STORMHARVESTER

CASE STUDY

ANGLIAN WATER

Tackling Inflow and Infiltration in the Wastewater Network.

Client Anglian Water | Date January 2026

OVERVIEW

TURNING INSIGHT INTO IMPACT:

20%

I&I REDUCTION

600 HRS

SEWAGE PUMPING STATION TIME

StormHarvester and Anglian Water cut infiltration and ingress into wastewater network by 20%, saving 600 hours sewage pumping station time.

Hydraulic overloading occurs when too much water enters the wastewater network, often due to heavy rain or surface water, causing it to overflow.

This is a major operational challenge for Anglian Water and contributed to 23% of pollution events during AMP7 (2020-2025). That's why Anglian Water partnered with StormHarvester to take a smarter, data-driven approach.

With StormHarvester, Anglian Water could identify high -risk areas where inflow and infiltration were entering the network and tackle the root causes accordingly.

The complexity of ingress and infiltration come from multiple overlapping sources:

- Surface water ingress (from highway surface runoff)
- Groundwater Infilration (Usually infiltrating through cracks, damaged open joints, or manholes, creating excess "clear water" entering the foul sewer network)
- Misconnections (from roads and paved areas misconnected to the network and surface water connection into foul water sewers from properties)
- Fluvial flooding (overflowing streams, rivers and watercourse)

Each source demands a tailored response, making advanced analytics and collaboration essential for effective intervention.

THE CHALLENGE

OVERVIEW

HOTSPOT AREA

One hotspot area experienced repeat pollution events and had been an ongoing focus of improvement.

The suspected causes had been identified, however validation through traditional investigations were costly, time-consuming, and often inconclusive. Anglian water needed a way to:

- Validate assumptions
- Sense-check findings
- Prioritise actions based on accurate, actionable data

APPROACH

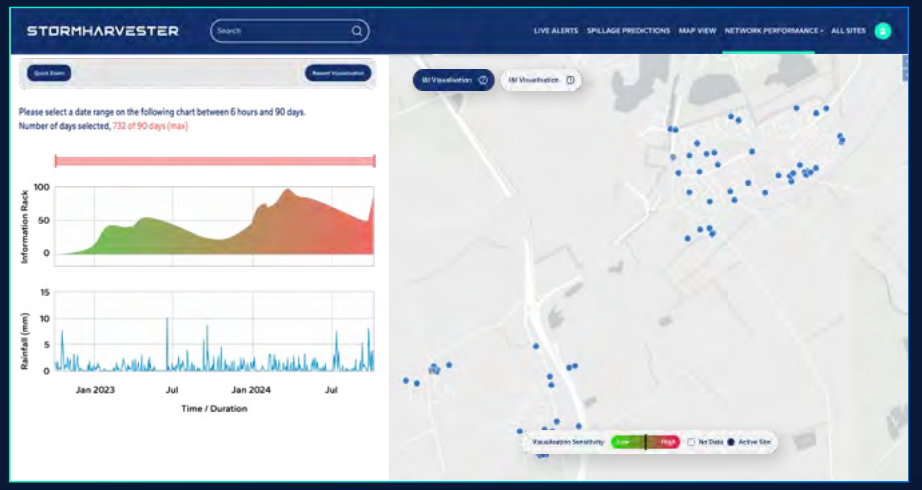
ADVANCED ANALYTICS

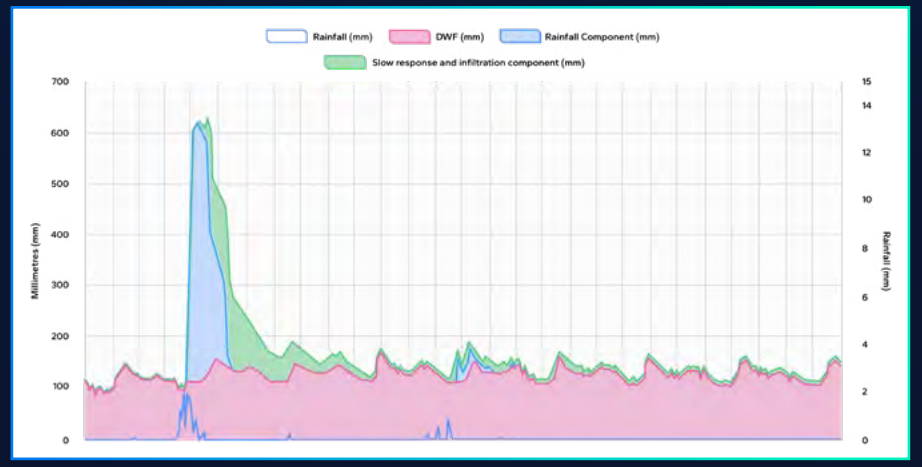
Anglian Water deployed StormHarvester's inflow and infiltration detection technology to gain a holistic view of network behaviour. This partnership enabled:

