Water supply resilience - gathering steam

Recent coverage compels action

The resilience of our region’s water supply infrastructure has been the topic of quite a bit of media coverage over the last couple of months.

People’s understanding about the reality of our situation is increasing. They’re also coming to grips with the likelihood of having to be self-sufficient for at least 7 days after a major earthquake. The coverage translated into a rush on the sale of water storage tanks, with councils reporting their stocks are selling quickly and the producer stepping up supply.

This is good news; the more people and businesses do their bit now, the sooner lives will return to normal and our economy will get back to productivity following an event. Also, increasing awareness will allow people to make informed decisions as they weigh up options presented to them during councils’ consultation on their 2018 Long Term Plans.

“People’s understanding about the reality of our situation is increasing.”
Creating the environment for long-term resilience

The importance of a resilient Wellington is gaining profile with regional and national leaders joining the conversation. They’re considering questions such as what the appropriate levels of service are that Wellington’s integrated infrastructure should and could deliver after a major event. It’ll take several decades to get the region’s core infrastructure to a coordinated, resilient state so we need a united commitment from leaders to deliver the required step change.

To achieve a resilient water supply network, our target is to develop draft investment plans for each of our owner councils to consider for including into their 2018 Long Term Plans. This is the mechanism that prioritises and mandates investment for the work required to build a resilient network.

Utility providers teaming up to promote regional approach to resilience

Momentum is building on developing an integrated plan to focus on improving the resilience of the region’s critical infrastructures, ie water, electricity and roads.

The plan will be supported by an economic study which will describe how investing now to build resilient networks will improve the recovery experience for residents as well as provide better value for money compared to the cost of repairing broken pipes, roads and power lines.

Critical customers

Critical customers are the organisations that’ll have an urgent need for water after a natural disaster to protect human life or facilitate a faster recovery, eg hospitals, schools and aged care facilities. Other infrastructure providers have also identified their critical customers and as expected, most are the same. Over the next few months, the team of regional infrastructure providers will engage critical customers to find out about their requirements, current storage, and their expectations of infrastructure providers.

Meet Rob Blakemore – Chief Advisor Asset Management

Rob describes his 38 year career in the water sector as his passion. He has worked around the world in various water-related roles. Back in New Zealand, Rob worked at Greater Wellington Regional Council on bulk water, and spent 17 years consulting.

He has been involved with a number of national initiatives – as a former Board member and President of Water NZ, as a member of the Ministry of Health’s Sanitary Works Technical Advisory committee and the Drinking Water Standards expert committee. He is a life member of Water NZ and a recipient of the IPENZ (Institution of Professional Engineers New Zealand) Angus award for contribution to utilities.

Outside work Rob gives priority to his close and wider family. As a typical engineer he loves to do DIY for which there is no shortage of work in maintaining a house that is 112 years old with an established garden. He loves (but never has enough time for) sport - especially golf and cricket, getting on the beach with his blokart in a strong northerly as well as reading biographies and history.

Resilience projects underway

All Wellington Water projects are planned with resilience in mind. Part of planning each piece of work includes a review to consider the potential contribution it could make to the resilience of the three water networks. Our investment decisions include weighing up whether investing more in the short term to make an asset or process more resilient will pay dividends in the long term.

Resilience-focussed projects currently underway include:

- Fire hazard mapping.
- Review of studies into saline intrusion of the Waiwhetu aquifer from sea level rise.
- Operational modelling to inform alternative water supply into Wellington. This includes carrying out a multi-criteria analysis to assess options against a range of factors. One of the first steps involves consulting iwi groups on the cultural implications of options.
- Designing the critical network which will serve critical customers after a major event.
- Investigating how to increase the resilience of the bulk water network by creating dual mains.
- Investigating locations to build warehouses that will house emergency supplies to repair the network following a major event.

Find out more at: wellingtonwater.co.nz/projects/regional-priorities/water-supply-resilience/ or visit wellingtonwater.co.nz or phone 04 912 4400