STORMHARVESTER

Proactive Sewer Monitoring and Intervention

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anglianwater

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BACKGROUND

StormHarvester and Anglian Water began working together in 2022 as part of Anglian Water's Dynamic Sewer Visualisation (DSV) programme.

The Anglian Water Dynamic Sewer Visualisation (DSV) programme was launched in February 2023. Their proactive sewer monitoring programme was designed to identify restrictions in the network before they turned into an escape and cause negative impact on their customer and the environment.

To date, StormHarvester has installed 50,000 sensors, providing analytics to Anglian Water to allow for wastewater insights and blockages to be proactively identified.

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THE CHALLENGE

Sewer blockages are a major cause of pollution and flooding incidents, often only detected once damage has occurred. Anglian Water needed a way to:

- Detect developing blockages early, to get ahead of potential issues before they become a negative impact.

- Prioritise high-risk areas such as known pollution or flooding hotspots.

- Move away from a reactive approach and build a scalable solution for proactive risk reduction.

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OUR APPROACH

StormHarvester provided the analytics for the DSV programme by integrating its machine learning platform and hyperlocal rainfall prediction technology into Anglian Water's operational systems.

StormHarvester deployed over 50,000 sensors across Anglian Water's network, while monitoring sewer behaviour, identifying early-stage blockages and establishing restrictions before they became critical.

These insights were actioned by Anglian Water's reactive and proactive teams, enabling smarter decision-making and targeted intervention.

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RESULTS

The collaboration between StormHarvester and Anglian Water has delivered significant operational and environmental benefits.

Since launching the programme, **5,123 jobs** resulted in a proactive blockage often getting smaller easy to clear blockages rather than massive blockages that can take some time to clear.

StormHarvester's platform **achieved a 70% hit rate on predicted blockages**, demonstrating high accuracy and actionable insight. Crucially, many of these blockages occurred in high-risk areas, including 729 pollution-prone and 4,394 flood-risk locations.

Anglian Water Expanded their Dynamic Sewer Visualisation programme to **42,000 monitors**. This resulted in a **418% increase in proactive blockage clearance** making the programme one of the largest in the UK.

The programme's success was made possible through close collaboration between Anglian Water, sensor providers, and StormHarvester for proactive sewer management.

StormHarvester has been key to this milestone and proactive risk reduction, without being able to proactively identify restrictions forming in their sewers Anglian Water would be blind to some of the near misses. It not only reduced the number of near-misses and potential pollution incidents but has also established a data-driven way of working, setting a strong foundation for continued innovation in proactive sewer management.

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EXAMPLE BLOCKAGE 1

14 July: Sewer level breaches threshold. StormHarvester system generates an alert to Anglian Water.

15 July: Utility crew attended the site and removed the blockage. Rags causing the obstruction were retrieved, the alarm was cleaned, and normal service was restored.

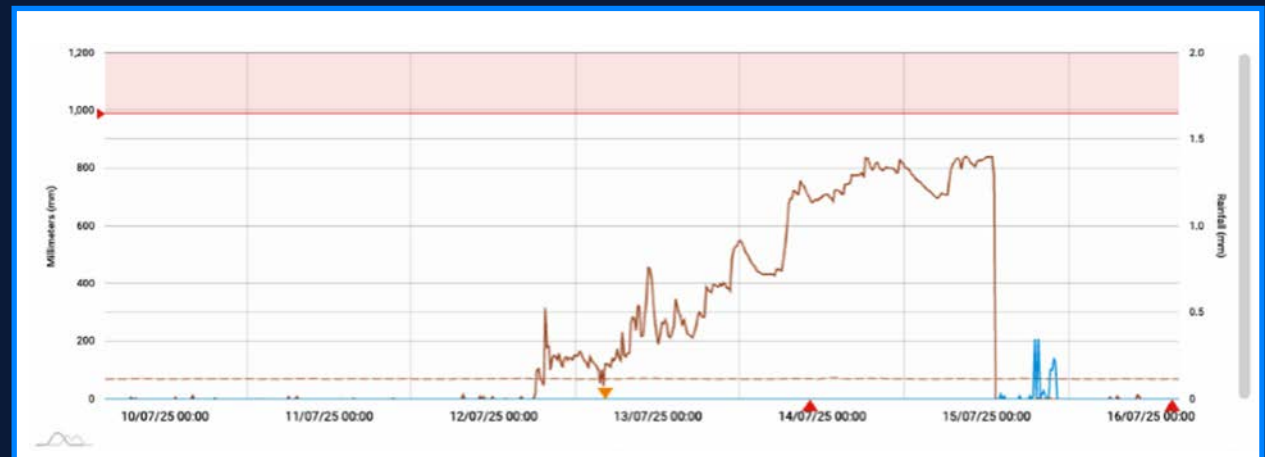**16 July:** Sewer level returns to previous behaviour within thresholds.

EXAMPLE BLOCKAGE 2

13 July: Sewer level breaches threshold. StormHarvester system generates an alert to Anglian Water.

15 July: Utility crew attend site and removed blockage.

16 July: Sewer level returns to previous behaviour within thresholds.

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