2 Storm Overflow Assessment Framework (SOAF)v2(2025). | TW consulted on SOAF v2 | To be confirmed on a site-by-site basis | In progress | Low |
| Rising main | Remedial capital asset improvements | Rising main replacement | Proactively repairing or replacing the rising mains that cause the most problems in our network | 12km | Structural issue | In progress | Med |
| Foul Sewer | Customer engagement | Customer education marketing campaign “Bin it, don’t block it” | Improving our customers’ awareness, understanding, and behaviour in relation to sewer abuse through the use of targeted marketing campaigns | Annual marketing campaign completed | Third party issue | In progress | Low |
| Foul sewer | Customer engagement | Household customer education | Contacting customers who reside close to where at least one blockage has occurred to distribute educational content that informs them of the negative consequences of inappropriately disposing of unflushables or fats, oils and greases down the drain | More than 300,000 pieces of educational content distributed | Third party issue | In progress | Low |
| Foul sewer | Implementation of proactive cleaning and maintenance | Targeted catchment investigations (TCIs) | The TCI process aims to predict and prevent pollutions by investigating areas with recent blockages, using thorough desktop and field investigations to identify and fix underlying issues | 739 TCIs investigated | Blockage | In progress | Med |
| Foul sewer | Customer engagement | Non household customer education | Visiting commercial establishments to provide education on how to manage fat, oil and grease waste responsibly to avoid blockages, checking compliance and working with them to improve disposal processes | 2,014 newly compliant food service establishments<br><br>14,749 total visits carried out | Third party issue | Pre-existing | Low |
| Surface water sewer and associated outfalls | Surface water outfall improvements | Resolve misconnections at surface water outfalls | Investigating and resolving misconnections through our Surface Water Outfall Programme | 14 outfall investigations signed off | Third party issue | Pre-existing | Low |
| Wastewater networks. | Network mapping | Network mapping | Using aerial imagery, machine learning, and GIS modelling to fully map the unmapped portions of our sewer network | Procurement framework:100% complete<br>Aerial imagery: 5% complete<br>Sewer inference model development: 50% | Blockage | In progress | Low |
| Foul Sewer | Telemetry installation and use of predictive analytics | Sewer depth monitors response | Using smart tools and new processes to respond to sewer depth monitor alarms with appropriate prioritisation, enabling a swift and efficient response | 104 escapes of sewage prevented | Blockage | In progress | Med |

Table 3: Summary of 2025 wastewater network initiatives

## Planned Sewer Maintenance

Planned sewer maintenance is a proactive intervention programme where our sewer network is routinely inspected and cleaned (when required) to prevent blockages and escapes of sewage. Specialist equipment such as CCTV cameras and high-pressure water jets are used to remove paper/rag, fat, oil, and grease (FOG), and other buildup, as well as mechanical cutting tools to address tree-root ingress. By identifying and removing material before it has the chance to develop into a full blockage, we can significantly reduce the risk of sewage backing up and overflowing from manholes. This helps ensure our sewers continue to operate as intended, with flows moving freely through the system.

To prioritise which sections of sewer to inspect and clean, we use a combination of insight from work management systems, historical incidents, local topography, geography (such as closeness to a watercourse), and localised asset characteristics – this allows us to identify network locations with the highest risk of a blockage that could lead to a pollution incident. Areas with higher repeat rates of incidents, clusters of restaurants, and locations where a pollution incident would have a greater impact on nearby watercourses are often prioritised. By comparing these hotspot areas with maps of our network, a risk profile can be generated for the area based upon our understanding of the likely cause of the elevated risk (such as FOG build up, or sewer defects), from which the right intervention programme can be chosen. For example, an area where FOG-related blockages are high might need sewer cleaning, customer, and business education interventions, while another area of repeated blockages caused by deteriorating sewer pipes would need including in the sewer rehabilitation programme.

Throughout 2025 we have continued to improve our approach to identifying the parts of the network that pose the greatest risk, resulting in more than 1,500km of sewer being proactively maintained.

## High frequency spilling combined sewer overflows

The Storm Overflow Assessment Framework (SOAF) was first developed by the Environment Agency in 2018 to provide a framework for assessing high spilling (storm) overflows, setting out how water companies should investigate and determine where improvements are needed to address spill frequency. The SOAF framework provides a structured approach to determine the root cause for high spilling frequency overflows, the potential environmental impact, and where appropriate, identification of improvement options within defined cost-benefit analysis criteria. The latest revision (March 2025) of the framework provides updated guidance on the triggers for when a SOAF investigation should be undertaken and became effective from the start of 2025. Basis for spill frequency assessment is from our Event Duration Monitor (EDM) annual returns, submitted in February each year, reporting the preceding calendar years performance (January – December). Thames Water will therefore apply the latest revision of SOAF to last year's data and investigate any overflows that are newly triggered for inclusion in our February EDM return, which is publicly published by Defra.

## Rising main replacement

A rising main is a pipe within our waste network that carries wastewater under pressure, typically from a lower point to a higher one, such as from a pumping station to a treatment facility. They make up 3% of our wastewater network by length but are responsible for 10% of bursts/collapses and, unlike gravity-fed pipes, rising mains rely on pumps to push the flow upwards or over longer distances so there is a risk that sewage may be actively pumped out through any defect should a burst occur. As a result, it is important that we keep our rising mains in good health, since responding to bursts not only risks causing a pollution but can also be extremely expensive and disruptive to wider operations. From April to December 2025 we proactively replaced 12km of rising mains against our target of 10.5km, prioritising those sections that have shown a higher tendency for repeat bursts and are therefore demonstrating a poorer asset health.

## Customer education marketing campaign "Bin it, don't block it"

Blockages caused by wet wipes are one of the leading causes of pollution from our assets. The removal of Wet Wipe Island in August 2025 in partnership with the Port of London Authority (PLA) and Thames21, partly funded by Thames Water, removed around 5 million wipes from the banks of the River Thames in London. Alongside the works, we launched an integrated communications campaign which included over 100 individual pieces of news coverage, social media posts, 700 letters delivered to local residents and engagement with local MPs and AMs, and Defra. In November, Parliament also passed the ban on wet wipes containing plastics, which will come into force in Spring 2027.

Figure 18: Example of hedgehog equipment

We delivered an integrated awareness campaign about the impact of fat, oil and grease on our network during the festive period, a time when we typically see an increase in the number of blockages caused by sewer misuse. The campaign reached 3 million people through a broadcast media campaign (and associated coverage), achieved 19.8 million impressions on paid social media through a targeted blockage reduction campaign, and secured over 60 pieces of coverage about the Whitechapel fatberg. Effective collaboration across the wastewater industry will be key to achieving lasting change, and so we are contributing to continued research into the impact and potential mitigations of FOG, working with bodies such as UK Water Industry Research to provide industry expertise and data to support studies.

## Household customer education

Sewer misuse is the root cause of a significant number of pollution incidents, and this has remained the case through 2025. Reducing the impact of sewer misuse through customer education remains a priority, and as such, the 306,538 pieces of educational material we have sent to households via our diffuse process this year is a new high. These materials are sent automatically to every household within 30 metres of a blockage caused by either paper and rag, or by fat, oil and grease. We firmly believe that customer education programmes should involve 2-way communication, which is why at every step in the process, there is an opportunity for customers to interact with us. We are extremely grateful to the 3,627 households this year who have pledged not to put FOG, wet wipes or other unflushables down the drain, and to the 2,950 households who have taken advantage of our free fat traps.

In addition to educational materials, we have also successfully trialled our new hedgehog equipment in Beenham village, which specifically targets wet wipes and other unflushable material. This hedgehog equipment allows us to measure how many wet wipes pass through a specific sewer in a 24-hour period. We can then trace this up the sewer network to find which homes these materials are coming from and target our educational efforts with the right customers. After our intervention, we measured a 51% reduction in wet wipes passing through the sewer system. We will continue to monitor the operational performance of the area to understand how this reduction in wet wipes impacts blockage, flooding and pollution reduction.

## Targeted catchment investigations (TCIs)

We started our TCI activities in 2025 where we set up an initial trial aimed at predicting and preventing pollutions by investigating areas with recent blockages that could be at risk of pollution. Our process involves carrying out an initial desktop investigation to identify previous incidents of escape of sewage, assess their impact, and look at areas that we consider being at risk of pollution. This then leads to targeted field investigations within the catchment, examining all sewers that have been identified as at risk to identify and fix any service or underlying structural issues. We started this year by undertaking trials in our Thames Valley region with a small number of crews, and, following initial success, we have now expanded activities and have rolled out the process across all Thames Water regions. Though it is still early in our adoption of the TCI process, we have seen a reduction in the number of blockages, flooding, and pollution incidents as a result of this work and will continue to develop and refine the process throughout the next year.

## Non household customer education

Since April this year (2025), our Network Protection Team (NPT) has carried out over 14,000 individual visits, contacting over 4,000 Food Service Establishments (FSEs) that required some form of grease management, more than in any previous year, resulting in 2,014 FSEs being newly compliant through the installation and effective operation of grease management systems. Each grease management system can help prevent up to 80% of an establishment's waste Fat, Oil, and Grease (FOG) from reaching our sewers if they are adequately maintained, helping to reduce the amount that might build up and form blockages within our pipes. Identifying areas where FOG blockages are directly linked to pollutions is a key focus of the NPT – in 2025 the team assisted with investigations and compliance checks in relation to 12 pollutions where FOG was the leading cause, helping to reduce recurrence of the issue and avoiding any repeat of pollution.

As well as visiting FSEs, we recognise that preventing sewer abuse starts with customer behaviour, and good habits can be developed from a young age. We have therefore continued our Junior Citizens Programme for school visits, running 880 individual sessions delivered to over 10,000 children and staff that focus on how to look after our sewers and prevent pollutions from FOG and wet wipes.

## Resolve misconnections at surface water outfalls

The objective of our Surface Water Outfall Programme (SWOP) is to reduce the number of outfalls that are polluted from misconnected waste pipes and other urban diffuse pollution sources such as road runoff and chemical nutrients from gardens. These investigations often require a deep-dive trace into individual catchments to figure out where the pollution is coming from, which resulted in 5901 properties having a site-specific drainage survey carried out. These surveys identified 580 properties with pollution sources, including 1798 individual misconnections. This work resulted in 14 outfall investigations being completed and signed as significantly improved to the Environment Agency's satisfaction in 2025. Thames Water also continued its Outfall Safari programme in partnership with the Zoological Society of London, funding investigative excursions on 4 different watercourses in 2025. This resulted in volunteer groups and other stakeholders assessing 536 outfalls, of which 57 were identified as potentially high-priority sites needing further assessment to evaluate their value for inclusion into SWOP. Misconnections remain a significant aspect of urban diffuse pollution and SWOP is a key tool in addressing these issues.

## Network Mapping

A new focus for our PIRP last year was to start an initiative to intelligently map our sewer network. At Thames Water, up to 56% of our sewer network is estimated to be unmapped, contributing to 30-45% of blockages, flooding and pollution incidents. This situation largely arose in October 2011 when the Transfer of Private Sewers Regulations came into effect, resulting in an estimated 200,000 km of mostly unmapped private sewers were transferred to the water industry, with approximately 40,000 km coming to us. Traditional methods like CCTV inspections and manual mapping are slow and would take around 70 years to complete for foul sewers and as much as 630 years for surface water networks, whilst the unmapped sewers create challenges for proactive programmes and increase costs due to manual data capture.

To tackle this, we have started using ultra-resolution aerial imagery alongside deep learning models and manual quality control to detect millions of unmapped sewer assets (manholes, highway drains, surface water outfalls, soil

stacks, rainwater downpipes and misconnections). We then use GIS modelling and AI to infer the locations of unmapped sewers to map the sewer network quickly, accurately and cost-effectively. Our initial pilot demonstrated that the process is faster and up to ten times less expensive to complete than traditional methods, so in 2025 we progressed to map three of the highest priority regions in a Phase 1 rollout (areas in North London, Harlow, and Oxford). Phase 1 identified 2.5x the number of previously mapped manholes (185k previously unmapped) as well as over 7,000 potential misconnections, highlighting the extent of the challenges posed by these regions of unmapped network. Based on the success of Phase 1, we have committed to further mapping the unmapped network over the next three years and invited suppliers to tender at the end of 2025.

## Sewer depth monitors response

Across the wider Thames Water network, we have over 23,000 Sewer Depth Monitors (SDMs) installed in various strategically selected manholes – these monitors are set to trigger alarms back to our control room, should the level of sewage reach above a certain level which may be indicative of a blockage that could result in escape of sewage. Due to the very large number of devices, we need to ensure that we are correctly prioritising which alarms we respond to, not only based on their likely pollution risk but also to make sure that we filter out any false alarms that could be generated as monitors require maintenance. As part of our Smart Waste initiatives in 2025, we made several updates to our Sewer Level Alert Manager (SLAM) tool that manages and analyses the data coming from these SDMs and that prioritises the alarms accordingly. By using smart tools and new processes to respond to these alarms with appropriate prioritisation, we are helping to enable a swift and efficient response to clear blockages before an incident might occur. Significant work has also gone into developing our site selection models and methodology, ensuring that we are placing our SDMs in the most strategic locations so that we can maximise the number of identified blockages per installed SDM. As a result of all these efforts, we have been able to improve the speed of response to the point where we have been able to attend 95% of these alarms within 4 hours, and our measure of blockages cleared per installed monitor has increased by nearly 14% from April to December.

