

# Water supply resilience STAKEHOLDER UPDATE

ISSUE 6
AUGUST 2016

Stakeholder
Update

### Resilience remains a priority for Wellington Water

At its recent quarterly meeting, Wellington Water's Board reiterated its priorities for the company. Completing the Water Supply Resilience Programme Business Case and Wastewater Resilience Strategic Case featured on the list. This means our efforts will remain focused on highlighting the issues, fostering relationships to create an environment for success, and developing activities for incorporation into councils' 2018-28 Long Term Plans.

Our investigations, however, have unearthed some information that can't wait until 2018 to progress. For example, our investigations have confirmed that because of the geography of our region and the impact this has on the susceptibility of our water supply network, residents and businesses need to be self-sufficient for seven days following an event such as a major earthquake – a change from past advice. So we're coordinating with councils and other partners to get that message out as soon as possible.

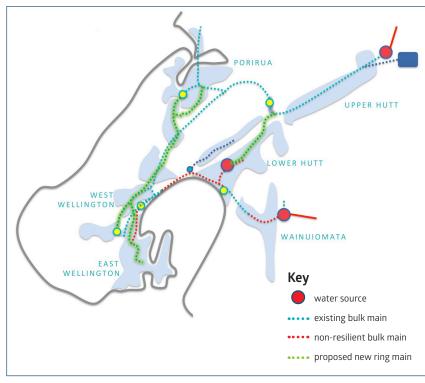
### A new bulk ring network

One of the high priority projects within the water supply resilience programme is the investigation of a new bulk ring network. We're looking at ways of designing and building a new, more resilient bulk water network to ensure each of our cities has two resilient sources of bulk water. A new network would also improve day-to-day operations and reduce likely downtime following an event such as a major earthquake.

Two new bulk ring mains are proposed to carry water between Waterloo and Silverstream, and from Porirua to Wellington.

The configuration of the existing network means if Upper Hutt currently needs bulk water from Waterloo, the water is piped from Lower Hutt along State Highway 2, up State Highway 1 through the Ngauranga Gorge, to Porirua via the Takapu Valley, and along State Highway 58 to Upper Hutt. The water travels over 30km to get 5km up the road!

To make the project manageable, it has been separated into two main phases; the Hutt ring main and the Porirua-to-Wellington ring main



Schematic of proposed bulk network

(broken into three geographically-based sub-projects). Investigations include considering potential routes, constructability, day-to-day operations and estimating the cost for the new networks.

The projects that result from the investigation will be considered in councils' 2018-28 Long Term Plans.

## Survey – will your business keep going when the water goes off?

To inform the planning of network and service improvements, we want to find out how prepared our local businesses are to be self-sufficient if normal water services are not available.

We've launched a **survey** to ask business operators what steps they're taking to prepare their business for being without potable and wastewater services for an extended period.

And thanks to The Tank Guy, we have five 200L and one 800L emergency water storage tanks to give away to six lucky survey respondents.

If you operate a business in the Wellington region, follow the link above (or this URL http://svy.mk/2bl7usg) to fill in the survey and be in to win!

VIN

1 of 5 emergency
water storage
tanks!



The 800L urbawater slimline tank; diameter 770mm, height 1970mm.

#### Containerised desalination

Containerised desalination of sea water is being considered as an option to supply potable water after a major event such as an earthquake. A containerised desalination plant can be set up quickly after an event, is flexible enough to be set up where it's needed and is a cost-effective, short-term solution.

Earthquakes are unpredictable in terms of where they'll happen and the level of damage they would inflict upon the

water network. So having a transportable, temporary option makes sense. While small from an everyday supply perspective, containerised desalination units could supply enough water for up to 50,000 residents while the network is being repaired.

At this stage, the thinking is that units will be flown in from Australia

if/when they're needed.
They could be set up within two-three days of being ordered. The programme business case will include a recommendation to have this option available as part of any emergency response.



