

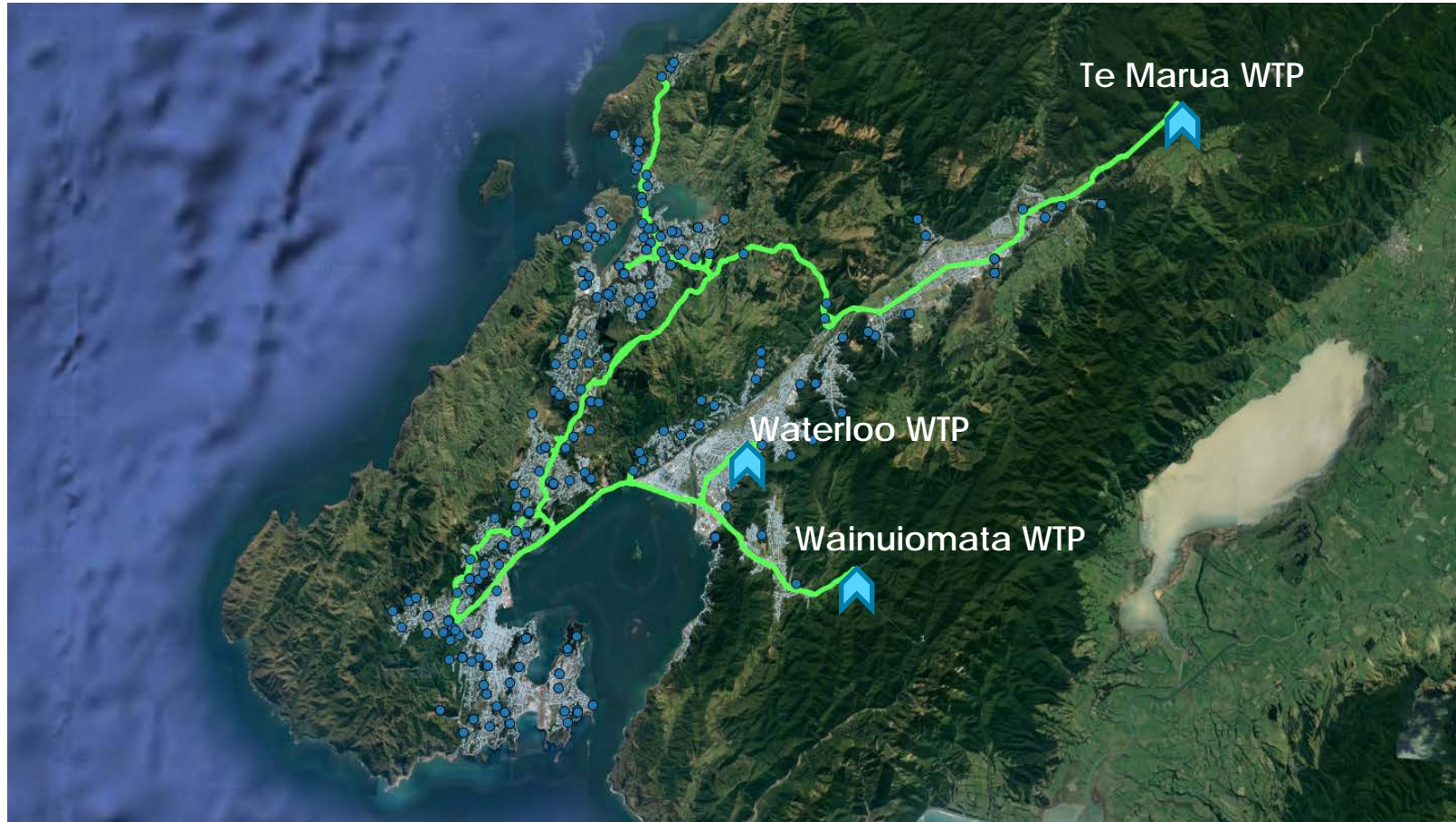
Shaken, not stirred
Water supply network resilience
in the Wellington region