Alongside our formal PIRP initiatives, we have also made good progress with several innovation pilots and business as usual activities:

## Ice pigging

As part of our initiatives to improve the health of rising mains across the network, an innovation pilot was started to explore the potential of using ice pigging to clean inside rising main pipes. The technique uses crushed ice to scour the inside of the pipe as it is pumped through, carrying away any unwanted deposits and blockages before being removed. By trialling the technique on a range of sizes and complexities of rising main, we are beginning to understand the potential of this technique as a future cleaning method. We anticipate that ice pigging rising mains on a regular basis will help keep them clear of any material that could lead to blockages, valve issues, or pumping failures, as well as extending their service life through improved asset health. In 2025 we cleaned 4 rising mains using this method, demonstrating the potential of ice pigging to clean pipes of various sizes and profiles. Each clean helps improve the flow through the pipes – we have seen flow rates increase by up to 77% and velocities by up to 29%, enabling a more effective operation of the rising main and putting less stress on the pumps, reducing failure rates and decreasing energy usage by up to 38%.

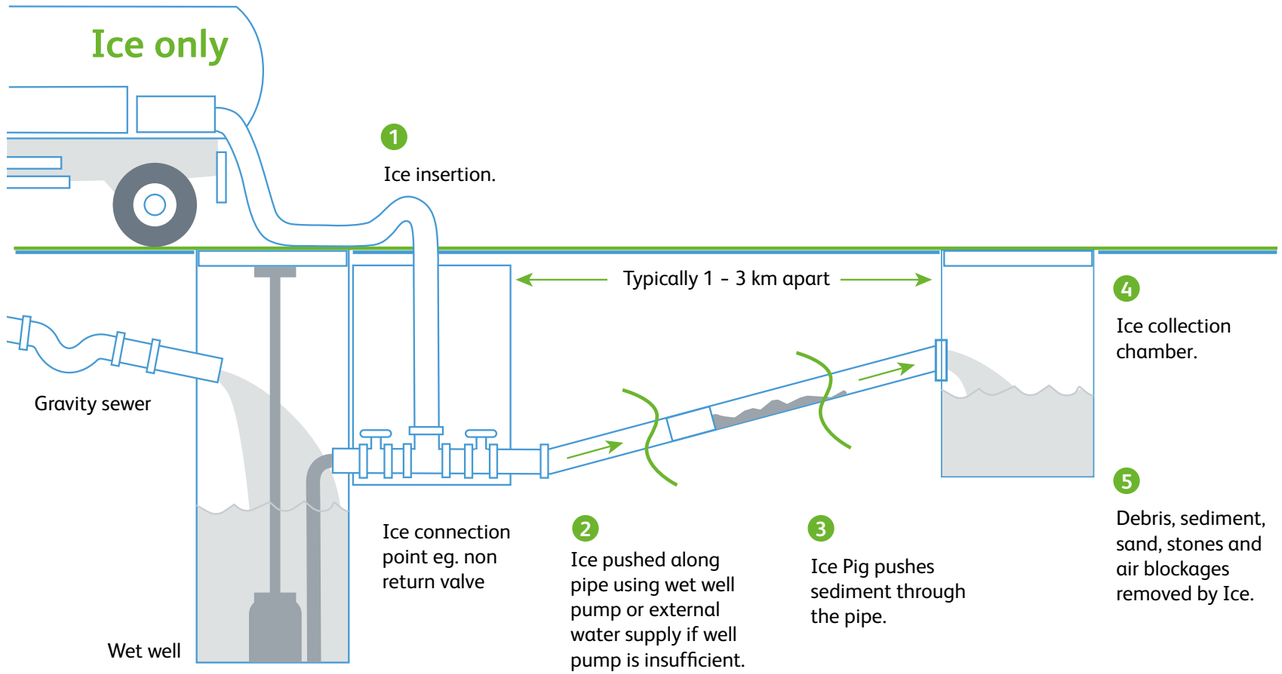



Figure 19: Schematic of the ice pigging process

## Syphon cleaning

Thames Water has several syphons across our network - sections of gravity sewer that dip under obstacles such as watercourses and railways. The nature of these low points can increase the likelihood of silt, debris, and other materials accumulating and therefore restricting the flow through the syphons, and they are particularly complex to clean. As such, we have begun an innovation pilot to explore supplier capabilities and techniques for safely and effectively cleaning and inspecting these assets, reducing the risk of failure and subsequent pollution. In 2025 we cleaned our first 2 syphons identifying significant amounts of foreign material that restricted flow and increased the risk of blockage – once cleaned, both syphons were repaired to remedy the deterioration caused by this build-up of debris.

## Smart waste rising main monitoring

Rising Main Monitoring is part of a suite of Smart Waste activities that is enabling an intelligent digital representation of the waste network. In turn, this will allow for better understanding and optimisation of the operational performance of our wastewater assets. By monitoring rising mains, we are primarily aiming to reduce the impact of bursts by enabling faster detection and response. We are carrying out a new trial as part of our Smart Waste programme to assess the potential for using pressure monitors to understand failure modes and improve operating performance of our rising mains. Many of our rising mains run through locations where a burst may not be immediately noticed by a passer-by, so by identifying bursts as soon as they occur, will enable a faster speed of response and enable us to prevent or reduce the impact of pollutions. Additionally, by developing a better understanding of the typical healthy pressure profiles of each rising main, we will be able to use the data captured by monitors to assess performance such as pressure transients that place stress on the system and can reduce the life of the asset, increasing the likelihood of failure.

During 2025 we have achieved our target of completing the first phase of a trial into the installation of pressure monitors on rising mains - in total, we installed 7 monitors across 3 rising mains. This initial phase was completed to provide further information on the practicalities of installation of these monitors, allowing for better understanding of the cost and complexity of installation, so that a larger programme of installations can be developed.

## Environmental Guardians

We have continued to expand our Environmental Guardians initiative, a volunteer scheme for Thames Water colleagues, launched in early 2024. Employees volunteer their time to monitor outfalls, collect baseline data and identify potential pollution events, which are then reported to our operational teams. Drawing from our Outfall Safari Programme with the Zoological Society of London, volunteers receive training, briefing materials and access to a digital platform. This platform includes an interactive map for adopting outfalls, a mobile app for field data collection and a community space for sharing ideas. As of January 2026, we have nearly 250 volunteers adopting over 685 outfalls, who have proactively completed over 1,900 individual outfall assessments and identified 14 potential pollutions.

Figure 20: Example of an outfall which our environmental guardians monitor

# Wastewater Treatment Works

Table 4 provides a view of the performance for initiatives that were featured in our PIRP last year for initiatives relating to our Wastewater Treatment Works (for the new prorated period of April-December 2025).

Table 4: Summary of 2025 wastewater treatment initiatives

| Measure | Action | Description | Scale (Apr-Dec 25) | Cause | Delivery status | Impact |
|---|---|---|---|---|---|---|
| Remedial capital asset improvements | Invest at our WwTWs | We are undertaking significant investment at a number of our WwTWs covering scope from various programmes. | 8 schemes delivered | Process capacity and design | In progress | Med |
| Power resilience improvements | Improving resilience to power problems | We are reducing the impact of power problems at our WwTWs by installing auto-reset devices and back-up generators. | 17 auto reset devices<br>3 generators | Power failure | In progress | Low |
| Outstation replacement (WwTW) | Outstation Obsolescence Replacement | This is a programme to replace legacy Outstations and communications links, which will improve the operation of our WwTWs and make Outstations more resilient and reliable. An Outstation is a remote device or unit that collects and sends/receives data to a central system for monitoring and or control. | 135 WwTW Outstation Replacements | Telemetry and control | In progress | Low |

Our waste treatment initiatives have made positive progress in 2025 with our Outstation Obsolescence Programme on track to achieve its target on time and significant progress made in the planning of our large capital investment programmes. We have provided more detail on these initiatives including what they are, their impact, as well as some information on additional activity undertaken in 2025 to improve pollution performance.

## Investment at our WwTWs

With known deliverability constraints, for example because of the need for us to manage outages and because of supply chain capacity, we have worked to optimise our business plan to allow us to deliver the maximum possible wastewater outputs within AMP8 in line with compliance drivers. We have developed a site-by-site plan to maximise efficiency of delivery, rather than separate delivery mechanism for chemicals, storm overflows and phosphorous improvements. Our business plan aims to achieve compliance with environmental requirements as soon as practicable. It only constrains delivery capacity based on external factors (including availability of supply chain, plant and materials, skills) and the practical constraints of delivering large, complex programmes of work on sites while maintaining service.

The result is an ambitious Plan, one which will take considerable effort and challenge to achieve. Our Plan was not constrained based on funding, financeability or internal capability/capacity challenges. While we acknowledge that the EA expect all statutory drivers to be complied with, we have aligned on a Plan that maximises what can be delivered by undertaking work on a site by site basis, while prioritising sites in line with regulatory dates, taking on board regulatory feedback (that expects prioritisation of flow compliance and spills, and prioritisation of sites where CCS1 and 2 breaches have been recorded). We believe this prioritisation approach is the best for our customers and the environment.

The design and scale of some capital interventions (e.g. the storm overflow improvement programme) are not fully known at this stage and are awaiting outcomes of investigations and assessments. Unforeseen circumstances and opportunities will also present themselves. To ensure we remain focused on maximising delivery and minimising compliance risks we are setting up a robust tracking and change control process with executive and, where appropriate, Board level oversight.

Other investment programmes include.

- Waste asset assurance programme (WAAP): increasing treatment capacity and making improvements to achieve discharge permit requirements.
- Pollutions Resilience: investing to reduce the risk of pollution future incidents.
- Growth: investing to provide treatment capacity for predicted growth up to 2036.
- The Water Industry National Environment Programme (WINEP) includes actions to protect water quality, improve wastewater treatment and address issues like stormwater overflows.

Some of the above programmes align where possible with the Plan, others are delivered independently, depending on site scope.

## Improving Resilience to Power Problems

Ensuring that our WwTWs are more resilient to an increasing number of power interruptions is central to our plans for reducing pollution incidents. Whilst the root cause of power failure did not materially appear within our 2025 pollution incidents, we only have to look back to 2024 to see the effect that significant storm events have on our performance. Through detailed analysis and characterisation of our historic power interruptions we have learned that 82% are less than 30 minutes in duration, and that these account for 87% of all power failure pollutions incidents. As a result, in 2025 we extended our programme of installing automatic restart switches at a number of sites. These provide automation capable of restarting a site once the power has returned, without the need for human attendance. Looking ahead, we plan to extend this programme further into 2026 (see Section 5).

## Outstation Obsolescence Replacement

With the decommissioning of Public Switch Telephone Network (PSTN) communications lines, our plan to upgrade links to 4G, and replace older RTU outstations (Remote Terminal Units), has progressed well and is ahead of plan. With a total of 209 of 225 units replaced by the programme overall, we have a small number remaining to complete in early 2026 as planned. This will ensure our remote communications remain resilient going forwards.

Alongside our formal PIRP initiatives, we have also made good progress with several innovation pilots and business as usual activities relating to human error:

## Human Error

One area of focus within Treatment is our incidents involving the causal factor of Human Error. We have seen an increase in the volume and proportion of these types of incidents since 2022, which correlates with our onboarding of additional operational resources. In 2025 we increased the overall number of frontline technical roles, however turnover resulted in a higher proportion of posts being held by less experienced colleagues. During 2025 posts held by new starters increased from 6% to 16%. Our plans for 2026 and beyond acknowledge the need to improve how new colleagues are trained quickly, gain experience and remain fully competent throughout their career (see section 5).

Through 2025 we remained committed to ensuring our operational roles maintained high levels of awareness of the importance of our regulatory and legal obligations relating to both permit compliance and pollution avoidance. This was achieved through the continued delivery of our dedicated pollution training module, with 98% of colleagues being current with this requirement at year-end, along with the ongoing delivery of our Management of Wastewater Treatment training and rolling out a newly developed regulatory compliance awareness module to over 2300 colleagues across Thames Water.

Improving procedures has delivered benefit in reducing the risk of human error incidents. During 2025 we continued to update and train our people on the importance of risk-assessing any work involving removing treatment equipment from service, whether that be a planned or unplanned activity. Internally we refer to this process as a compliance process assessment check, or CPAC for short. We have made the system easier to use based on feedback from the teams using it, and we monitor and report on system usage to senior managers. We have matured the use of the system, focusing on quality as well as quantity, introducing a peer review approach, and feeding back to colleagues where there could be room for improvement.

# Wastewater Pumping Stations

Our waste pumping initiatives have made strong progress in 2025 with most achieving the targets set out in our 2025 PIRP (for the new prorated period of April-December 2025). Table 5 provides a view of the performance of our Waste Pumping initiatives that were featured in our PIRP last year. We have provided more detail on these initiatives including what they are, their impact as well as some information on additional activity undertaken in 2025 to improve pollution performance.

