Thames Water

HWM Global

case study

Tackling Fatberg Risks with Early Blockage Detection

HWM Global's SpillSens blockage detection solution helps water companies detect rising sewer levels before a blockage develops, enabling quick intervention to prevent pollution incidents.

Despite ongoing improvements, blockages still cause costly clean-ups, environmental damage, and sewage flooding affecting thousands of homes each year. With new developments adding strain to ageing networks, early visibility of rising sewer levels is critical to prevent disruption.

Recent discoveries of exceptionally large fatbergs beneath major cities have highlighted the scale of the problem. Weighing hundreds of tonnes and formed over long stretches of sewer, these blockages require extensive engineering effort to remove and can take months to fully clear. Each instance underscores how quickly FOG build-up can escalate into a major obstruction capable of causing widespread flooding if it goes unnoticed.

Water companies now invest heavily in proactive approaches to detect blockages before they develop. The increasing frequency of fatberg discoveries has made it clear that traditional inspection methods alone are no longer enough; utilities need continuous, real-time insight into what is happening underground.

To strengthen their digital wastewater strategy, Thames Water began deploying HWM Global's SpillSens system as part of a broader programme of sewer level monitoring. Designed specifically for wastewater environments, SpillSens provides early alerts when water levels start to rise, often the first indication that a blockage is forming downstream. Rising levels trigger alarms that help teams respond quickly, long before the situation escalates into a flood or pollution incident.

"SpillSens is an important tool in our armoury in the fight against sewer blockages. The data it provides gives us a picture of what's happening in our sewers and helps us to nip blockages in the bud before they cause problems."

Head of Operations, Thames Water

Thames Water's operational teams recognise SpillSens as an important tool that allows them to "nip blockages in the bud," providing detailed insight into sewer behaviour and enabling targeted, preventative maintenance. With real-time level data illuminating emerging risks, teams are able to act confidently and decisively, reducing the number of emergency responses and avoiding the severe consequences of uncontrolled sewer flooding.

The growing number of blockages being identified before they cause pollution or customer impact demonstrates the tangible value of early-warning technology. SpillSens supports smoother network performance, reduces operational burden and helps utilities focus resources where they are needed most.