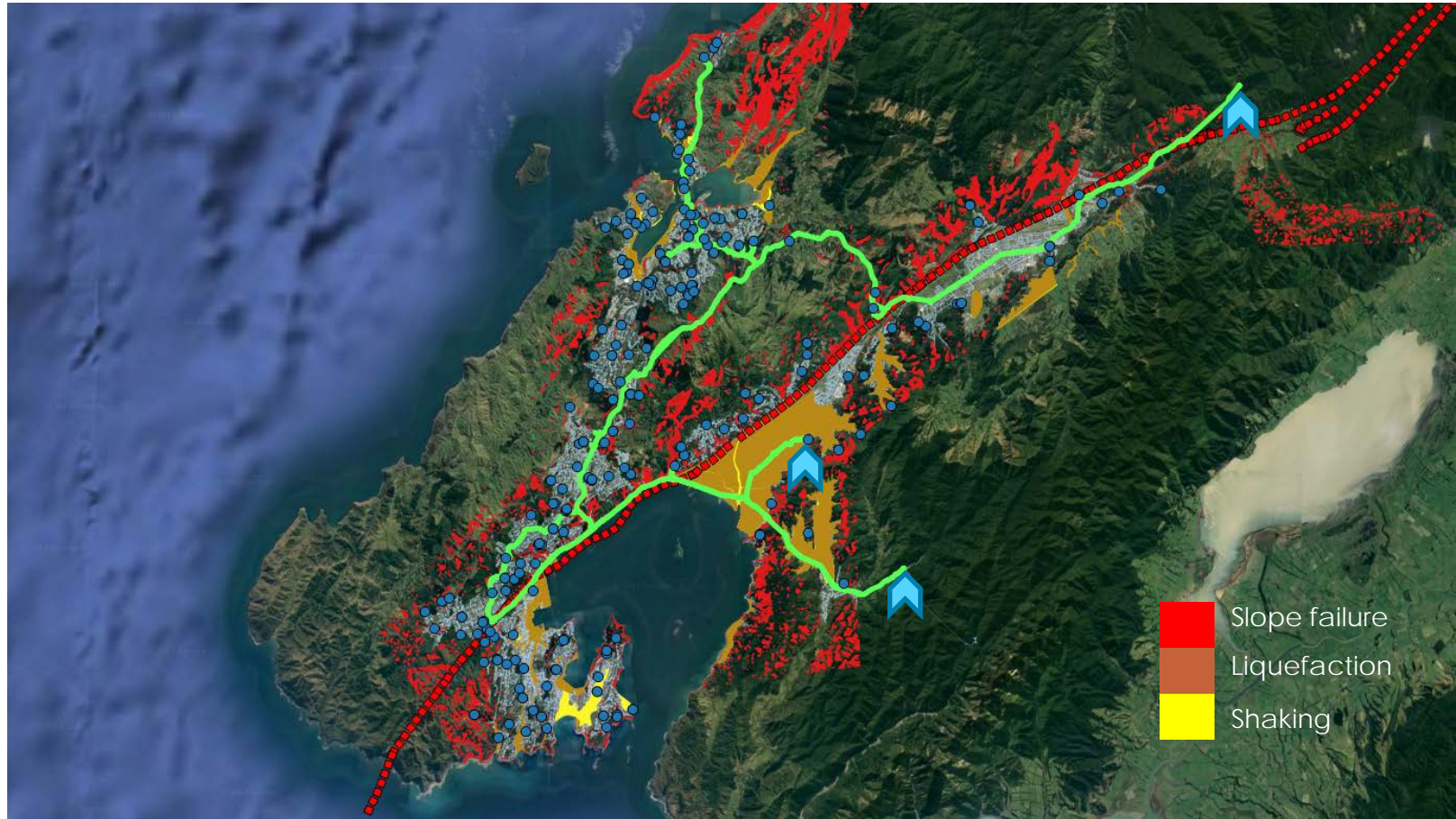
Cedric Papon – MWH, now part