- Rapid validation of root causes for recurring incidents
- Targeted investigations guided by real-time data
- Identification of infiltration and ingress hotspots across the network

StormHarvester's advanced analytics transformed network data into clear insights, empowering Anglian Water to make data-led decisions and optimise resources.

The area in question was known to experience issues at a downstream pumping station due to inflow and infiltration. Advanced analytics on sensor data allowed the quantity and location of inflow and infiltration to be better understood.





RESULTS

ANALYSIS

TRUE SCALE

The analysis revealed the true scale and nature of hydraulic overloading in the area:

1K+

Instances of infiltration detected

£2.4M

Anglian Water were able to take action as a result; with the outputs directly informing £2.4M of targeted interventions for delivery in this and the next AMP period.

303

Inflow connections, equivalent to 60,000 m² of connected area

Roughly 6.9 Olympic - Size swimming pools of additional water entering the network

MEASURED IMPACT

IMPROVEMENTS

Performance was tracked across two winter periods in 2023 and 2024:

20%

TOTAL REDUCTION

20% total reduction in flow attributed to ingress, inflow, and infiltration

TESTIMONIAL

After rigorous testing of both the theory and the tool, it became clear that StormHarvester I&I tool significantly enhanced the precision of our investigations. The accuracy of StormHarvester's I&I tool proved exceptional, saving considerable time and delivering tangible benefits. This data-driven methodology enabled us to adopt a Business-as-Usual (BAU) approach, investigating infiltration and inflow at the most critical times of the year when it was likely to peak.

Luke Murphy

Investigation & Resolution Manager

Anglian Water

MEASURED IMPACT

FIG: 1

MANHOLE LEVEL DATA

Image shows the levels on flow in the system prior to the implementation of StormHarvester.