Table 5: Summary of 2025 wastewater pumping initiatives

| Measure | Action | Description | Scale (Apr-Dec 25) | Cause | Delivery status | Impact |
|---|---|---|---|---|---|---|
| Remedial capital asset improvements | Asset Improvement Programme | We are improving our remote monitoring for a specific set of WwPSs, which have older technology. This will further support our proactive approach to use operational data as a key evolving contributor to risk reduction. | 11 % installed assets commissioned | Telemetry and control | In progress | Low |
| Power resilience improvements | Improving resilience to power problems | We are increasing the resilience at wastewater pumping stations that are impacted by power problems by installing standby generators | 3 generators installed | Power failure | In progress | Low |
| Outstation replacement (WwPS) | Outstation Obsolescence Replacement | This is a programme to replace legacy outstations and communications links at pumping stations and enhanced pumping station controllers (EPSC), which will improve their operation, increase pump efficiency and make them more resilient and reliable. An Outstation is a remote device or unit that collects and sends/receives data to a central system for monitoring and or control. An EPSC unit is a device used for advanced monitoring and to manage and remotely intervene in respect of the performance, optimisation and reliability of the pumping station and its associated assets. | 76 Enhanced Controllers & 135 Outstations upgraded | Telemetry and control | In progress | Low |

## Asset improvement programme

The aim of this programme is to improve our remote monitoring for a specific set of 276 WwPSs (~5 % of all WwPS sites). These sites had older technology which, although not yet obsolete, had less functionality and higher risk of failure than newer equipment. This has further supported our proactive approach of using operational data as a key evolving contributor to risk reduction. This has enabled:

- Increased coverage of stressed sites tracking and intervention from the activation of backup control which is a lead indicator of heightened pollution risk.
- Increasing the coverage of time series analytics and insight from Wet Well level data will improve response and recovery times as this is a lead indicator to backup activation and high wet well alarms. Early intervention is essential

Progress with commissioning has encountered issues with resource availability both within the field teams and operational technology. A resource plan has been developed, and commissioning is now progressing well, although completion is likely to stretch later into 2026 than originally planned.

## Improving resilience to power problems

Power resilience has historically been one of the biggest causes of pollutions at WwPSs. In areas where there is a known risk of network power outages, we are installing standby generators to provide power if the network supply fails.

In 2025 we installed and commissioned 3 new generators at sites which have previously experienced power outages. This initiative will continue to be included, with installations planned at additional sites with power resilience issues.

## Outstation obsolescence replacement

Outstations, which transmit data from on-site monitoring equipment to the central control centre, at a number of our WwPSs were due to become redundant, risking total loss of remote visibility and an inability to respond to critical alarms. 135 outstations have been upgraded with modern kit in 2025.

Enhanced pumping station controllers (EPSCs) allow more precise and dynamic control of pumping station equipment, improving their operation, efficiency and reliability. We have installed 76 EPSCs in 2025.

This initiative will not be included in future years as all sites in the programme are on track to be completed by the time the 2026 PIRP will be published.

## Performance monitoring & maintenance

We have over 5,000 pumping stations and many of those have multiple pumps. In 2025, just 0.4% of those stations caused a pollution, so it is difficult to know where issues are likely to occur. In addition to the above initiatives, we continue to develop new and intuitive ways to smartly monitor the performance of our pumping assets, predict where issues are likely to occur and proactively respond before incidents are caused. In particular, we use two measures of asset availability and stressed site reporting. The first considers how much functional redundancy and contingency there is in the system, and has consistently tracked above 98.5% availability throughout 2025. The second compares multiple different data points (e.g. pump run times, wet well levels, power consumption) to determine which sites are under stress and prone to failure. This allows us to proactively intervene before getting to the point of failure and taking action at the site to prevent pollutions from occurring.

Furthermore, we have a strong emphasis on power resilience. In addition to the installation of new generators, we have a robust programme of black-start testing. This mimics a total power outage to assess how the site and generator respond, with follow-up actions and maintenance carried out as required. The testing has been completed to schedule throughout 2025.

# Across Asset Base

Table 6 provides a view of the performance for initiatives that were featured in our PIRP last year for initiatives relating all asset types (for the prorated period of April-December 2025).

Table 6: Summary of 2025 across asset base initiatives

| Measure | Action | Description | Scale (Apr-Dec 25) | Cause | Delivery status | Impact |
|---|---|---|---|---|---|---|
| Use of data tools | Consequence Modelling | We are improving risk-based decision-making with consequence modelling for failure. | Completed for all sewage pumping stations, 90% rising mains, and sludge mains | Enabler | In progress | Low |
| Use of data tools | Smart Waste Innovation | The vision for Smart Waste is to create an intelligent ecosystem of smart IT products that enhances our understanding of wastewater asset performance in AMP 8. | We have created a system to get water quality readings into our database 'live'. We are building the river catchment mapping system. | Enabler | In progress | Med |
| Staff training (business-wide) and Cultural/ behavioural change | Internal training and culture improvement activity | We continue to be colleague-focused and delivering essential pollution awareness training for colleagues across the organisation | 92% completion with rolling training dates for new starters | Human error | In progress | Med |
| Infiltration reduction plan delivery | WINEP Storm Overflow Discharge Reduction Programme | Our storm overflow programme focuses on investigating and improving stormwater systems to meet the goals set in Defra's Storm Overflow Reduction Plan. | All 107 sites have moved into solution design phase | Hydraulic overload | In design | Low |

Our initiatives covering all asset types have achieved the targets set out in our 2025 PIRP (for the new pro-rated period of April-December 2025). We have provided more detail on these initiatives including what they are, and their impact to improve pollution performance.

## Consequence modelling

This project used advanced data tools, including hydraulic modelling and automated spatial analysis, to predict where wastewater would flow if it escaped from our systems and what environmental receptors, such as rivers, designated sites and properties, it might affect. By applying this method to millions of assets, such as pumping stations, rising mains and gravity sewers, we can quantify the consequence of failure to better understand risk and make smarter decisions for both day-to-day operations and long-term investments. We completed our target of focusing on pumping stations and most rising mains and we are now evaluating how we use that data in our day-to-day operations.

## Smart Waste innovation

Our smart waste programme is evolving, from the installation of equipment in AMP7, such as sewer depth monitors and additional flow meters on sites, to creating an intelligent system of smart IT products. The purpose is to enhance our understanding of wastewater asset performance in AMP 8. This allows us to implement the most effective interventions at the right time and place, transitioning from a reactive to a proactive approach. We have been focusing on the quality and quantity of our data, increasing our insights into our systems and thereby improving interventions to prevent or reduce pollution impact. An example of this is how we have refined our response times to pollution associated to sewer depth monitors, to get there quicker.

## Internal training and culture improvement activity

Our root cause analysis has shown that prompt and appropriate action by our colleagues can help to prevent or mitigate pollution incidents. This is why we continue to focus on delivering essential pollution awareness training for all colleagues across the organisation.  We have seen an increase in clean water colleagues reporting potential pollutions due to an increase in their awareness. In wastewater treatment we continue to roll out mandatory “management of wastewater treatment”, an intensive, externally run course with colleagues spending 2 weeks in a classroom and then having to put their learning into action through coursework to pass the qualification.  For our more technical process specialists we offer a Masters upskilling option, not only benefitting them but the water industry with their research.

When a pollution has occurred, we fully investigate it and share incident learning to prevent repeat incidents across all of our operational teams. We use the root cause data they provide to then review our pollution reduction initiatives and make sure we are addressing them at source.

## WINEP Storm Overflow Discharge Reduction Programme

Defra expectations are for 75 % of high priority SOs to meet spill targets by 2035. Our plan delivers over one quarter of high priority sites by 2030, with the balance undertaken in AMP9. The improvements include increasing treatment capacity at wastewater treatment works, adding storage for heavy rainfall, reducing excess ground /surface water entering the system, and treating stormwater separately from the main treatment process. Additionally, the programme will improve a storm overflow located upstream of three designated bathing areas affected by our operations.

The focus for our Storm Overflow Discharge Reduction Programme in 2025 has been on progressing the strategy that will ultimately see the delivery of combined solutions at 107 identified locations. All locations have now passed through the first stage of the investment approvals process, with activities focusing on solutions, value, quality and assurance. Some early opportunity work around infiltration management has already been instructed and is actively on site in key locations such as Benson. Our investigations work packages are also underway and are providing active data to support the engineering solutions being developed for each location. The process so far has helped us to identify where we need to target to deliver successfully and has identified further potential opportunities through packaging and phasing of works, for example, in the Beckton catchment area, where we are using our technology to balance flows through the network using sensors and gated penstocks, holding additional storm water in the existing system, without the need to undertake any other interventions.

# Clean Water

Our clean water initiatives have made strong progress in 2025 with most either achieving or exceeding the targets set out in our 2025 PIRP (for the new prorated period of April-December 2025). Table 7 provides a view of the performance of our Clean Water initiatives that were featured in our PIRP last year. We have provided more detail on these initiatives including what they are, their impact as well as some information on additional activity undertaken in 2025 to improve pollution performance.

Table 7: Summary of 2025 clean water initiatives

| Asset type | Measure | Action | Description | Scale (Apr-Dec 25) | Root cause | Delivery status | Impact |
|---|---|---|---|---|---|---|---|
| Water Distribution Network | Trunk main improvements | Trunk main leakage (TML) programme | We are proactively identifying and resolving leaks on trunk main water pipes to maintain the system and prevent major bursts where drinking water can enter watercourses. | 86 leaks | Network burst | In progress | Low |
| Water Distribution Network | Valve maintenance and improvements | Distribution mains valve repairs | We are fixing or replacing distribution valves to make sure we can quickly shut off the water when a pipe bursts, reducing the volume of water that could flow into a watercourse. Distribution valves are devices in water systems that control the flow of water through pipes. They help manage the distribution of water to different areas by opening, closing or adjusting the flow. When there is a problem like a burst pipe, distribution valves allow the system to be isolated quickly so the affected area can be fixed without impacting the rest of the water supply. | 1258 valve repairs | Network burst | Pre-existing | Low |
| Water Distribution Network | Pressure calming | Calm Systems Strategy | We are taking a data-driven approach to improve how the end-to-end water supply works holistically by reducing sudden pressure changes and keeping pressure levels steady to reduce the number of pipe bursts each year. | 10 schemes | Network burst | In progress | Low |
| Water Distribution Network | Air valve maintenance | Trunk main Air valve maintenance programme | This is a plan to regularly check and maintain air valves on trunk mains so we can reduce the number of pipe bursts on the main water lines. Air valves are devices used in water and sewer systems to allow air to enter and/or exit pipes. In water systems, air valves allow trapped air to escape the system during normal operation and filling of the pipe, and they also let air back in when water levels drop. | 817 maintenance attendances | Network burst | Pre-existing | Low |
| Water Distribution Network | Smart Valve installation | Smart Valve | We are delivering new technology that will help our technicians easily identify water network valves and dynamically monitor valve movement. This will improve the speed of response and promote calm network operation to reduce bursts. | Begin embedding new tool | Network burst | In progress | Low |
| Water Distribution Network | Trunk main improvements/ valve maintenance and improvements | Trunk Main Valve Check Programme | Complete valve checks on all valves needed to control and maintain the trunk main network to ensure swift operation can be carried out when a burst has occurred reducing the flow of drinking water that could potentially flow into a watercourse. | 7241 valve checks | Network burst | Pre-existing | Low |

## Trunk main leakage programme

We have proactively identified and resolved 86 leaks on trunk mains. Due to the size and pressure of these systems, leaks which develop into bursts have the potential for large volumes of water to be released into the environment. We have proactively identified leaks, in part through a programme of 947 leakage detection surveys in 2025, covering over 250km of trunk mains. By proactively and pre-emptively responding, we have prevented these catastrophic bursts from happening and reduced the risk of environmental impact. The number of 86 leaks resolved is slightly lower than our YTD target of 90, mostly due to lower delivery in December because of team capacity. We remain confident that the initial PIRP target of 120 leaks will be resolved in the original timescale by end of March.

## Distribution mains valve repairs

Distribution mains valves control the flow of water through the system. If a burst does occur, we need to be able to respond quickly by shutting off the water to isolate that section and reduce the volume of water released. Historically, many valves have been damaged or seized, which has delayed isolation. In 2025, we have repaired 1258 valves, so they are available to operate as intended when needed.

## Calm Systems Strategy

We are adopting a data-led approach across the whole end-to-end water system to reduce bursts. Typically, this involves avoiding sudden pressure changes and keeping pressure levels steady to reduce any stress on the system and lower the likelihood of bursts occurring. The initial targets for this programme were based on the number of leaks/bursts resolved. Throughout the year, it became apparent that a better methodology was number of completed schemes. During 2025, 10 schemes were completed compared to an initial target of 8.

## Trunk main air valve maintenance programme

Air valves are used in water systems to allow trapped air to exit the system. This helps to manage pressure and avoid bursts from occurring. By carrying out routine inspections and maintaining these valves, we ensure they continue to operate as designed. In 2025, we significantly exceeded our programme targets, with 817 trunk main air valve inspections and maintenance activities carried out in 9 months, compared to an original 12 month target of 600 activities. We also carried out additional air valve maintenance on smaller pipework, to reduce the risk of bursts on those sections.

