



## Pumping Station Flow Monitoring - Rapid Deployment, Cost Reduction, & No Disruption.

In this two-pump station, Thames Water was interested in monitoring pump station performance along with checking the individual condition and efficiency of each pump. While much can be inferred from derived flow calculations, direct flow monitoring is much more informative about pump station operation. The usual way to achieve that would be by installing a magflow type meter. In this case, that would have required groundwork, including the building of a separate chamber adjacent to the existing pumping station to house extra pipework and the magflow meter. Given the position of the station, by a busy 'A Road', that work would probably have required traffic control to be put in place.

Instead, a FlowPulse unit from Pulsar Measurement was used. Completely non-invasive, FlowPulse installation is through a simple band and a silicon pad to make close contact with the pipe, and the unit can be positioned

close to pipe bends or flanges. FlowPulse works by 'firing' an ultrasound pulse from a high output ceramic crystal through the pipe wall and analyzing the flow using a novel signal analysis technique called Refracted Spread Spectrum Analysis (RSSA), which can consolidate the real flow information from the mass of signals coming from the particles, bubbles, turbulence, vortices, and eddies within the flowing liquid.

Cost saving was of course important but, by using FlowPulse, Thames Water was also able to avoid extensive groundwork and did not affect station flow, so there was no disruption to local traffic or neighboring properties, and no need to tanker sewage away. The FlowPulse was installed with Pulsar's optional Flow Monitor controller to power the unit and to provide a local display of flow rate.

### More Information



**Flow Monitor:** <https://pulsarmeasurement.com/flow-monitor.html>

**FlowPulse:** <https://pulsarmeasurement.com/flowpulse->



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