Finding and fixing hidden leaks and predicting water main bursts before they occur are part of a Hunter Water-first digital innovation trial currently underway.

The 12-month trial will involve using Internet of Things (IoT) devices with data science, and acoustic monitoring technology, to monitor the water pressure and flow in parts of the network at Lake Macquarie and Maitland.

Hunter Water's Chief Information and Technology Officer Richard Harris said the trial was an exciting opportunity for Hunter Water.

“This is a first-of-its-kind digital innovation project for Hunter Water. Intelligent networks will help transform the way we do business, driving better outcomes for our customers and community.

“We’ll be using the latest in Internet of Things (IoT) technologies and data science to more effectively understand the operation of our network. This will involve installing devices like pressure sensors and flow meters on our water infrastructure between Dora Creek and Arcadia Vale.

“These devices, combined with the use of advanced analytics, will enable us to monitor the water flow and pressure in real-time, giving us greater visibility of how the system is performing. Having that visibility will allow us to more quickly find and respond to breaks if they occur, particularly those in remote locations.

“We’ll also be undertaking acoustic monitoring in Louth Park and Glendale. This technology will allow us to listen for water leaks in our network and will alert us if a leak is getting worse.

“Leaks can sometimes be a precursor to a water main break, so the sooner we find leaks, the sooner we can fix them and minimise any potential impact on our customers and community. It will also assist our field crews in their active leak detection work to find and fix leaks that would previously go undetected.

“I’m really pleased to see this trial get underway, which has been made possible through the collaboration of various sections of our business. If successful, we hope to expand it to other parts of our network and apply the learnings to future projects,” said Mr Harris.

To support the rollout of the trial, Hunter Water is installing infrastructure to extend the coverage of the Long Range Wide Area Network (LoRaWAN).