## Smart Valve

We are incorporating new technology to identify valves across the water network and dynamically and remotely monitor their movement and positioning. This system will help to improve speed of response and promote calm network operations by avoiding sudden pressure changes, which helps to avoid bursts. We have encountered some delays due to difficulties incorporating this into our existing systems and resource challenges for testing. We anticipate this new system will be live in 2026.

## Trunk Main Valve Check

Similarly to distribution mains valves, trunk main valves control the flow of water through the system and can be used to divert flow away from a burst, reducing the volume of water released. Due to the larger diameter of trunk mains, and therefore the higher volume of water in these systems, this is particularly important to minimise environmental harm. The 2025 target was exceeded, with 7,241 valve checks completed against a target of 6,375.

Alongside our formal PIRP initiatives in 2025 we also began development of a clean water pollution transformation plan focused across four key areas:

- Awareness – ensuring everyone has access to the right training and information
- Prevention – reducing the likelihood of bursts on our water network
- Response – providing clear instruction and the right equipment for our frontline teams
- Learning – Sharing key themes and improved ways of working from our incidents

We have increased our training for clean water colleagues and ensured this is specifically targeted around identification of potential pollutions and awareness of correct reporting routes. This has also been incorporated into the Licence to Operate programme and it is therefore a role requirement for all frontline operatives to complete the training. As a result, we will likely see more forward-thinking reports based on potential environmental impact. While this may mean more incidents are reported in the short term, it also shows a growing understanding and awareness of the risk factors, which will boost river health long term.

# Case study

## Improving pollution triage - Introduction of Waste virtual technicians

In October 2024, we introduced two new virtual technicians into our Virtual Triage team in our Operational Contact Centre to help triage our pollution incidents. We expanded the team to ten technicians in 2025 and expect to grow the team further in 2026. When a pollution is reported to us, either online or via a call, our virtual technicians investigate further to determine the urgency and prioritise accordingly. Customers and other members of the public are able to upload photographs via the Thames Water website which provide clearer information, enabling more accurate triage and prioritisation by the virtual technicians. This ensures our operational response teams are deployed to genuine pollution incidents more efficiently. The Virtual Triage team also maintains strong awareness of environmental impact and works closely with our pollution desk to ensure all procedures are followed correctly.

Our enhanced virtual technician team has significantly improved pollution incident response times by approximately 41 minutes. The team are now able to manage higher volumes and extend coverage into weekday evenings and weekends, reducing operational risk as well as triage other customer channels such as webchat and WhatsApp.

### Improving Response Times

As a result of the team's performance in prioritising reported incidents, pollution incidents are being attended faster and more effectively, which means our operational response teams are attending incidents where it matters most. An example of this is an incident attended in Guildford whereby a blockage was reported by a developer on a building site. Before the introduction of the virtual technicians, this would have been attended as a lower priority and classified as external flooding, however this was attended with a 1 hour 48-minute response after being given to a virtual technician to triage. The root cause of the incident was a blockage found on site – likely caused by a third party – which had led to a surcharging manhole and internal flooding of an unoccupied new build basement. The incident was confirmed as a pollution, with samples taken and containment measures deployed to mitigate the risk.

Another example is a virtual technician receiving a report through our website regarding concerns at Cody Dock, London, during a period of heavy rain. The report was received at 11:37am and following the virtual technician's review they were able to inform our pollution control team of a potential pollution immediately. A joint response team comprising a Thames Water Network Engineer and our blockage contractors arrived on site at 12:43pm. Following their investigation the incident was determined to be related to significant road runoff entering a nearby lagoon and not a sewage related pollution.

Overall, in 2025 there have been 65 occasions, when virtual technicians have upgraded a report of flooding to a higher priority pollution attendance, where they identified a potential risk to the environment.

### Outcome

As a measure of the team's success, there has been an improvement in the speed of response in attending incidents, creating capacity in our operational teams. There has also been an improvement in our self-reporting of incidents. This initiative will continue to grow and is expected to produce wider business and operational benefits for our customers and the environment.

Figure 21: A virtual technician in the control room

# Planned additional measures

In this section we share our overarching strategy to improve pollution performance*. There is then a section on each asset type explaining the new or ongoing measures we plan to implement in 2026 to improve pollution performance. The format highlights the causes each initiative addresses, providing clarity on how we are tackling the specific drivers of pollution and the impact we believe these initiatives will have. The scale and impact of these initiatives are the incremental figures delivered only during 2026 and do not take into account any delivery in previous years or planned delivery in future years.

It is important to note that some of our initiatives are reliant on the successful navigation of additional funding processes. We are seeking to secure funds through Ofwat's gated allowance process, a mechanism used to manage and allocate funding for specific AMP8 projects across the water industry. We will need to pass through stages or "gates" to demonstrate to Ofwat how we will spend the conditional funding. We have established internal processes to make sure that we pass through the gates as efficiently as possible, but it is important to note that there could be delays or changes to the delivery of our initiatives as we move through the conditional allowance process.

Throughout this section we refer to the 'impact' of our interventions. This is defined as the number of pollutions prevented in-year by the measure and uses a scale rather than absolute numbers as follows. Low = <1 pollutions, Medium = ≥1 and <5 pollutions, High = ≥5 pollutions.

* We are presently operating under the Business Plan for AMP8 approved by our Board of Directors on 11 September 2025. We are working with our stakeholders to progress and implement a recapitalisation and operational turnaround. Our future investability and financeability are dependent on the outcome of that process. Our Business Plan, and the prioritisation and sequencing of investment, is consequently liable to change once there is further clarity on our future; whether this be through a successful recapitalisation process or as a result of a CMA redetermination or as a result of our entering the Special Administration Regime.

# Our strategy

River health in the UK has been deteriorating, with many rivers failing to achieve "Good" ecological status. A material contributor is the water industry, particularly due to frequent storm overflows and historic inadequate investment in infrastructure to keep up with population growth and climate change.

As shown in Figure 22, in the Thames region, we are the largest contributor to poor river water quality at 31%, closely followed by agriculture and rural land management at 26% and urban and transport causes such as road run off at 19%. We are taking a leading role in addressing the issue. Our approach focuses on three key actions: 'speak up' to highlight the problems, 'open up' by providing transparency on storm overflow discharges and 'clean up' by taking swift and efficient action to improve the situation.

We were one of the first UK water companies to accept our accountability and confirm that sewage discharges to the environment are unacceptable. We reinforced our strategy to 'open up' by being the first to publish live information on our website as to when all our sewer overflows were discharging. Healthy rivers are essential to our operations, and we are committed to ensuring wastewater is treated properly before being released, aiming to improve river health through more effective treatment and management. To improve river health, we are going to:

### Discharge higher-quality treated effluent

Monitor our WwTWs to make sure they treat incoming flow to the required standards

Work with local authorities to upgrade WwTWs in line with their housing projections

Focus on reducing nitrates and phosphorus levels from an increased population

### Reduce potentially polluting discharges to our rivers

Continue work on the Thames Tideway Tunnel to reduce discharges in London

Reduce pollution incidents through our pollution incident reduction plan (PIRP)

Meet government targets, prioritising overflows in the most sensitive catchments

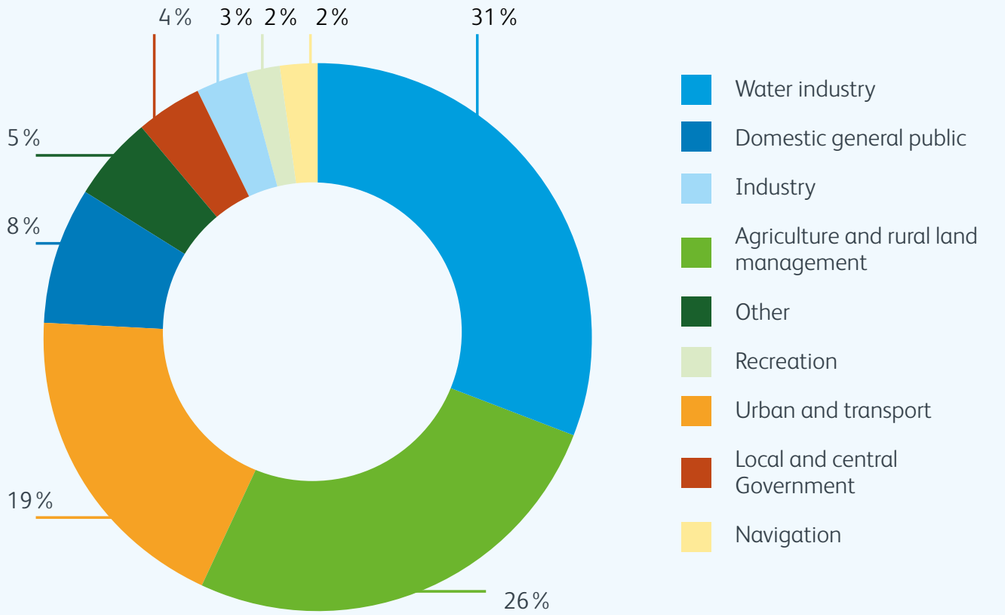
### Work with partners to improve river quality

Share data with our event duration monitoring (EDM) map and Open Data API

Work collaboratively to identify and address polluted surface water outfalls

Trial a more collaborative approach with our smarter water catchments (SWC)

Figure 22: Sources of water pollution in the Thames region, according to the EA's catchment data explorer



By 2050 our ambition is to significantly reduce pollution incidents and become more resilient to extreme weather. Our pollution reduction activity is focused on the following three themes:

- Prevention: Launch targeted initiatives to reduce the number of operational events that historically are at higher risk of causing a pollution incident, typically through asset investment and changes to our ways of working
- Mitigation: Improve our response to incidents to prevent and minimise any impact on the environment and our communities
- Culture and behaviour: Educate, train and motivate colleagues throughout all levels of our organisation to identify risks to the environment and act urgently to prevent impact, all while developing and maintaining a culture of openness and prioritising the best environmental outcome. Educate our customers on the impact of their behaviour on river health and work together to reduce blockages

Achieving our ambition to improve river health will require significant investment, with latest estimates indicating £25-30bn will be required.

To provide assurance that our PIRP will be effective and is deliverable, we have developed our PIRP in conjunction with long term, strategic plans and investment, specifically our Drainage and Wastewater Management Plan (DWMP).

As the statutory DWMP is finalised in 2028, we will fully align future PIRPs with its long-term risk assessments, preferred options, and investment pathways to ensure that annual operational measures and long-term planning operate as a single coherent pollution reduction framework.

The DWMP is a strategic plan for how a sewerage undertaker will manage and develop its drainage and sewerage system to meet its obligations under section 94 of the Water Industry Act 1991, as supplemented by the Urban Wastewater Treatment (England and Wales) Regulations 1994. The first statutory DWMP will be published in August 2028 and it has a planning period of 2030-2055. DWMPs must identify all current and future risks, measures and investment needs for the drainage and sewerage system over the next 25 years, including total and serious pollution incident reduction. PIRPs and Implementation Reports focus on the operational measures sewerage undertakers are implementing to address pollution each calendar year from now until 2030. Internally we are working closely as teams to ensure alignment. For example, the DWMP will take the PIRP pollution forecast exit position as the base year for the DWMP. In addition, initiatives from the latest pollution reduction activities in our PIRP to inform benefits assumptions in the long-term pollution reduction investment forecasts in the DWMP.

The glidepath below shows our historic performance with some key factors which have impacted this. The successful implementation of our PIRP would mean we achieve the future targets set out here. These targets are based on the pre-WIRI operating environment, and these regulatory changes will materially increase our pollution numbers going forwards. The targets also assume average weather conditions. Extreme weather such as prolonged heavy rainfall, high groundwater levels, strong winds and drought conditions all have the potential to significantly impact our performance.