of Stantec



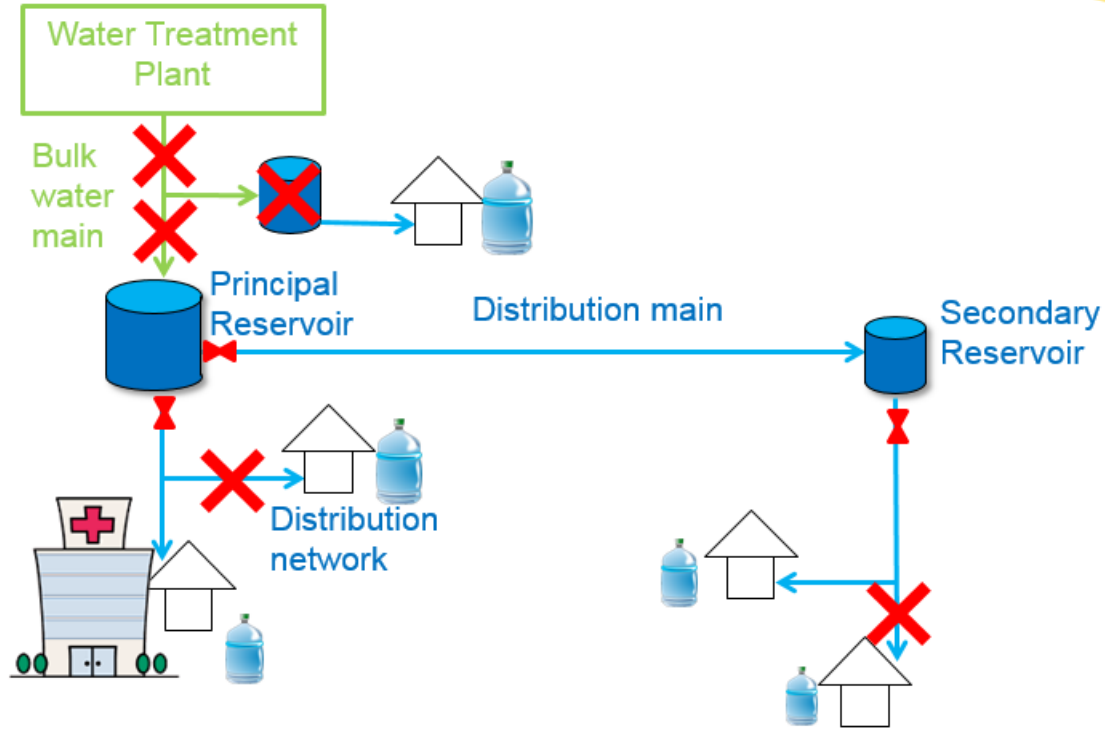
Pipelines...



