



**Melinda Pavey**  
Minister for Water, Property & Housing

## **MEDIA RELEASE**

Friday, 7 August 2020

### **AUSTRALIAN FIRST TECH TO DETECT WATER LEAKS**

In an Australian first, the NSW Government through Sydney Water, is trialling quantum sensing technology to detect leaking pipes and prevent major water main breaks.

Sydney Water has partnered with NSW Smart Sensing Network (NSSN), Australian National University (ANU) and the University of Canberra (UC) on the project.

Minister for Water, Property and Housing Melinda Pavey said with 23,000 km of underground water pipes across 13,000 square kilometers in the Great Sydney and Illawarra network the maintenance task is a huge one.

“Using the very best technological solutions creates opportunities to do things better and more efficiently and means we can detect problems before they escalate.

“This means a more proactive approach that reduces the need for emergency work and customer disruption and prevents the loss of our precious water resource,” Ms Pavey said.

Mrs Pavey said quantum sensing can see further underground than previous technologies to assess ground conditions without needing to dig.

“Quantum sensing technology measures the gravitational field of the subsurface by detecting density variations underground cause by water,” Mrs Pavey said.

“A leak before a major break will cause water to leak into the surrounding soil. The soil changes from dry to wet, leading to a change in its density.

“Measuring this change in density helps us identify the location of the leak.”

Sydney Water Managing Director Roch Cheroux said Sydney Water were interested in any technology that ultimately leads to less disruption for their customers.

“The data from the trial will be analysed by our university partners to inform future use of the technology on the water network,” Mr Cheroux said.