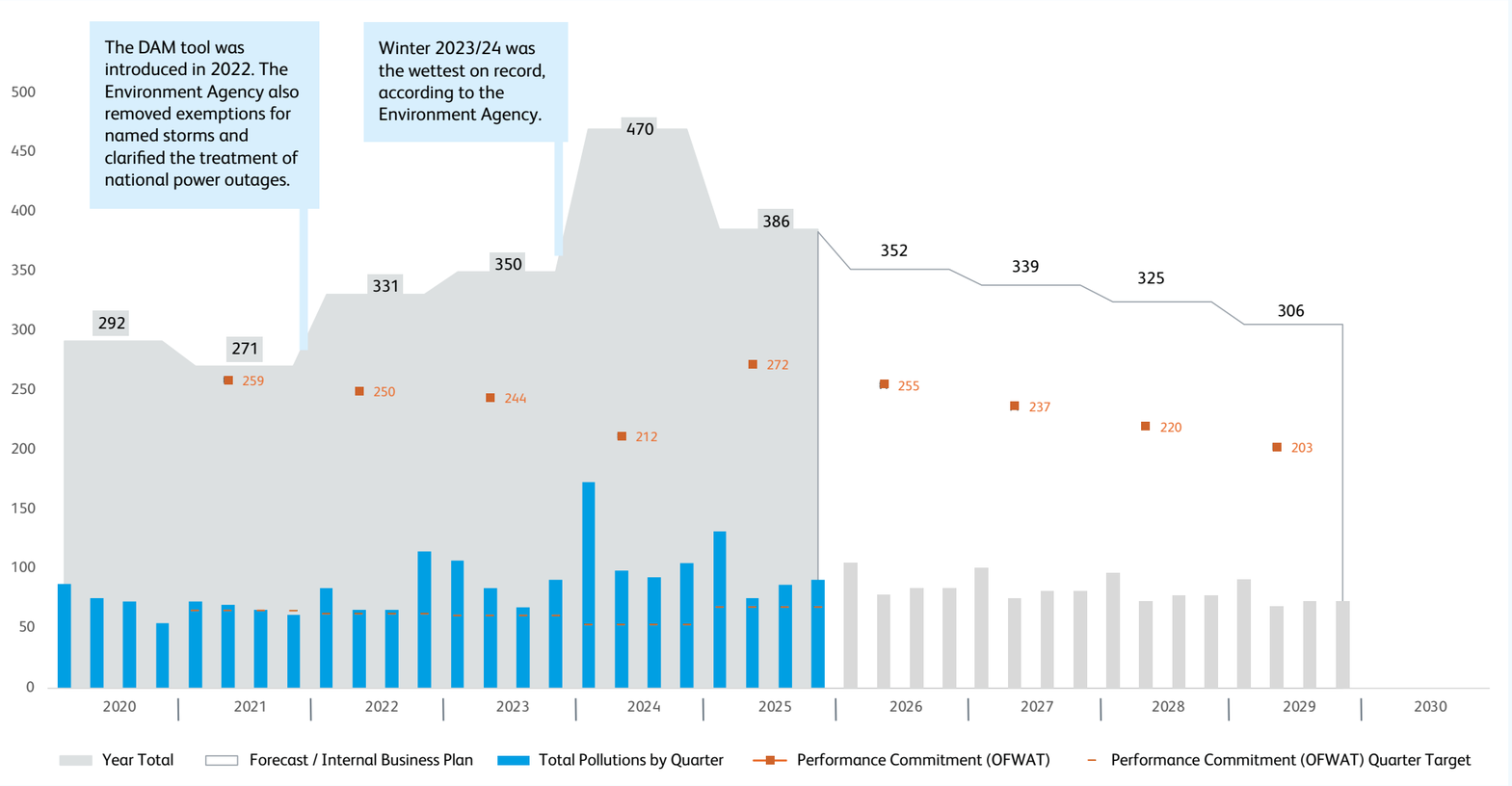



Figure 23: Thames Water AMP7–AMP8 Pollution Glide Path Including Commitments and Cumulative Totals

# Wastewater Networks

One of the most significant causes of wastewater network pollution incidents continues to be blockages, at nearly 54%. This is largely due to sewer abuse – essentially items flushed into the sewer network that it was never designed to manage, including wet wipes and fats, oils and greases. For this reason, most of our interventions are tackling the pollution drivers of blockages and third-party issues. The proportion of our network that causes pollution incidents is tiny, with less than 2% of sewers causing most of our incidents. Because there are thousands of blockages that could potentially cause a pollution, it is difficult to predict where the next pollution will occur and intervene. This provides a challenging context for how we invest in pollution reduction activity to provide the best value and most effective impact.

Historically, our ambition was to cover more of the network with planned interventions such as monitor installation, sewer cleaning and rehabilitation. However, what we have learnt from AMP 7 is that we can have a greater impact on pollution performance by optimising these initiatives to better target the problematic parts of the network predicted using our approach detailed in section 4.1. This has been an important lesson, and our interventions there are having a more powerful impact because we are targeting the right areas better. In the case of sewer maintenance, we have also increased the distance we plan to complete in the next four years to cover more of the network, meaning we will see benefit from both the optimisation of the locations cleaned and an increase in scale.

Table 8 provides a view of the initiatives we plan to implement in 2026 relating to our wastewater networks to improve pollution performance. This is our most ambitious plan yet, with many initiatives setting out to achieve higher volumes than ever before. For example, our sewer maintenance targets have increased by 500km from years 1 to 2 of AMP8 which has led to a positive reduction of our internal targets for both total and serious pollutions.

Table 8: Summary of 2026 wastewater network initiatives

| Asset Type | Measure | Action | Description | Scale | Cause | Start date | End date | Impact |
|---|---|---|---|---|---|---|---|---|
| Foul Sewer | Infiltration reduction plan delivery | WINEP Storm Overflow Discharge Reduction Programme | Investigating and improving stormwater systems to meet the goals set in Defra's Storm Overflow Discharge Reduction Plan | Deliver 74 schemes (AMP8 target)<br><br>Take 40% of schemes through SG1 | Blockage | Jan | Dec | Low |
| Foul Sewer | Customer engagement | Customer education marketing campaign "Bin it, don't block it" | Improving our customers' awareness, understanding, and behaviour in relation to sewer abuse through the use of targeted marketing campaigns | Complete annual campaign | Blockage | Jan | Dec | Low |
| Foul Sewer | Customer engagement | Household customer education | Contacting customers who reside close to where at least one blockage has occurred to distribute educational content that informs them of the negative consequences of inappropriately disposing of unflushables or fats, oils and greases down the drain | Continue to proactively share educational content to customers close to where a blockage has occurred<br><br>Further develop and roll-out hedgehog process | Blockage | Jan | Dec | Low |
| Foul sewer | Customer engagement | Non household customer education | Visiting commercial establishments to provide education on how to manage fat, oil, and grease waste responsibly to avoid blockages, checking compliance and working with them to improve disposal processes | 1,988 compliant FSEs | Blockage | Jan | Dec | Low |
| Foul sewer | Implementation of proactive cleaning and maintenance | Targeted catchment investigations (TCIs) | The TCI process aims to predict and prevent pollutions by investigating areas with recent blockages, using thorough desktop and field investigations to identify and fix underlying issues | Investigate up to 1,650 TCIs | Blockage | Jan | Dec | Med |
| Foul sewer, Combined sewer overflows and associated outfalls | Implementation of proactive cleaning and maintenance | Planned Sewer Maintenance | Routine jetting and cleaning of foul water sewers to remove silt, debris, and early blockages before they escalate | Maintain 2,040km | Blockage | Jan | Dec | Med |
| Foul sewer | Remedial capital asset improvements | Sewer rehab | Using a data-led approach to identify and rehabilitate additional lengths of the high-risk sewer through a range of techniques, such as grouting and patch lining | 15km rehabilitated | Structural Issue | Jan | Dec | Low |
| Foul sewer | - | Network Mapping | Using aerial imagery, machine learning, and GIS modelling to map the unmapped portions of our sewer network | Aerial imagery, DTM & DSM: 55% complete<br>Asset detection: 18% complete<br>Sewer inference model development: 63.5% complete<br>Sewer inferencing: 19% complete | Blockage<br>Structural issue | Jan | Dec | Low |
| Foul Sewer, Combined Sewer and associated outfalls | Telemetry installation & Use of predictive analytics | Evolving our smart networks | Increasing the extent and availability of sewer depth monitors (SDM) installed across our network, and using smart tools to improve our response to SDM alarms | 7,848 installs<br><br>80% availability | Blockage | Jan | Dec | Low |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Foul Sewer, Combined Sewer and associated outfalls | - | Resolve misconnections at surface water outfalls | Investigating and resolving misconnections through our Surface Water Outfall Programme | 37 outfalls submitted to SWOP<br><br>1,500 misconnections identified | Third party issue misconnections | Jan | Dec | Low |
| Rising Main | Remedial capital asset improvements | Rising main replacement | Proactively repairing or replacing the rising mains that cause the most problems in our network | 8km replaced | Structural issue | Jan | Dec | Low |
| Network | - | Improving speed of response | Reducing the time it takes to respond to alerts of potential pollutions through increased investment in the available resource | Meet our speed of response targets | Blockage | Jan | Dec | Low |

## WINEP Storm Overflow Discharge Reduction Programme

The focus for our Storm Overflow Discharge Reduction Programme in 2026 will be on advancing all schemes through the next phase of the Stage Gate process – Stage Gate 1. This will start to formalise options for implementation, further develop delivery plans and allow us to engage with contractors to commence works on site. It is expected that the first physical on-site work will start in year 3, however there may be an opportunity for some quick wins to be implemented toward the end of 2026. Our approach to sequencing and prioritising delivery of the storm overflow improvements is consistent with normal engineering practices, whereby the initial stage entails refining the data for our overflows in terms of performance and physical characteristics such as undertaking water quality surveys of both discharges and that of the receiving water course. We need to undertake these surveys covering a full year in order to understand environmental performance through the seasons. The insight acquired helps us to enhance our models that are key to maximising benefit and efficient delivery of the schemes. The nature of each overflow location complexity varies considerably; from small natural chalk stream catchments through to the larger rivers that flow through London (Wandle, Lee etc.) each requiring different needs from our investment and entailing quite different approaches to the solutions. We then determine which are the straightforward schemes that we can deliver earlier versus the more complex that take longer. Ultimately, our delivery plan envisages solutions at a total of 74 locations being delivered within AMP 8 and the remainder in the early part of AMP 9.

## Customer education marketing campaign "Bin it, don't block it"

Looking ahead, we are defining an integrated campaign to raise awareness of the impact of misconnections, as well as continuing to focus on the impact of wet wipes, fat, oil and grease on blockages and pollutions, and promoting only flushing the three Ps. We will also continue to demonstrate the investment that we are making to improve performance through our "biggest infrastructure upgrade in 150 years" campaign.

## Household customer education

There are currently 950,002 households within our diffuse process of sending educational material to customers following a blockage caused by sewer misuse. Entering 2026, we will continue this process and anticipate the number of unique households within the process reaching in excess of 1 million by year end. With 28% of Category 3 or above pollutions being caused by sewer misuse, increasing slightly to 29% for serious pollutions, we will also explore more localised communications in response to pollution incidents caused by sewer misuse.

We will continue to refine our hedgehog process. Now that we have shown proof of concept, we will explore how best to roll this out across our catchment. The aim is to reduce the number of pollutions caused by paper/rag which stood at 55 for 2025, 6 of which were serious pollutions. We have already started a new trial in Basingstoke and will look to fully develop our end-to-end process: beginning with locating and educating the correct households which we have now trialled successfully, which could then escalate to recharging costs if the problem continues to persist. In the most serious cases, we may pursue prosecution. We will also explore other methods of utilising the hedgehog equipment such as targeting known rag hotspots or deploying reactively post-incident.

Internally, we have made it easier for relevant colleagues to access information on blockages broken down by local authority area and parliamentary constituency. This year, we will use this information to forge stronger working relationships with these stakeholders and explore what is possible when focusing on a specific geographical area working in partnership with other organisations.

## Non household customer education

Following on from the success of the Network Protection Team's activities this past year (see section 4.1), the team will continue to investigate non-compliant FSEs and drive the installation of suitable Grease Management (GM) systems to intercept FOG before it reaches our network, aiming to achieve a similar number of newly compliant FSEs within 2026. We will be working with local authorities' Environmental Health Officers to develop a clear and consistent message towards FSEs about the requirement to install GM, ensuring that new businesses know what they need to do when setting up shop and facilitating our engagement with them when we come to audit their processes. In addition, we plan to increase the frequency of revisits in pollution or blockage hotspot areas to ensure that businesses clean and maintain their GM systems appropriately so that they work effectively, helping to reduce the chances of repeat blockages in these key areas. It may take multiple visits before an FSE installs suitable GM, though there are sometimes

instances where businesses will fail to comply with the requirement to dispose of waste correctly even after our final visit. Where this is the case, we will continue to pursue enforcement options – up to prosecution where necessary – to ensure that no contacted businesses are left disposing of FOG into the sewers and risking pollution to our environment.

As well as FOG that enters our network from commercial FSEs, we also see instances of waste being discharged from institutions such as schools, hospitals, and industrial premises. To tackle these sites, we will be exploring opportunities to expand our visit & communications process to include those with large kitchens that may be discharging FOG into the network, as well as industrial sites where evidence indicates that they may be discharging effluent into the surface water sewer system. In particular, any waste that directly enters our surface water sewer system from either misconnections, negligence, or illegal discharge stands a high chance of directly leading to a pollution since it is not usually processed before it enters a watercourse – identifying and remediating these issues is therefore a key priority of the NPT and will be further pursued throughout 2026.

## Targeted catchment investigations (TCIs)

Following 2025's fast-track trial in specific regions, it was clear that we will require additional feet on the ground alongside office support roles to facilitate the roll-out of further crews. The pilot of the programme will continue into 2026 whilst the process is finalised - we will continue to grow the number of Thames Water and contractor teams throughout the year, aiming to expand the team up to the desired capacity in order to carry out the intended 1650 catchment investigations proposed in this PIRP.

## Planned Sewer Maintenance

In 2026 we are planning to increase the total length of our sewers that we proactively maintain by an additional 500km, a 28% increase on our FY 2025/26 target, taking our target for the year to over 2,200km. We will also continue to review which lengths of sewer are considered high-risk and need the most frequent cleaning, making sure that we tackle the highest priority sections on a regular basis to make the best use of cleaning resource, with our focus remaining on targeting those areas where we will see most pollution benefit.

