

ANGLIAN ADOPTS OVARRO'S COMPLETE WASTEWATER ANALYTICS SOLUTION



THE CHALLENGE

Water companies in England and Wales plan a significant investment (2025-2030) to reduce sewage spills and pollution, focusing on minimizing rising main sewer bursts. These pressurized pipes carry wastewater and pose ecological risks if they burst. Historically, technical and logistical limitations in monitoring have relied on public reports of bursts, leading to delayed responses. Advancements in proactive network monitoring, driven by technology, aim to mitigate pollution incidents, shifting from reactive to preventative strategies under AMP8 plans.

PUMPINSIGHT
BLOCKAGEDetect
BURSTDetect

THE SOLUTION

Anglian Water is the largest water and sewerage company in England and Wales geographically, managing a sewer network of 76,000km, which includes 6,000 rising mains. The company's 2023-2025 pollution reduction plan reports that in 2022, 9% of pollution incidents were attributed to burst rising mains. In spring 2022, Anglian Water became the first utility to adopt BurstDetect, Ovarro's artificial intelligence (AI) led system uses machine learning to detect rising main sewer bursts before pollution occurs.

Following this, the utility purchased BlockageDetect which analyses data from the same assets to alert to sewer blockages. In February 2024, it adopted PumpInsight, a secondary component platform that uses AI, including machine learning, to monitor telemetered pumping stations and detect performance issues to support predictive pump maintenance. Anglian Water has applied Ovarro's data-driven early-warning technology across all rising main sewers, meaning bursts and blockages are detected before serious pollution occurs. Anglian Water pledges in its 2025-2030 draft business plan to eliminate serious pollution and reduce the total number of pollution incidents by 40%, with a strategy that includes bringing in machine learning.



WATER



MANAGED SERVICES



UNIQUE ALGORITHMS

BurstDetect and BlockageDetect, cloud-based platforms with unique algorithms, analyze data from rising mains to detect bursts and blockages. Alerts are sent to operators for early response, presented on the Ovarro Atrium platform. They can be applied to most pumping stations, requiring no extra hardware for full network coverage. In 2022, they helped Anglian Water detect 50 bursts, preventing pollution incidents. Over 2,000 alerts have been generated with a 70% accuracy rate, informing rehabilitation programs for 42 rising mains. The systems are self-learning, improving alert accuracy over time.



“Our focus continues to be the implementation of new smart technologies and integrating these with our business-as-usual approaches in our quest to become preventative rather than reactive. BurstDetect, BlockageDetect and PumpInsight will be a key part of this.”
Paul Louth, head of water recycling networks at Anglian Water



INNOVATIVE PUMP MONITORING

Ovarro's PumpInsight platform utilises advanced AI and machine learning to monitor pump efficiency, reducing the risk of unplanned failures and pollution incidents. Anglian Water praises BurstDetect and BlockageDetect for identifying rising main incidents, highlighting their potential to further enhance pollution prevention. Collaboratively developed with UK water companies, Ovarro's suite of solutions underscores Anglian Water's dedication to innovation and pollution reduction. Gavin Russell, regional manager at Ovarro, said: “Our suite of proactive wastewater solutions - BurstDetect, BlockageDetect and PumpInsight - was developed in collaboration with UK water companies, in response to the sector's challenge to cut pollution sustainably and cost-effectively. We worked closely with Anglian Water on the implementation of the systems, and we're pleased the technology is effectively supporting pollution reduction goals. By adopting our full suite of AI-driven wastewater solutions, Anglian Water proves its commitment to cutting pollution by embracing innovation and machine learning.

KEY DELIVERABLES

- Cutting-edge AI and machine learning technologies
- Proactive data-driven insights
- Real-time burst and blockage detection
- Enables predictive maintenance strategies
- Enhanced operational efficiency
- Seamless integration with existing infrastructure

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