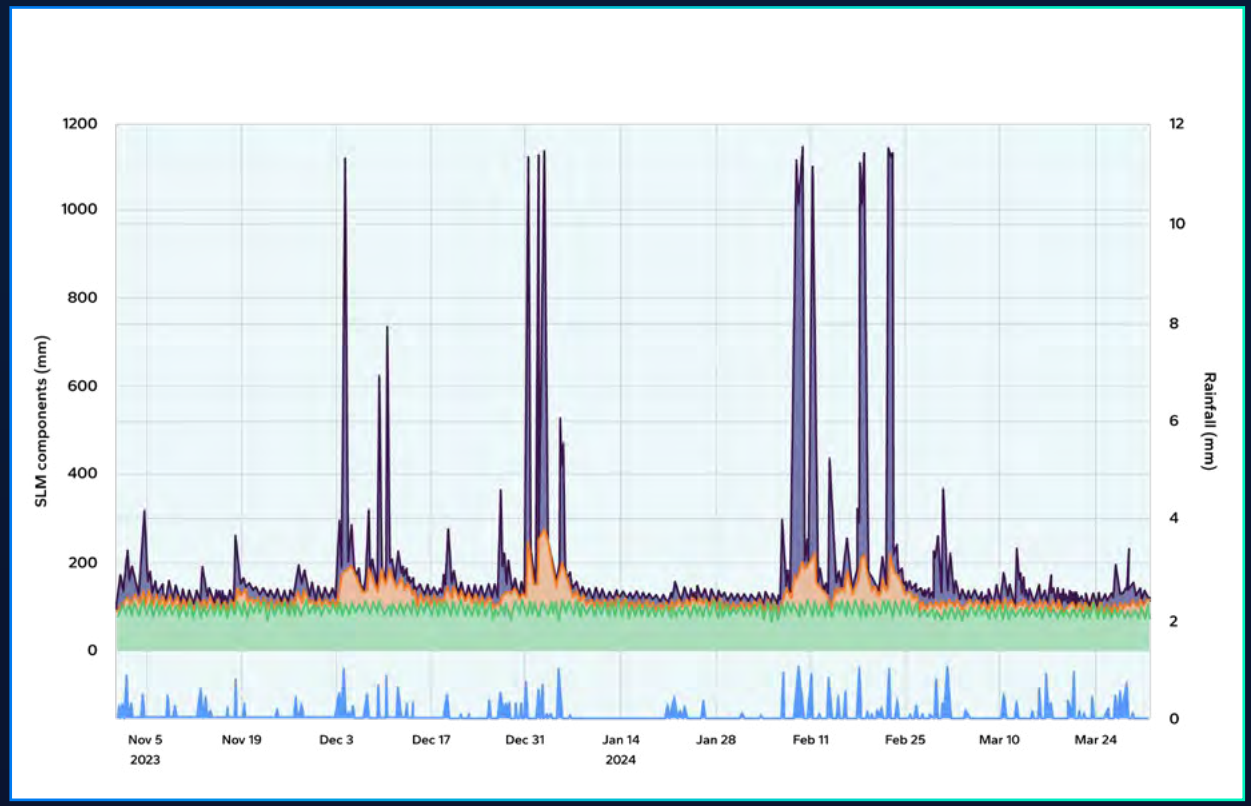


FIG: 2

IMPROVEMENT AFTER ACTION

Image shows the improvement after action taken by Anglian Water as a result of the insights provided by StormHarvester

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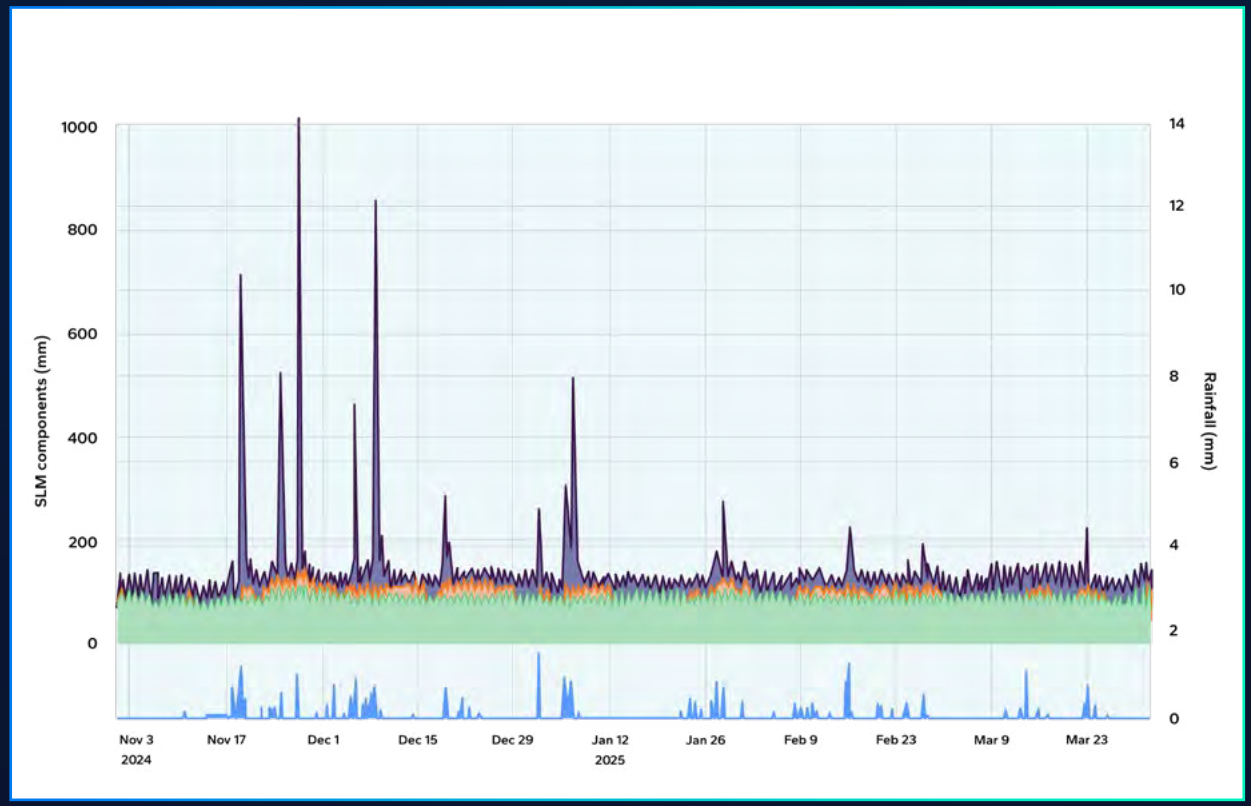