## Sewer rehabilitation

The objective of the sewer rehabilitation initiative is to improve asset condition by delivering relevant structural rehabilitation work on sewer pipes (including patch repairs, relining, re-round and lining, and replacement), thereby recovering asset health and reducing the likelihood of structural failures that could lead to customer flooding and environmental pollution incidents.

The 2025 and 2026 planned sewer rehabilitation programmes are based on data-led targeting methods and delivery processes that combine structural asset condition data with flooding and pollution risk prioritisation. This methodology has been continuously improved since it was implemented at the start of AMP7, when Thames Water significantly increased investment in planned sewer rehabilitation – our data shows that rehabilitated sewers on average show a 21% reduction in blockages and a 29% reduction in internal sewer flooding, demonstrating the effectiveness of this initiative in preventing incidents. From April to December 2025 we rehabilitated 22km of sewer, surpassing our target of 20km, and we have carried out continual improvements to how we assess and prioritise lengths of sewer that require these works. We will look to rehabilitate a similar length of sewer in 2026.

## Network Mapping

Phase 2 of our network mapping project will aim to map over 2,800km2 of the Thames Water catchment. Fixed wing aircraft will capture aerial imagery (2D and 3D), Digital Terrain Models (DTMs) and Digital Surface Models (DSMs) across urban areas. Asset detection will be semi-automated by training deep learning models, which will then feed into progressing the development of the sewer inferencing model. Unmapped areas with the highest network performance risk will be prioritised first so that we can improve our proactive sewer cleaning, offer better customer service, and delivery overall operational efficiencies.

Though not specifically targeted to an individual fault type, fully understanding the extent of our network is key to facilitating the various proactive and reactive measures that we implement on a day-to-day basis for reducing pollutions. By capturing these previously-unmapped portions of network in our digital maps, we will have a near-complete digital twin. This will allow for accurate pollution tracing (e.g., from foul manholes to surface water outfalls via highway drains), identification of misconnections and dual manholes, hydraulic modelling of flow, and increased accuracy of asset data, allowing for faster customer callouts, optimised targeting of interventions, and reduced blockages, floods and pollutions. We expect to see pollution benefit as result of this initiative from year 4 of the AMP onwards.

## Evolving our smart networks

As well as seeking to continually improve our Sewer Level Alert Manager tool (SLAM) to optimise our prioritisation of response to SDM alarms, in 2026 we will also continue to increase the number of SDMs that we have installed and will be aiming to improve the availability of these devices by reducing their maintenance downtime. Within the first 3 years of AMP8 we are currently looking to install a further 22,000 monitors across the network, focusing on high priority areas for prevention of pollutions. During 2026 we will enter into new contracts with our suppliers for the installation, maintenance and provision of SDMs, aimed at both increasing the volume of installations and availability of devices throughout the period, whilst we are already updating a number of our existing units and will continue to do so throughout the year to help facilitate these improvements. Once our new contracts have embedded, we will review and look to increase our targets in this area, particularly in respect of sewer depth monitor availability - in 2025 we successfully met our target of 80% availability and will continue to ensure that we exceed this during 2026. To improve our ability to prioritise and increase our speed of response, we plan to better understand ground water and flooding impacts on the system and our SDMs, improving where alerts are being generated not because of a blockage but because of system capacity.

## Resolve misconnections at surface water outfalls

Misconnections pose a continual challenge to ensuring the quality of discharge from SWOs, since they are widespread and can require extensive investigation to identify the precise location of the misconnection. To continue our efforts in 2026, SWOP aims to significantly improve 37 more outfalls whilst continuing to monitor outfalls on the waiting list and prioritising these with the Environment Agency for the live programme. We will also continue funding further Outfall Safaris, with 6 planned for the 2026 season.

## Rising main replacement

Ofwat expects Thames Water to deliver at least 33.8km of rising main replacements in AMP8. This equates to an average renewal rate of 0.32% per year over the 2025–30 period, from base funding. In 2026 we aim to replace 8km of rising mains, bringing the cumulative total delivered since the start of AMP8 to 20km by year end. The programme will also seek to accelerate projects that have been scheduled for later years in order to increase the outputs to be delivered in 2026, achieving a stretch target of 9km of replacements in the year.

We are working hard to secure additional allowances through the Asset Health Improvement gated allowance and are aiming to start delivery of this extended rising main programme in the second half of 2026. The exact scale and programme of this work is yet to be agreed with Ofwat.

## Improving speed of response

Achieving an appropriate speed of response to incidents remains a critical capability to help us effectively deal with reports of pollutions and flooding - by attending incidents in a shorter time we can minimise the duration of any escape of sewage and implement mitigation as soon as possible, therefore reducing the resulting impact on the environment. We can reduce the average time taken to attend an incident by having more available resource to attend these call outs – as such, we are investing in 22 new crews for network response through our partner Lanes for Drains so that we have more crews available, and we will be gradually rolling these out over the first half of the year. This strategy of increasing capacity has already helped us to meet our internal target of attending pollution jobs within 2 hours, though in 2026 we are also considering how we can best strategically place new depots and expand existing ones to facilitate shorter travel times to incidents.

Alongside our formal PIRP initiatives we will also continue:

### Ice pigging

We will continue our innovation pilot to explore ice pigging as an option for cleaning rising mains, aiming to clean a wider variety of pipes to build a deeper understanding of the applicability and technical limitations of the technique. As well as assessing any improvement in operational performance, we will develop experience in the identification of mains suitable for ice pigging and any pre-requisites for carrying out a clean.

### Syphon cleaning

Thames Water has a number of syphons across our network - sections of gravity sewer that dip under obstacles such as watercourses and railways. The nature of these “low points” can increase the likelihood of silt, debris, and other materials accumulating and therefore restricting the flow through the syphons, and they are particularly complex to clean. As such, we are in the process of starting a new innovation pilot to explore supplier capabilities and techniques for safely and effectively cleaning these features, identifying and remedying any potential sections for follow-on repair as required. By targeting these complex sections of network we are aiming to proactively clear blockages and find & fix structural issues before they lead to a potential pollution.

### Virtual technicians

Following the initial success of our virtual technicians in 2025 we are expanding the team to 14 full time technicians in 2026. Having proved the benefit of having available technicians during the daytime pilot, we will be able to use the new team members to extend coverage into weekday evenings and weekends as well and managing higher volumes of customer contacts. In addition to the extra capacity reducing operational risk, we intend to extend the virtual technician coverage to include triage of other customer channels such as webchat and WhatsApp, making sure that we can keep a keen pollution awareness across all forms of customer contact.

### Smart waste rising main monitoring

During 2026 we will continue to build on the first phase of the trial completed in 2025 to complete a larger programme of installations. The aim of this phase of the trial is to: 1) expand to cover an additional 50 high risk sites, 2) continue to review and understand data collected from rising main pressure monitors, and 3) understand how we develop an operational response to this data.

# Wastewater Treatment Works

In 2025, pollution incidents from our WwTWs were mostly due to resilience issues resulting in inadequate process capacity and design. Our main initiative tackling this is the WwTW investment initiative (more detail below). Resolving these incidents often requires a large-scale project to upgrade the site, costing significant time and money. As described in section 4.2, our ambitious Plan is not constrained by funding, financeability or internal capability/capacity challenges, but does acknowledge constraints in delivery capacity based on external factors (including availability of supply chain, plant and materials, skills) and the practical constraints of delivering large, complex programmes of work on sites while maintaining service. One of the biggest challenges we face at our sites is the condition and aging nature of our assets. This in part stems from decades of underinvestment, during which customer bills were kept down but at the detriment of the levels of maintenance and renewal of assets. To demonstrate this, we have shared some images that highlight some of the issues we are now experiencing . Table 9 provides a view of the initiatives we plan to implement in 2026 relating to our Wastewater Treatment to improve pollution performance.

Table 9: Summary of 2026 wastewater treatment initiatives

| Measure | Action | Description | Scale | Cause | Start date | End date | Impact |
|---|---|---|---|---|---|---|---|
| Screens Maintenance | Inlet screen refurbishment | Programme of major refurbishment of inlet screens, to improve their availability and effectiveness in the removal of screening materials from entering the treatment process. | 52 inlet screens | Blockage | Jan | Dec | Med |
| Power resilience improvements | Improving resilience to power problems | We are reducing the impact of power problems at our WwTWs by installing back-up generators. | 3 no. back-up generators | Power failure | Jan | Dec | Low |
| Remedial capital asset improvements | WwTW Investment | A significant investment at a number of our WwTWs covering scope from various programmes, including:<br>• Waste asset assurance programme (WAAP): increasing treatment capacity and making improvements to achieve discharge permit requirements;<br>• Pollutions resilience: investing to reduce the risk of pollution incidents;<br>• Growth: investing to provide treatment capacity for predicted growth up to 2036;<br>• The Water Industry National Environment Programme (WINEP) includes actions to protect water quality, improve wastewater treatment and address issues like stormwater overflows. | 15 schemes delivered | Process Capacity & Design | Jan | Dec | High |
| Remedial capital asset improvements | Capital maintenance investment (planned and reactive) | Continue delivering our ‘Maintenance 100’ programme, with a specific focus on targeted capital maintenance for critical asset groups and on increasing planned maintenance completion rates through improved resource planning and productivity. | Initiate delivery phase of capital maintenance programme.<br>Development of demand reduction, and contractor support plans.<br>Launch our new Operation & Maintenance Standards Groups – our Communities of Practice for Treatment, Pumping & Networks. | Equipment failure | Jan | Dec | Med |

Figure 24: Concrete degradation on tank

Figure 25: Bent shaft on penstock

## Power Resilience

As stated in section 4, we will be extending our programme of installing automatic restart switches throughout 2026 to address the most common cause of power related pollutions, short duration power interruptions from the local electricity network operator. Addressing this issue in the first instance provides the best return on investment, reducing pollution risk significantly. Where power interruptions of more significant durations are prevalent, installing permanent stand-by generators remains in our plans for 2026. However, in addition we are seeking to explore new, alternative solutions to longer duration power interruptions, such as 'battery energy storage solutions'. Such technology may enable an increased, more cost-effective deployment than traditional generators, therefore we will be proposing a pilot during 2026 to test this approach.

## WwTW Investment

Our AMP 8 business plan for WwTWs is our most ambitious ever and includes a large-scale programme for the upgrade of our sites, including over £3 billion of investment . This is made up of various programmes with different purposes and scopes. The programmes included in this initiative are as follows:

- WAAP: Our waste asset assurance programme (WAAP) is making improvements at certain WwTWs identified as requiring investment to improve performance against some of their permit conditions. We are increasing treatment capacity, improving resilience and making improvements to achieve discharge permit requirements.
- Pollution resilience: We are investing to reduce the risk of pollution incidents.
- Growth: We will invest in a number of wastewater treatment works, providing treatment capacity for predicted growth and helping to future-proof our assets for the growing demand.
- WINEP: The Water Industry National Environment Programme outlines environmental commitments and requirements for water companies in England, ensuring that they meet environmental standards and regulations. This includes actions to protect water quality, improve wastewater treatment and address issues like stormwater overflows.

## Capital Maintenance

We recognise the benefit in proactively identifying and refurbishing those assets key to the effective operation of the treatment process in preventing pollutions. To this aim, we are increasing the proportion of our capital maintenance budget allocated to proactive maintenance programmes. This includes inlet screens, essential in removing unwanted materials from entering the treatment process and causing damage and blockages, ultimately leading to pollution incidents. In 2025 we initiated an AMP plan to begin systematically refurbishing our inlet screening assets, which we are including here as a dedicated initiative. We have also identified subsequent asset groups essential to operational performance, and during 2026 we will be defining AMP delivery plans for these asset groups, which may be added to our PIRP in subsequent updates.

In parallel we are focused on continuing improvements in the delivery of our planned maintenance programme. Key areas of attention include ensuring we maximise the productivity of existing capacity, supported with contractor resources, and seeking opportunities to streamline and reduce overall demand.

## Human Error

Ensuring awareness of regulatory obligations remains an important foundation and several elements of our plan delivered in 2025 will continue into 2026 and beyond. Specifically, we will be enhancing our regulatory compliance awareness module, moving it online and making an annual refresher a requirement to all relevant roles.

In reviewing the detailed root causes of incidents involving the cause of Human Error, we recognise two key opportunity areas to make an impact on this aspect of performance - the quality of technical training for our operational colleagues and the ongoing assurance of their competency, along with our behaviours. As a first step, in 2026 we will initiate an assessment of the current competency of our technicians, to identify any deficiencies that may be addressed simply. In parallel, we are exploring options to deliver long-term improvements to our approach for training all new technicians, as well as ensuring that our colleagues have access to continuous, technical support. We anticipate defining and delivering the foundations of a preferred approach through 2026. We expect this, coupled with a programme of updating our existing management systems, and the standing up of a new assurance capability, to start providing tangible benefit from 2027 onwards.

With a focus on behaviours, in 2026 we are undertaking a pilot of a new management operating system (MOS). Already defined, our new MOS delivers clarity for site teams regarding key performance metrics to remain focused on, how these are captured, reviewed and clarity on responsibilities. This resets the expectations for operational performance management. On completion of the pilot, we will be exploring how this will be rolled out across all of our relevant treatment teams.