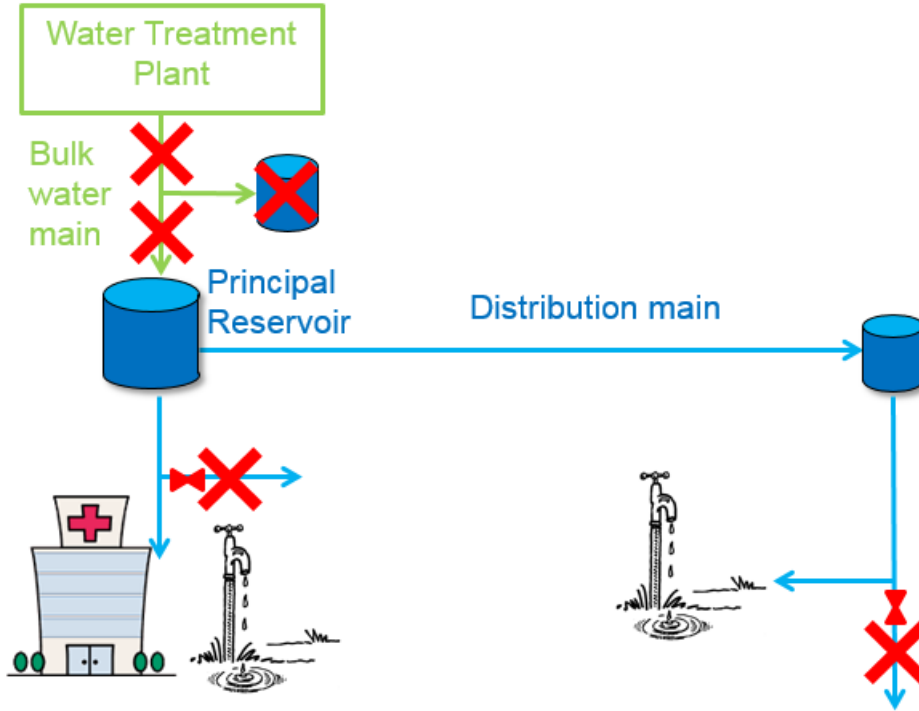
...and Faultlines



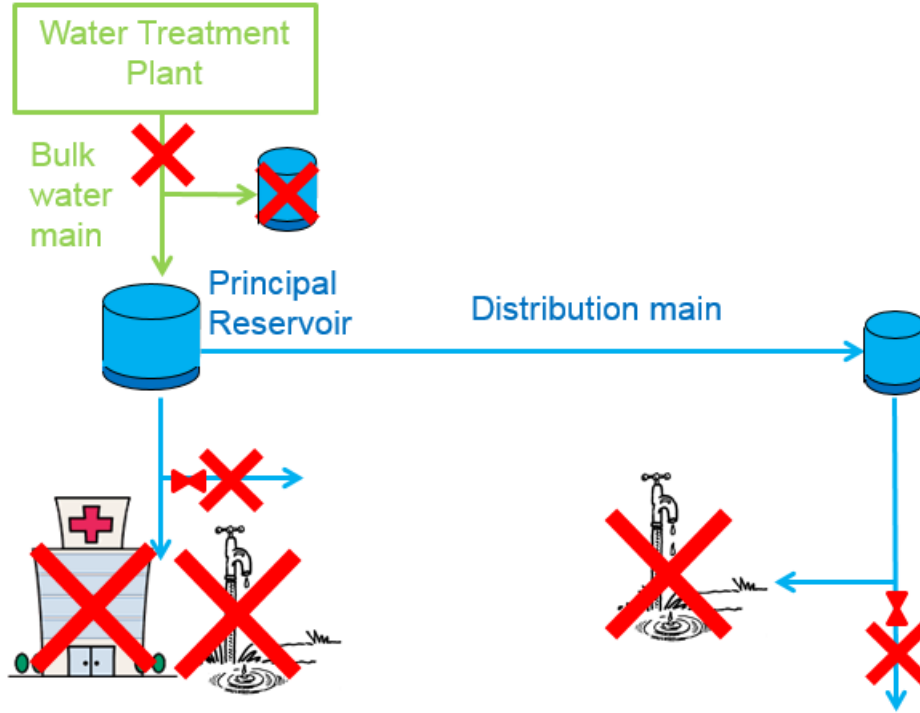
Emergency Stage



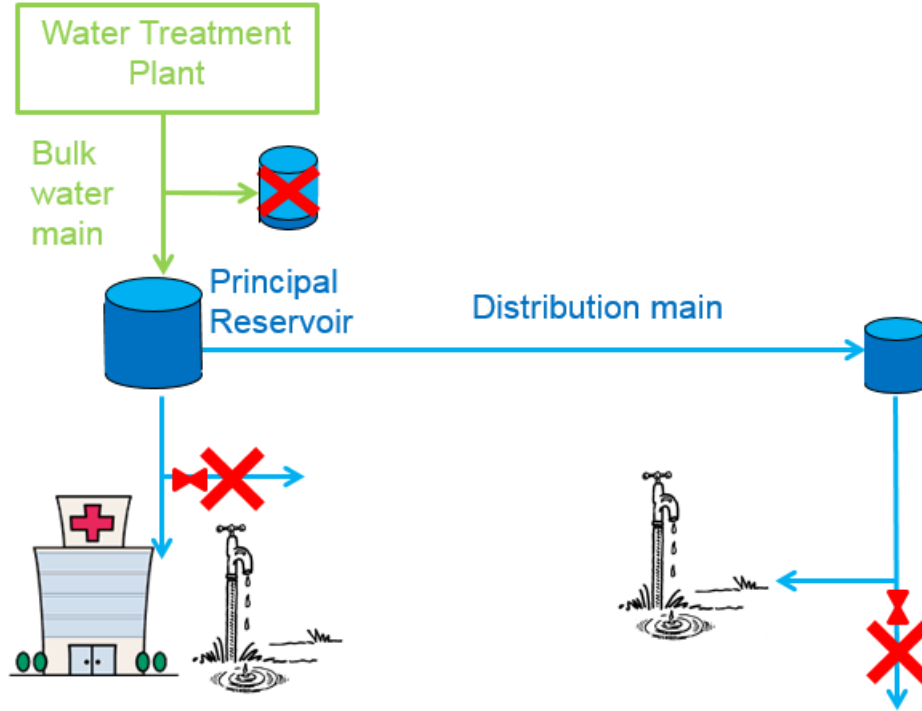
