

# Real time GPRS Step testing

## With Wessex Water

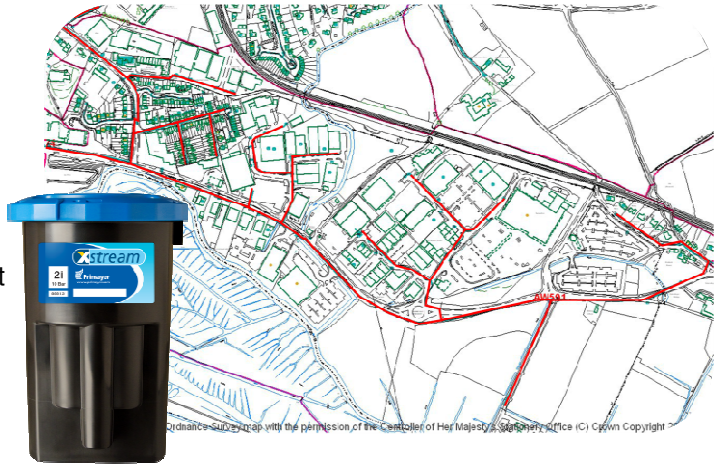
Case Study XS-CS-UK-2.0

### Background

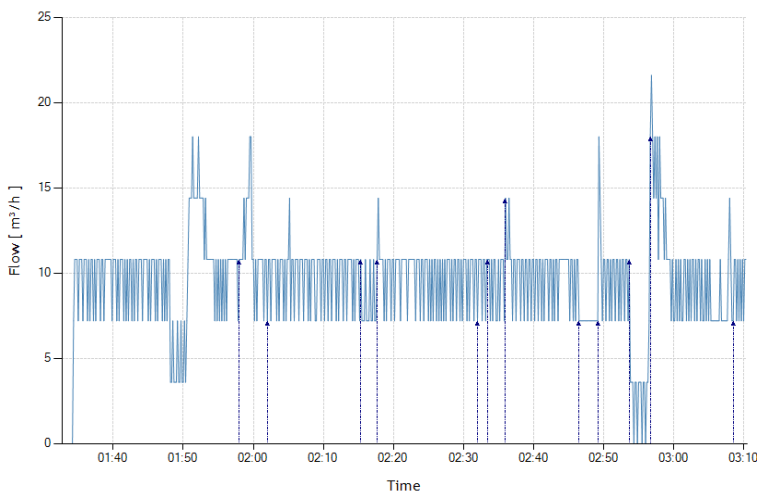
As the percentage of plastic pipes increases in our distribution network so does the difficulty of detecting leaks. More and more companies are finding that they are returning to traditional methods of step testing to pinpoint a smaller area. Then deploying a team to stopcock bash the area identified as having a high demand according to the step test that was carried out. By listening to every fitting it allows a much more thorough sweep where operatives can pick up several leaks, large and small.

### Step test methodology

Wessex Water identified a DMA with an increased nightline to trial **Xstream** for a step test. Their step test method was slightly different to the conventional methods, as they wanted to minimise disruption to supply. They would only close off each shut for 5 minutes, allowing them enough time to gain an accurate flow reading. This flow reading would be subtracted from the flow reading before the shut was closed off. It is this difference that represents the drop, and therefore the biggest drop indicates an area with potential leaks for further detection.



Wessex Water Step Test



### Results

It was clear that shut 6 had the largest drop in flow, as it consumed 7.2m<sup>3</sup>/hr. This shut contained domestic properties and a team on leakage operatives carried out further leak detection in a few hours to discover an abundance of service pipe leaks.

### Paul Hillier

#### Leakage Controller, Wessex Water

*“XStream really makes sense and it’s a very useful piece of kit. It should make reporting of any step test carried out much better and the guys were also impressed with the usability.”*

Shut No.	Reading Before	Time Closed	Reading After	Flow Drop	Time Opened	Comments
1	10.80	01:45	7.20	3.60	01:50	4" Supply to STW
2	10.80	02:00	10.80	-	02:05	
3	10.80	02:15	7.20	3.60	02:18	
4	10.80	02:30	10.80	-	02:32	Small leak on SV when operated
5	10.80	02:43	7.20	3.60	02:45	
6	10.80	02:53	3.60	7.20	02:57	
7	10.80	03:05	10.80	-	03:07	