# Wastewater Pumping Stations

Table 10 provides a view of the initiative we plan to implement in 2026 relating to our Wastewater Pumping Stations to improve pollution performance.

| Measure | Action | Description | Scale | Cause | Start date | End date | Impact |
|---|---|---|---|---|---|---|---|
| Power resilience improvements | New generator installs | Installation of new generators at sites at risk of low power resilience | 4 generator installs | Power Failure | Jan | Dec | Low |

Table 10: Summary of 2026 wastewater pumping initiatives

We have 5,169 pumping stations that help transport 4.7 billion litres of wastewater to our WwTWs every day. Only 0.4% of these sites caused pollution incidents, which demonstrates the strong focus we have on pollution performance at our WwPSs. In 2024 (2025 not yet published) our performance was industry-leading for the second year running, with our incident numbers outperforming the rest of the industry in terms of total numbers, which is impressive given the scale of our operation (we had 28 incidents compared to the average of 77). When this figure is normalised per 10,000km of sewer, we achieved performance of 2.57 compared to an industry average of 17.58. This is because of consistent investment and management of our sites. Our wastewater pumping station interventions remain focused on improving resilience against power.

## Power resilience improvements

Improving the resilience of our sites to power problems remains a key focus, with power failure being a core driver of WwPS pollutions. We monitor sites with higher-than-expected failure rates, as well as the potential impact of their failure, to create business cases to install new or replacement standby generators if needed. We have been doing this activity for several years and have fixed standby generators at 230 of our highest-risk sites. Alongside this, we also monitor business-as-usual maintenance activity and KPIs, including inspections, testing and maintenance. We have also installed a total of 229 automatic restart switches to help sites return to service without any intervention, giving them better resilience to cope with a wide range of power issues.

In 2026 we plan to install four new generators at sites which have previously experienced power disruption to further boost our resilience in case of future power outages. We are investing in technologies like ‘Automated Voltage Control’ which will balance voltage fluctuations impacting our sites as a trial and we are in early stages of identifying where ‘Battery Energy Storage Systems’ can be commissioned as an innovation trial, which will mitigate voltage fluctuations and protect against Power interruptions.

# Clean Water

Table 11 provides a view of the initiatives we plan to implement in 2026 relating to our clean water assets to improve pollution performance.

| Asset Type | Measure | Action | Description | Scale | Cause | Start date | End date | Impact |
|---|---|---|---|---|---|---|---|---|
| Water distribution network | Pressure calming | Calm systems strategy | We are taking a data-driven approach to target the parts of our supply system at higher risk by reducing sudden pressure changes and keeping pressure levels steady to reduce the number of pipe bursts each year. | 8 schemes delivered | Structural issue | Jan | Dec | Low |
| Water distribution network | Air valve maintenance | Air valve maintenance programme | This is a plan to regularly check and maintain air valves so we can reduce the number of pipe bursts on the main water lines. Air valves are devices used in water and sewer systems to allow air to enter and/or exit pipes. In water systems, air valves allow trapped air to escape the system during normal operation and filling of the pipe, and they also let air back in when water levels drop. | 964 maintenance activities | Structural issue | Jan | Dec | Low |
| Water distribution network, Water treatment works | Staff training | Pollution awareness training | We are ramping up our training for clean water employees and ensuring this is specifically targeted around identification of potential pollutions and awareness of correct reporting routes. This is also incorporated into the Licence to Operate programme and is therefore a role requirement for all frontline operatives to complete the training. | 85 % of clean water staff with training complete | Human Error | Jan | Dec | Low |

Table 11: Summary of 2026 clean water initiatives

As network bursts are still the biggest cause of our clean pollution incidents, we are continuing to focus on initiatives which support burst reduction. This includes our calm systems strategy which aims to reduce the pressure levels and sudden pressure changes in our pipes, and air valve maintenance which enables the effective operation of our network leading to less bursts.

We also recognise the importance of our frontline teams having the right knowledge, behaviour and skills when it comes to pollution reduction and that is why this year we have included sight of our new initiative specifically focusing on pollution training for our clean water teams. We are increasing our training for clean water employees and ensuring this is specifically targeted around identification of potential pollutions and awareness of correct reporting routes. This is also incorporated into the Licence to Operate programme and is therefore a role requirement for all frontline operatives to complete the training. As a result, we will likely see more forward-thinking reports based on potential environmental impact. While this may mean more incidents are reported in the short term, it also shows a growing understanding and awareness of the risk factors, which will boost river health long term.

In 2026 we will continue our enhanced focus on pollution reduction in clean water with the introduction of a new pollution specific role (Environmental Performance Specialist) which will support the continued implementation of our pollution reduction transformation programme focusing on:

- Awareness – ensuring everyone has access to the right training and information.

This involves ensuring everyone working in clean water completes clean water-specific Pollution Awareness training by integrating it as part of the Licence to Operate. Pollution performance metrics will be established and transparently reported on at all levels to encourage accountability and prompt proactive discussions focused on pollution prevention. Briefing notes of incident learning and case studies will be shared to encourage learning, reflection and continuous improvement. Engaging visual aids will be installed on pollution-risk equipment and areas to facilitate best practice. Finally, interactive awareness sessions will be held on a regular basis with frontline teams to ensure the plan is practical, well-understood and effectively implemented.

- Prevention – reducing the likelihood of bursts on our water network by tackling the biggest causes.

This includes some of the PIRP initiatives detailed above which focus on managing pressure effectively and routinely maintaining equipment across the network.

- Response – providing clear instruction and the right equipment for our frontline teams.

A clear hierarchy of response is being developed so that teams have a solid understanding of priorities when attending any incident. A core list of pollution response equipment is also being developed to enable prompt and effective mitigation. In addition, frontline teams are being provided access to waste GIS, which shows mapping of all Thames Water waste assets. This allows a better understanding of where water may be flowing, the pathway of any underground pipework and possible environmental receptors. We also continue to focus on valve maintenance and repairs, ensuring key distribution valves are available to operate when needed, so flow can be diverted away from burst locations and reducing volumes entering the environment.

- Learning – Sharing key themes and improved ways of working from our incidents.

Any pollution incident from a clean water asset will be logged on the corporate pollution database and will be subject to a comprehensive root cause analysis process. The findings from this will feed into the development of case studies and learning sessions in order to provide constructive feedback and prompt discussion on how to improve future responses. Where learning highlights inadequate training, we will update materials. Our goal is to build a culture of openness, transparency and accountability so that improvements can be effectively implemented.

# Glossary

| | |
|---|---|
| AMP | Asset Management Period, which is the five-year funding period. AMP 7 was the seventh asset management period planned by the UK water industry and ran from 2020 to 2025. AMP 8 is the eighth period and runs from 2025 to 2030. |
| Category 1 pollution | Major, serious, persistent and/or extensive impact or effect on the environment, people and/or property. |
| Category 2 pollution | Significant impact or effect on the environment, people and/or property. |
| Category 3 pollution | Minor or minimal impact or effect on the environment, people and/or property. In 2026 the application of WIRI guidance means a Category 3 incident will be defined as any polluting substance entering the environment, regardless of impact. |
| Category 4 pollution | No impact on the environment. In 2026 the application of WIRI guidance means a Category 4 incident will be only be recorded if a polluting substance does not enter the environment. |
| Common Incident Classification System (CICS) | EA guidance which defines what an incident is and how it is classified based on a two-tier system. This includes the seriousness of an incident, with Category 1 being the most serious and Category 4 being the least serious |
| CMA | Competition and Markets Authority |
| CSO | Combined sewer overflows are used to prevent sewers from flooding our homes, gardens, and streets. They act as a safety valve, diverting some of the rainwater and foul water into watercourses. |
| DAM | Discharge Alert Manager - a system that helps us draw insight regarding discharges from our storm-related assets. |
| Defra | The Department for the Environment, Food and Rural Affairs is the Government department responsible for issues including the natural environment, environmental protection and pollution control. |
| DWMP | Drainage and Wastewater Management Plan |
| EA | The Environment Agency is a non-departmental public body, established in 1996 and sponsored by the United Kingdom Government's Department for Environment, Food and Rural Affairs, with responsibilities relating to the protection and enhancement of the environment in England. The EA regulates our environmental performance. |
| EDM | Event Duration Monitors use sensors to monitor the level of flow in a tank or sewer. They are installed on storm overflows. The sensor triggers an alert when a certain level is reached, indicating a storm discharge is happening. EDM monitors measure the start and end time of any flow. They do not measure the volume of the flow itself. |
| EPA | The Environmental Performance Assessment is a tool used to evaluate and compare environmental performance between water companies and across years. |
| FOG | Fat, Oil and Grease – substances which should not be disposed of down the drain because they cause blockages. |
| FSE | Food Service Establishments |
| IBP | Integrated Business Plan |
| KPI | Key performance indicator: a quantifiable measure used to track and assess progress toward a specific business goal or objective |
| MoWWT | The Management of Wastewater Treatment training course is a level 5 award in understanding wastewater treatment, helping candidates to improve their knowledge and understanding of regulatory compliance requirements and best practice in wastewater treatment. |
| Ofwat | Ofwat is the Water Services Regulation Authority, an economic regulator for the water and sewerage sectors in England and Wales. Its role is to ensure that water companies provide a reliable service to customers at a fair price while maintaining the sustainability of water resources and protecting the environment. |
| PIRP | Pollution incident reduction plans are a regulatory requirement that all water companies must have, outlining the actions being undertaken to improve pollution performance. |
| PR24 | Every five years, water companies set out their plans for what they'll deliver and how much they'll charge customers. This process is known as the price review. The most recent was in 2024 and referred to the period of 2025-2030. Ofwat makes the final decision on this. |

| | |
|---|---|
| Rising main | A rising main is a sewer that is pressurised using pumps to move sewage uphill. |
| Serious pollution | A pollution event categorised by the EA as either category 1 or category 2. |
| SLAM | Sewer Level Alert Manager - a system that uses data from level monitors installed in our sewer network to target interventions. |
| Sewer Depth Monitor (SDM) | A sewer depth monitor (sometimes referred to as a sewer level monitor or SLM) is a device used to measure and monitor the depth of wastewater within sewer systems. These monitors are essential for managing and maintaining sewer networks, as they provide real-time data on the flow and level of sewage. |
| SOAF | Storm Overflow Assessment Framework is an initiative that investigates high-frequency discharging combined sewer overflows (CSOs). |
| SWOP | Surface Water Outfall Programme which aims to identify outfalls to watercourses that are suffering from wastewater pollution. These outfalls are diagnosed with widespread sources, which are most likely third-party misconnections. |
| Storm discharge | A storm discharge is a mixture of rainwater and untreated sewage, released by storm overflows into watercourses. This happens during heavy or continued rain to prevent sewer flooding. |
| TCI | Targeted Catchment Investigations: An in-depth desktop and field investigation to identify, understand, and fix underlying issues in a specific part of our network, typically focusing on areas that are susceptible to blockages or pollutions. |
| WAAP | Waste Asset Assurance Programme |
| WINEP | WINEP stands for the Water Industry National Environment Programme. It is a programme that outlines environmental commitments and requirements for water companies in England, ensuring that they meet environmental standards and regulations. This includes actions to protect water quality, improve wastewater treatment and address issues like stormwater overflows. WINEP sets out a series of specific projects that water companies must carry out to meet environmental goals, such as reducing pollution, improving habitats, and complying with European Union and national environmental laws. |
| WIRI | Water Industry Regulation Incidents. New EA guidance around reporting and information provision for pollution incidents. This introduces more stringent requirements for pollution self-reporting and water quality sampling, and alters how category 3 & 4 incidents will be recorded. Pollution numbers will increase as a result of these changes. |
| WISER | Water industry strategic environmental requirements. A document providing strategic steer to water companies on the environment, resilience, and flood risk for business planning purposes. |
| WwPS | Wastewater pumping stations (sometimes referred to as waste pumping) pump wastewater against gravity through a rising main. |
| WwTW | Wastewater treatment works are designed to treat and clean sewage and wastewater before they are released into the environment. |

# Appendices

# Appendix 1 – Water UK summary of regulatory changes (WIRI)

## Purpose

The EA published new guidance on 15 October 2025, entitled Guidance for Reporting and Assessing Water Industry Regulation Incidents ("WIRI guidance"). * 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. 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 2026–2030. **Future assessments of water company environmental performance will use eight metrics to determine an overall star rating, ranging from 1 (worst) to 5 (best).

