



**ANCALA**  
WATER SERVICES

CASE STUDY

# Reducing Leakage Through Active Pressure Management

## 01 THE BRIEF

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Water is a precious commodity essential for life so here at Ancala Water Services we place the social and environmental benefits of water conservation at the heart of everything we do. On average in the UK, including industrial use, each person consumes more than 100,000 litres per year and water production and use accounts for 6% of all carbon emissions. These are the reasons we are committed to reducing our carbon impact by driving down leakage in our network.

### **Water Pressure Management**

In recent years, our Asset Optimisation experts have developed a sophisticated process for optimising the performance of our assets across the entire water cycle. By considering the impact of our services across the entire ecosystem, we have introduced our **Calm Networks** programme focuses on real time pressure management within water infrastructure.

In simple terms, higher water pressure within water pipes will cause increased losses through even minor pipe defects. As pressure is a major factor in the quantity of water lost reducing that pressure means less water is wasted.

### **TOPIC**

Active Pressure Management

### **AIM OF THE PROJECT**

To reduce leakage across Ancala Water Services' managed sites by using advanced technologies

### **NUMBER OF ANCALA WATER SERVICES SITES**

20 sites identified as the initial trial across our UK network



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Over the course of the last 12 months, we have conducted an extensive survey of our network and shortlisted sites suitable for an active pressure management solution.

As part of our Calm Networks programme we identified 20 locations in which real time technology will have the biggest impact in reducing leakage levels.



Fig 1 – PRV Controller Installed

## 02 THE SOLUTION

The chosen solution is a sophisticated and highly versatile technology for pressure control, with integrated two-way mobile communications. We have the capability to set target pressure by time, flow or by a combination of both. We have also incorporated critical point data loggers which can automatically analyse and calculate network conditions and maintain a stable pressure to continuously optimise the District Metered Area (DMA). The resulting benefits include lowering demand on water resources in the catchment whilst also reducing burst frequency. These benefits in-turn calms the network and so improves the service levels to our customers.

## 03 THE RESULTS

Through our **Calm Network** programme, we will continue to make significant investments in the latest technologies to realise environmental improvements.

Ancala Water Services supports Social Values in line with the UN Goals for Sustainable Development.

20	18,500m <sup>3</sup>	£50,000	4,800
Units Installed	Water Saved	Cost Savings	kg/CO2 per Annum