SEWAGE PUMPING STATION

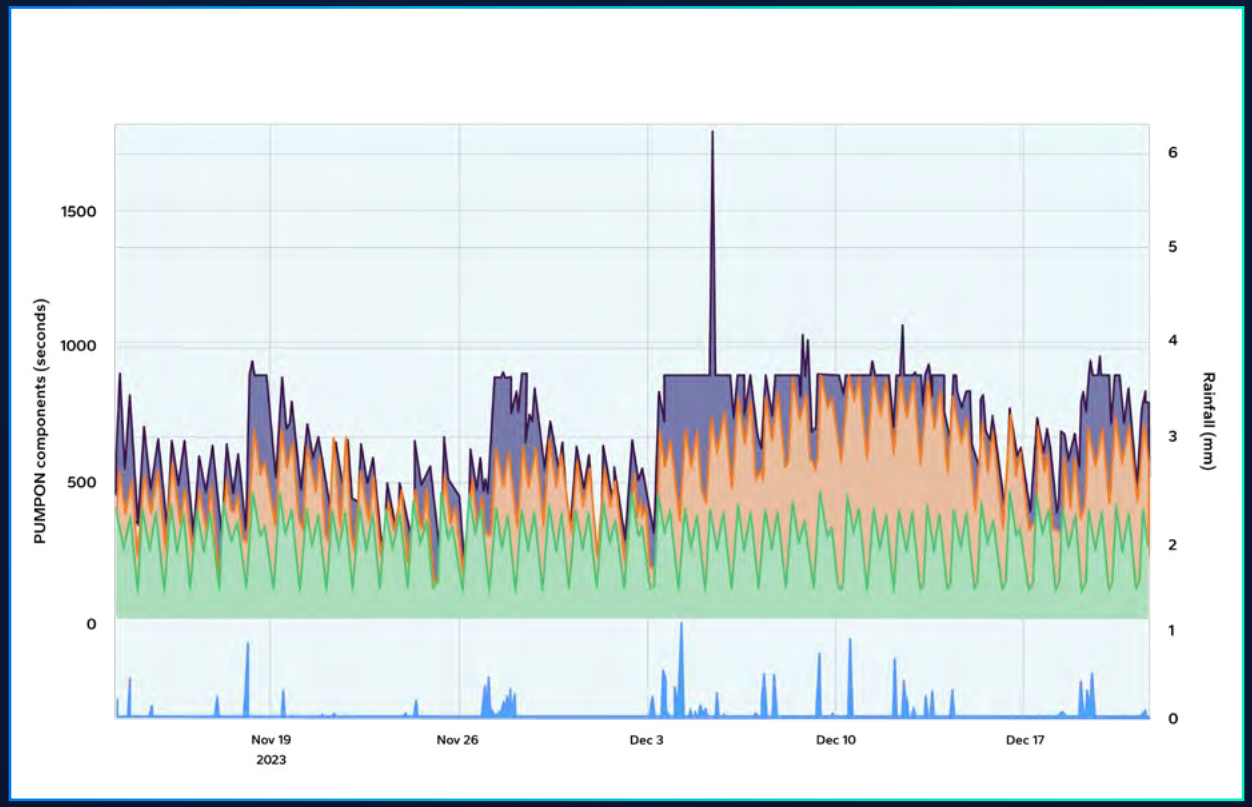

FIG: 3

SPS RUN TIME DATA

Almost 600 hours less pump run time, delivering significant operational and energy savings.

