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Auckland flood alert system trial at three pilot sites need public feedback

Auckland Transport (AT) is trialling automated flood alert systems at three flood-prone sites in the Rodney area and the public is being invited to sign up to alerts triggered by the systems.

Installed at Sunnyside Road in Coastesville, and Kaipara Flats Road and Falls Road in Warkworth, the system has been tailored for each site, considering the local typography, connectivity, road speed and community need. AT is asking locals who regularly use these roads to assist with critical feedback.

Three different systems make up the pilot; a water sensor, a radar sensor and an AI Computer Vison Flood Detection (CVFD) system which uses a CCTV camera as an optical sensor powered by solar panels. The two sensors are set to send alerts when predetermined levels are reached and the CVFD system automatically detects water within an image sequence while digital rulers monitor water levels in real-time, sending alerts when flood water reaches a predefined level or enters a demarcated zone. The alerts from all three are fed into back-end platforms that will then activate the road signage and send an electronic alert via email to those registered.

“We’re asking locals who regularly use the roads being trialled in the pilot to sign up to receive an email when the system is triggered, to help us adapt the technology where possible, get our messaging and timing right with warnings at various levels,” says Murray Burt, Director Infrastructure and Place at AT.

The Auckland pilot will attempt to notify residents who sign up in real time and it is expected there will be technical complexities that need to be worked through initially.

“Adapting the system is critical to us getting it right and being able to install early flood detection warning systems in other flood prone areas. Ideally, we will be able to communicate through other forms of direct messaging once we get the technology right and for this, we really need the public’s help,” adds Murray.

Similar technology is proving effective in other countries impacted by severe weather events such as Australia and the USA.

If the system is proven reliable, the hope is that alerts will be eventually integrated into Auckland Transport's Operations Centre (ATOC) to enable wider communications to be circulated across AT digital channels (website, social media, phone apps etc).

"If we can achieve timely messages to the public, it will help enable AT to warn users about the likelihood of having to utilise alternative routes ahead of any road closures as water levels rise, while digital signs will notify when the road is closed and where possible, of any diversion routes," says Murray.

Aucklanders living in or travelling through the three trial sites are invited to sign up to be part of the trial pilot programme or for more information visit Electronic flood alert pilot (at.govt.nz).

-ENDS-

About Auckland Transport (AT):
AT's mission is to care for, enable and deliver an effective, efficient, and safe transport system that contributes to a more thriving and sustainable Tāmaki Makaurau Auckland and unlocks our potential as a city.

We do this by listening and responding to needs of our customers and communities, bringing players together to take a whole of system view and putting people and places at the heart of how we design and deliver our transport system.

Auckland Transport works to the direction of Auckland Council and central Government through several policies and long-term plans to guide the way the transport system is developed. This helps keep us on track and determines our funding priorities.