CASE STUDY SEWER LEVEL MONITORING

Industry: Water Utilities

CHALLENGES

- ± 15 blockages per month costing approximately $200-$300k
- Risk to public and environmental health
- Wasted time and resources identifying and resolving overflow incidents

RESULTS

- Reduced frequency of overflow incidents
- Decreased risk to public and environmental health
- Saved incident response resources and associated costs

A major Australian water utility based in New South Wales is responsible for the management of over 26,000 kilometers of network pipes that collects over 1.5 billion liters of wastewatereach day. Due to the sheer scale of network infrastructure, sewerage service interruptions can occur hundreds of times over a year period in the form of mains breaks and blockages, resulting in overflows.

Following the implementation of the Captis solution, the enduser has gained real-time data to assist in the identification of potential sewer overflows, allowing for the proactive resolution of network issues and a substantial reduction in overflow events. As a result, everyday operations are optimised with less network interruptions and risk to public and environmental health is decreased, representing improved compliance to EPA regulations.

Previously, no automated method of identifying these overflows existed, with the water utility relying on members of the community to alert them of the incident. The delayed identification and rectification of the sewage overflow often resulted in a risk to public and environmental health, wasted time and resources of the water utility, and the risk of hefty EPA fines.

The Captis solution was implemented by the water utility to proactively manage sewage overflows through localised monitoring of sewer risers, introducing the ability to identify issues before an overflow can occur. A fleet of 2000+ Captis devices (including Captis Pulse Lite EA and Captis Multi) were deployed to the sewer network and were configured to log and send data daily, in addition to immediate alerts on high level sewer events. The Captis on-board alarm processing allows for configurable signal debounce to prevent false triggers as well as immediate transmission on events. Additionally, the broken wire input is utilised to detect disconnection or damage of the float switch high-level sensor.