Survival Stage 1



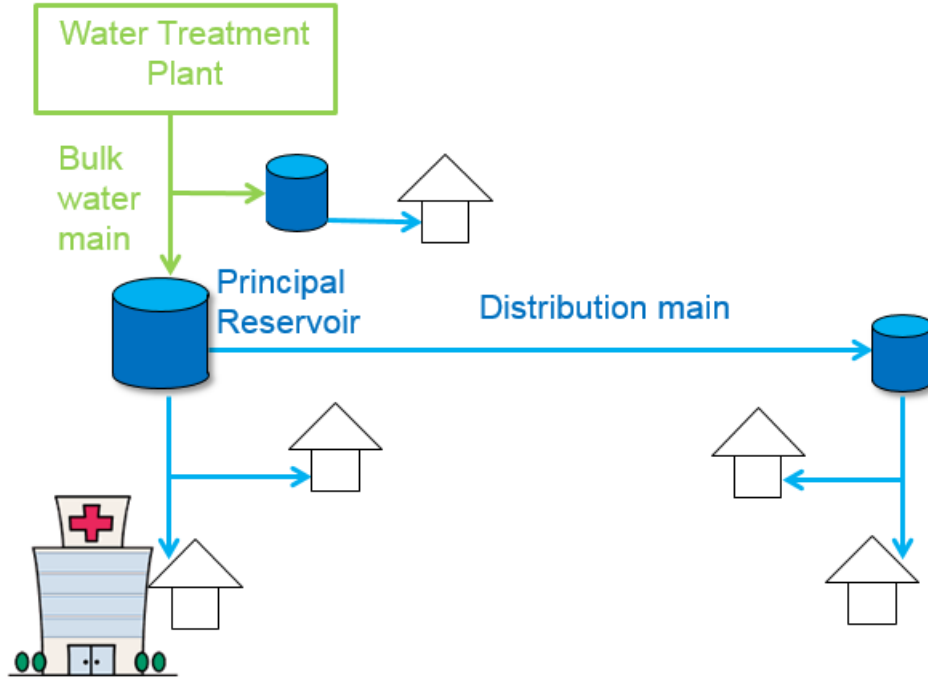
Survival Stage 2



Survival Stage 3



Operational Stage

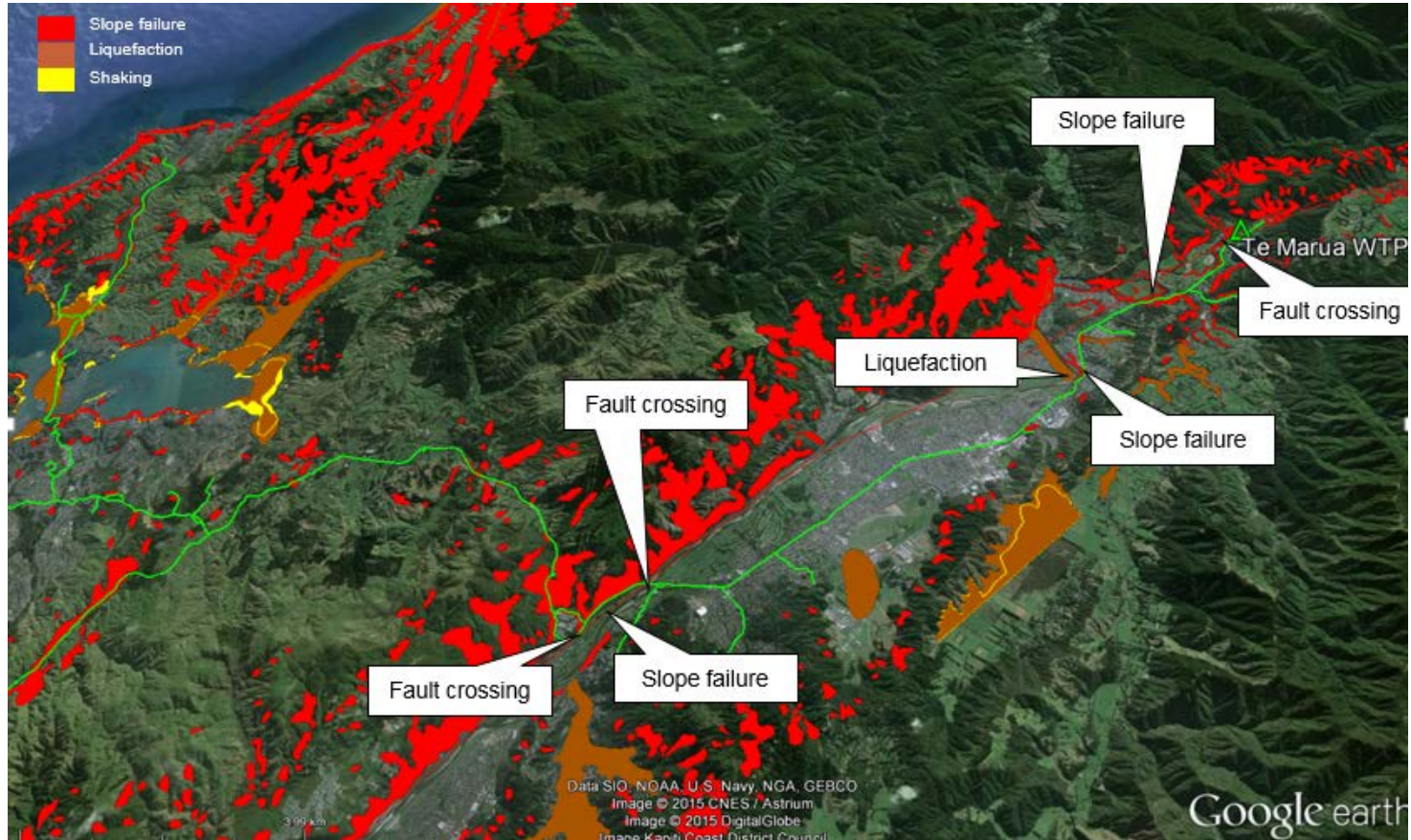