FIG: 4

BREAKDOWN

The breakdown of time the pumps ran the following winter after mitigation actions were taken by Anglian Water. The total pump run time is almost 600 hours less.

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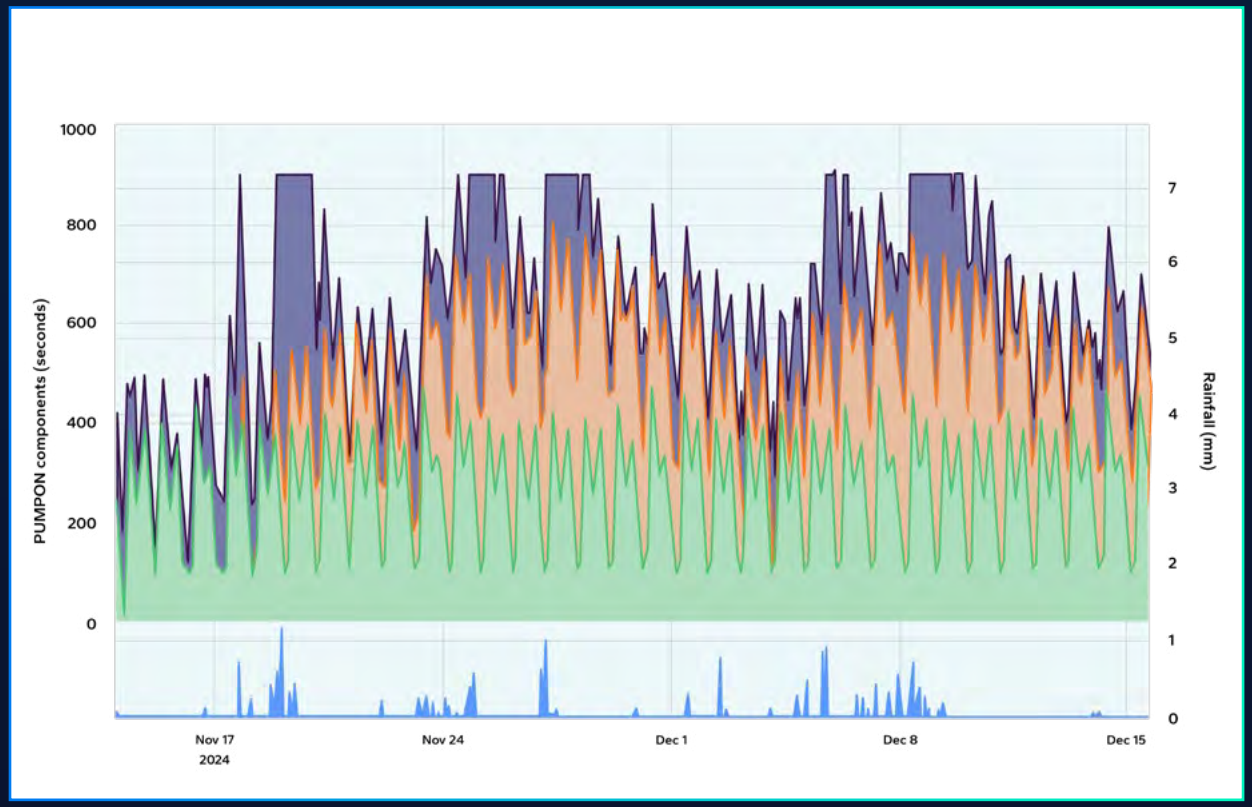

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CONCLUSION

COLLABORATION

THE PARTNERSHIP

Anglian Water's collaboration with StormHarvester combined network data with advanced analytics to gain a clear, actionable understanding of the factors driving hydraulic overloading. This partnership:

- Validated existing knowledge
- Guided cost-effective, targeted interventions
- Supported environmental compliance
- Reduced public impact
- Optimised future investment planning

StormHarvester's technology proved critical in turning complex data into decisions that deliver measurable results.

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