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

## 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

## 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 actual 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."

* Guidance for reporting and assessing water industry regulation incidents (WIRI)

** Water and sewerage companies: EPA methodology for 2026 to 2030 - GOV.UK

# Appendix 2 – Pollution incident tables

Table 12 Pollution Incident Numbers for 2025 by Asset Type, Severity, and Month for Waste

| Waste | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Asset Type | Seriousness | Jan-25 | Feb-25 | Mar-25 | Apr-25 | May-25 | Jun-25 | Jul-25 | Aug-25 | Sep-25 | Oct-25 | Nov-25 | Dec-25 | Total |
| Foul Sewer | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 2 | 0 | 0 | 2 | 2 | 1 | 0 | 2 | 2 | 0 | 1 | 1 | 0 | 11 |
| | Category 3 | 22 | 18 | 32 | 18 | 9 | 14 | 18 | 11 | 15 | 9 | 9 | 15 | 190 |
| Combined Sewer and Associated Outfalls | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Rising Main | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Category 3 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 0 | 17 |
| Wastewater Pumping Stations | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Category 3 | 3 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 3 | 1 | 2 | 5 | 19 |
| Wastewater Treatment Works | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 2 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 7 |
| | Category 3 | 14 | 10 | 10 | 16 | 5 | 3 | 10 | 7 | 6 | 3 | 13 | 13 | 110 |
| Surface Water Sewer and Associated Outfalls | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| | Category 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| | Category 3 | 1 | 2 | 2 | 3 | 0 | 1 | 1 | 3 | 2 | 6 | 3 | 3 | 27 |
| Regulatory Total | | 46 | 38 | 48 | 39 | 19 | 18 | 32 | 26 | 29 | 25 | 29 | 37 | 386 |

Table 13 Pollution Incident Numbers for 2025 by Asset Type, Severity, and Month for Clean Water

| Clean | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Asset Type | Seriousness | Jan-25 | Feb-25 | Mar-25 | Apr-25 | May-25 | Jun-25 | Jul-25 | Aug-25 | Sep-25 | Oct-25 | Nov-25 | Dec-25 | Total |
| Water Distribution Network | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| | Category 3 | 9 | 3 | 7 | 5 | 5 | 4 | 14 | 8 | 10 | 2 | 10 | 5 | 82 |
| Water Treatment Works | Category 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Category 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Clean Total | | 9 | 3 | 7 | 5 | 5 | 5 | 14 | 8 | 10 | 2 | 11 | 5 | 84 |
| Regulatory Total | | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |

Table 14 Cause of serious pollution incidents in 2025

| Asset Type | Event No | Location | Reported Date & Time | Seriousness | Fault | Cause |
|---|---|---|---|---|---|---|
| Wastewater Treatment Works | 2350952 | Markyate WwTW | 22/01/2025 16:09 | Category 2 | Hydraulic overload and abnormal flow | Infiltration - Groundwater |
| Wastewater Treatment Works | 2357064 | Abingdon WwTW | 09/02/2025 13:18 | Category 2 | Hydraulic overload and abnormal flow | High Rainfall Or Snowmelt - Exceeding Design Capacity |
| Wastewater Pumping Stations | 2358465 | Bricket Wood WwPS | 13/02/2025 18:03 | Category 2 | Blockage | Debris or silt |
| Foul Sewer | 2365884 | Northwood | 11/03/2025 09:45 | Category 2 | Blockage | Fat / Grease |
| Foul Sewer | 2373738 | Yeading | 31/03/2025 16:39 | Category 2 | Blockage | Fat / Grease |
| Foul Sewer | 2377184 | Harrow Weald | 09/04/2025 16:48 | Category 2 | Blockage | Roots |
| Foul Sewer | 2377390 | Totteridge | 10/04/2025 10:53 | Category 2 | Third party issue | Foreign Object |
| Wastewater Treatment Works | 2386868 | Hartley Wintney WwTW | 12/05/2025 00:18 | Category 2 | Blockage | Paper / Rag |
| Wastewater Treatment Works | 2391418 | Bracknell WwTW | 26/05/2025 20:47 | Category 2 | Process capacity and design | Asset Out Of Service |
| Foul Sewer | 2392699 | Woodside | 31/05/2025 18:03 | Category 2 | Blockage | Fat / Grease |
| Water Distribution Network | 2401368 | Chingford | 27/06/2025 09:46 | Category 2 | Network burst | Network Asset Failure |
| Rising Main | 2404431 | Little Milton | 05/07/2025 12:30 | Category 2 | Structural issue | Defect |
| Foul Sewer | 2406494 | Bromley | 11/07/2025 11:08 | Category 2 | Blockage | Paper / Rag |
| Foul Sewer | 2411697 | Headley | 24/07/2025 01:54 | Category 2 | Blockage | Paper / Rag |
| Foul Sewer | 2415968 | Broxbourne | 06/08/2025 16:07 | Category 2 | Blockage | Paper / Rag |
| Foul Sewer | 2417029 | Potter's Bar | 10/08/2025 15:09 | Category 2 | Blockage | Paper / Rag |
| Surface Water Sewer and associated outfalls | 2417194 | Cutteslowe | 11/08/2025 09:50 | Category 1 | Structural issue | Defect |
| Wastewater Treatment Works | 2428739 | Aldershot WwTW | 15/09/2025 23:49 | Category 2 | Equipment failure | Poor Asset Condition |
| Surface Water Sewer and associated outfalls | 2432994 | Horsell | 01/10/2025 12:35 | Category 2 | Third party issue | No Thames Water Asset Involved |
| Foul Sewer | 2435266 | Waverley | 10/10/2025 13:55 | Category 2 | Blockage | Paper / Rag |
| Wastewater Treatment Works | 2438073 | Aldershot WwTW | 23/10/2025 04:18 | Category 2 | Process capacity and design | Incorrect Asset Configuration Or Design |
| Water Distribution Network | 2440789 | Charlton | 06/11/2025 09:55 | Category 2 | Third party issue | No Thames Water Asset Involved |
| Foul Sewer | 2441297 | Stone | 08/11/2025 03:04 | Category 2 | Blockage | Roots |
| Wastewater Treatment Works | 2452831 | Fleet WwTw | 26/12/2025 18:49 | Category 2 | Process capacity and design | Plant Design Fault |

Table 15 % of Asset Type shows distribution within each asset.

Note: Percentages are calculated from incident counts and rounded to whole numbers for presentation. Due to rounding, totals may not equal exactly 100%.

| Asset Type | Primary Cause | Secondary Cause | % of Asset Type | % of all Pollutions | % of all Pollutions |
|---|---|---|---|---|---|
| Combined Sewer and associated outfalls | Blockage | Fat / Grease | 100% | 0.3% | 1 |
| Foul Sewer | Blockage | Paper / Rag | 24% | 12.4% | 48 |
| | | Fat / Grease | 20% | 10.6% | 41 |
| | | Debris or silt | 10% | 5.4% | 21 |
| | | Roots | 10% | 5.4% | 21 |
| | Hydraulic overload | High Rainfall Or Snowmelt - Exceeding Design Capacity | 8% | 4.4% | 17 |
| | Structural issue | Defect | 7% | 3.9% | 15 |
| | Cause unidentified | Cause Unidentified | 4% | 2.1% | 8 |
| | Structural issue | Collapse | 4% | 2.1% | 8 |
| | Third party issue | Misconnection | 3% | 1.8% | 7 |
| | Hydraulic overload | Infiltration - Groundwater | 3% | 1.6% | 6 |
| | Blockage | Scale / Limescale | 1% | 0.5% | 2 |
| | Third party issue | Fly Tip | 1% | 0.5% | 2 |
| | Equipment failure | Electrical Burnout | 0% | 0.3% | 1 |
| | Human error | Competency / Training Issue | 0% | 0.3% | 1 |
| | Hydraulic overload | Inundation - Natural / Fluvial Flooding | 0% | 0.3% | 1 |
| | Structural issue | Corrosion | 0% | 0.3% | 1 |
| | Third party issue | Foreign Object | 0% | 0.3% | 1 |
| Rising Main | Structural issue | Defect | 72% | 3.4% | 13 |
| | Blockage | Debris or silt | 6% | 0.3% | 1 |
| | | Paper / Rag | 6% | 0.3% | 1 |
| | Human error | Accidental Error | 6% | 0.3% | 1 |
| | Structural issue | Collapse | 6% | 0.3% | 1 |
| | | Structural Failure / Defect | 6% | 0.3% | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Surface Water Sewer and associated outfalls | Cause unidentified | Cause unidentified | 38 % | 2.8 % | 11 |
| | Blockage | Paper / Rag | 14 % | 1.0 % | 4 |
| | Third party issue | Misconnection | 14 % | 1.0 % | 4 |
| | | Fly Tip | 10 % | 0.8 % | 3 |
| | Structural issue | Defect | 7 % | 0.5 % | 2 |
| | Blockage | Roots | 3 % | 0.3 % | 1 |
| | Human error | Accidental Error | 3 % | 0.3 % | 1 |
| | | Competency / Training Issue | 3 % | 0.3 % | 1 |
| | Third party issue | No Thames Water Asset Involved | 3 % | 0.3 % | 1 |
| | | Accidental Damage | 3 % | 0.3 % | 1 |
| Wastewater Pumping Stations | Equipment failure | Motor Control Failure | 20 % | 1.0 % | 4 |
| | Power failure | Power Failure (Grid) | 20 % | 1.0 % | 4 |
| | Cause unidentified | Cause unidentified | 15 % | 0.8 % | 3 |
| | Hydraulic overload | High Rainfall Or Snowmelt - Exceeding Design Capacity | 10 % | 0.5 % | 2 |
| | Airlock | Control / Pump Control | 5 % | 0.3 % | 1 |
| | Blockage | Debris or silt | 5 % | 0.3 % | 1 |
| | | Paper / Rag | 5 % | 0.3 % | 1 |
| | Equipment failure | Poor Asset Condition | 5 % | 0.3 % | 1 |
| | | Asset In Place, But Unavailable | 5 % | 0.3 % | 1 |
| | | Electrical Fault | 5 % | 0.3 % | 1 |
| | Third party issue | Accidental Damage | 5 % | 0.3 % | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Wastewater Treatment Works | Process capacity and design | Plant Design Fault | 20 % | 6.0 % | 23 |
| | Human error | Competency / Training Issue | 9 % | 2.6 % | 10 |
| | Equipment failure | Poor Asset Condition | 9 % | 2.6 % | 10 |
| | Blockage | Paper / Rag | 8 % | 2.3 % | 9 |
| | Process capacity and design | Asset Out Of Service | 7 % | 2.1 % | 8 |
| | Blockage | Debris or silt | 7 % | 2.1 % | 8 |
| | Hydraulic overload and abnormal flow | Infiltration - Groundwater | 7 % | 2.1 % | 8 |
| | Process capacity and design | Incorrect Asset Configuration Or Design | 4 % | 1.3 % | 5 |
| | Human error | Accidental Error | 4 % | 1.3 % | 5 |
| | Equipment failure | Design Fault | 3 % | 1.0 % | 4 |
| | Telemetry and control | ICA - Configuration Issue | 3 % | 1.0 % | 4 |
| | Blockage | Environmental Detritus | 2 % | 0.5 % | 2 |
| | Equipment failure | End Of Asset Life | 2 % | 0.5 % | 2 |
| | Power failure | Power Failure (Grid) | 2 % | 0.5 % | 2 |
| | Telemetry and control | Design Fault | 2 % | 0.5 % | 2 |
| | Third party issue | Trade Effluent Discharge | 2 % | 0.5 % | 2 |
| | Telemetry and control | ICA - Telemetry Did Not Reflect Asset State | 2 % | 0.5 % | 2 |
| | Blockage | Fat / Grease | 1 % | 0.3 % | 1 |
| | Cause unidentified | Cause Unidentified | 3 % | 1.0 % | 4 |
| | Equipment failure | Electrical Burnout | 1 % | 0.3 % | 1 |
| | Structural issue | Corrosion | 1 % | 0.3 % | 1 |
| | Third party issue | Fly Tip | 1 % | 0.3 % | 1 |
| | Telemetry and control | Ica - Mechanical Switch Failure | 1 % | 0.3 % | 1 |
| | Hydraulic overload and abnormal flow | High Rainfall Or Snowmelt - Exceeding Design Capacity | 1 % | 0.3 % | 1 |
| | Hydraulic overload and abnormal flow | Inundation - Burst Water Main | 1 % | 0.3 % | 1 |

Table 16 Most significant causal & contributory factors for 2025 blockage-related pollution incidents

| Category | Sub-category | Causal and contributory factor | % |
|---|---|---|---|
| External and Other | Customers and third parties | Ineffective customer programmes (e.g. Bin It campaigns) | 39 % |
| | | Failure to manage Polluted Surface Water Outfall risk | 4 % |
| | Weather / Environment | Reasonable mitigation not possible / practicable / extreme weather | 13 % |
| | | Failure to prepare reasonable mitigation for expected conditions | 1 % |
| People and Organisational | Capability and training | Competency issue (Field) | 3 % |
| | | Person not trained (Field) | 0 % |
| | Communication | Failure to communicate critical information effectively (Control) | 1 % |
| | Resource availability or capacity | Lack of TW resource out of hours (Control) | 2 % |
| | | Lack of TW resource out of hours (Field) | 1 % |
| Processes and Procedures | Asset management | Asset maintenance / replacement strategy inadequate | 7 % |
| | Fixed asset availability | Out of service awaiting repair / upgrade | 1 % |
| | | Compromised or defective asset | 1 % |
| | Planned work | Absent / ineffective prevention activities (e.g. sewer surveys, cleaning, etc.) | 5 % |
| | | Failure / delay in completing planned Ops activity | 4 % |
| | Predictive monitoring and modelling | Absent / inadequate processes for performance monitoring & risk prediction | 13 % |
| Technology | Monitors and alarms | Failure / absence of new asset installation / replacement programme (SDMs) | 1 % |
| | | SDM alert missed by OCC (in hours) | 1 % |
| | | Failure to configure / calibrate asset / receiving systems correctly | 1 % |


Thames
Water