Scope of the Study

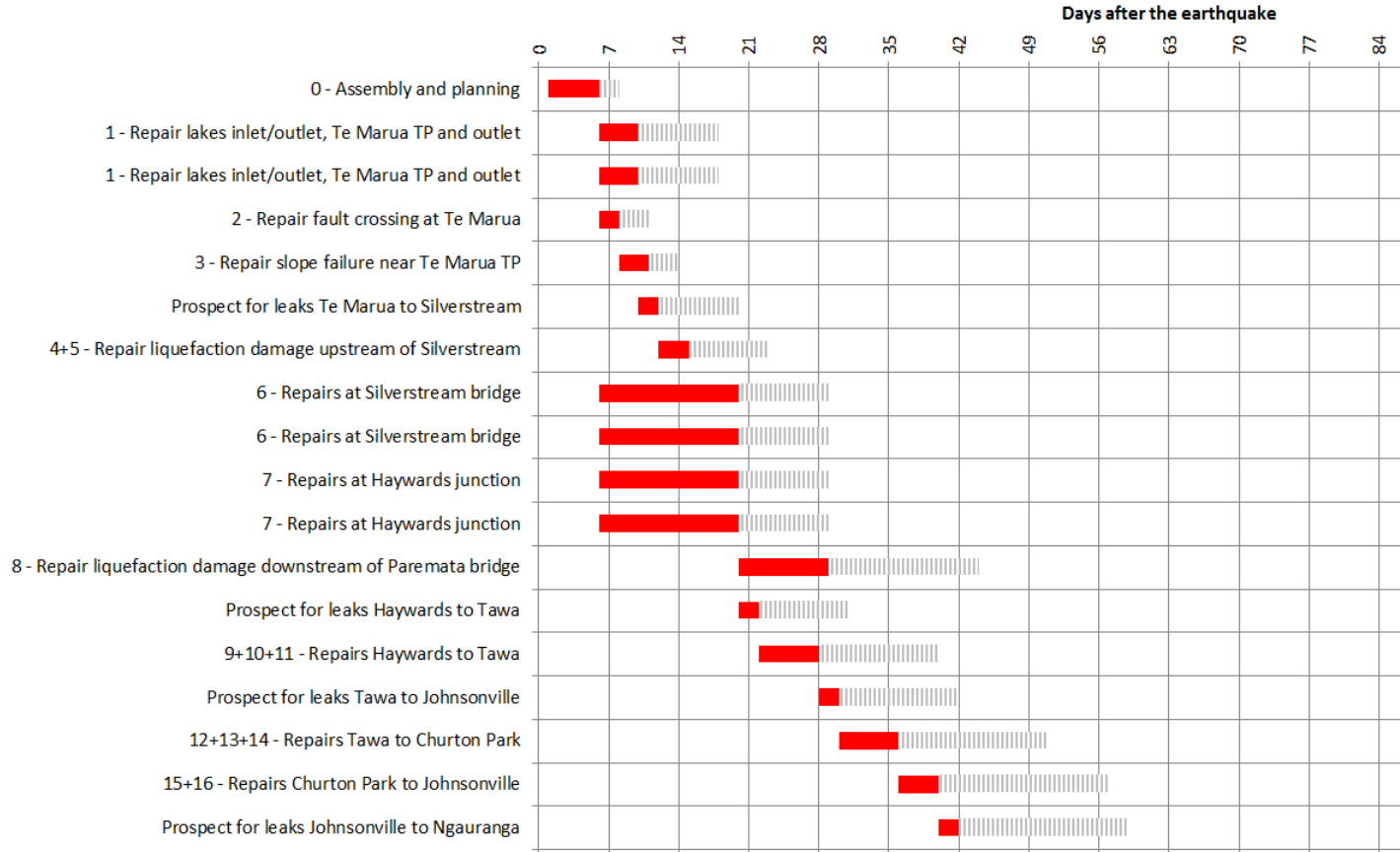
The study aims at estimating the magnitude of the problem:

- How long to restore the bulk supply?
- How long will users be without water?
- What is the minimum distribution network required to supply priority users and public distribution points?

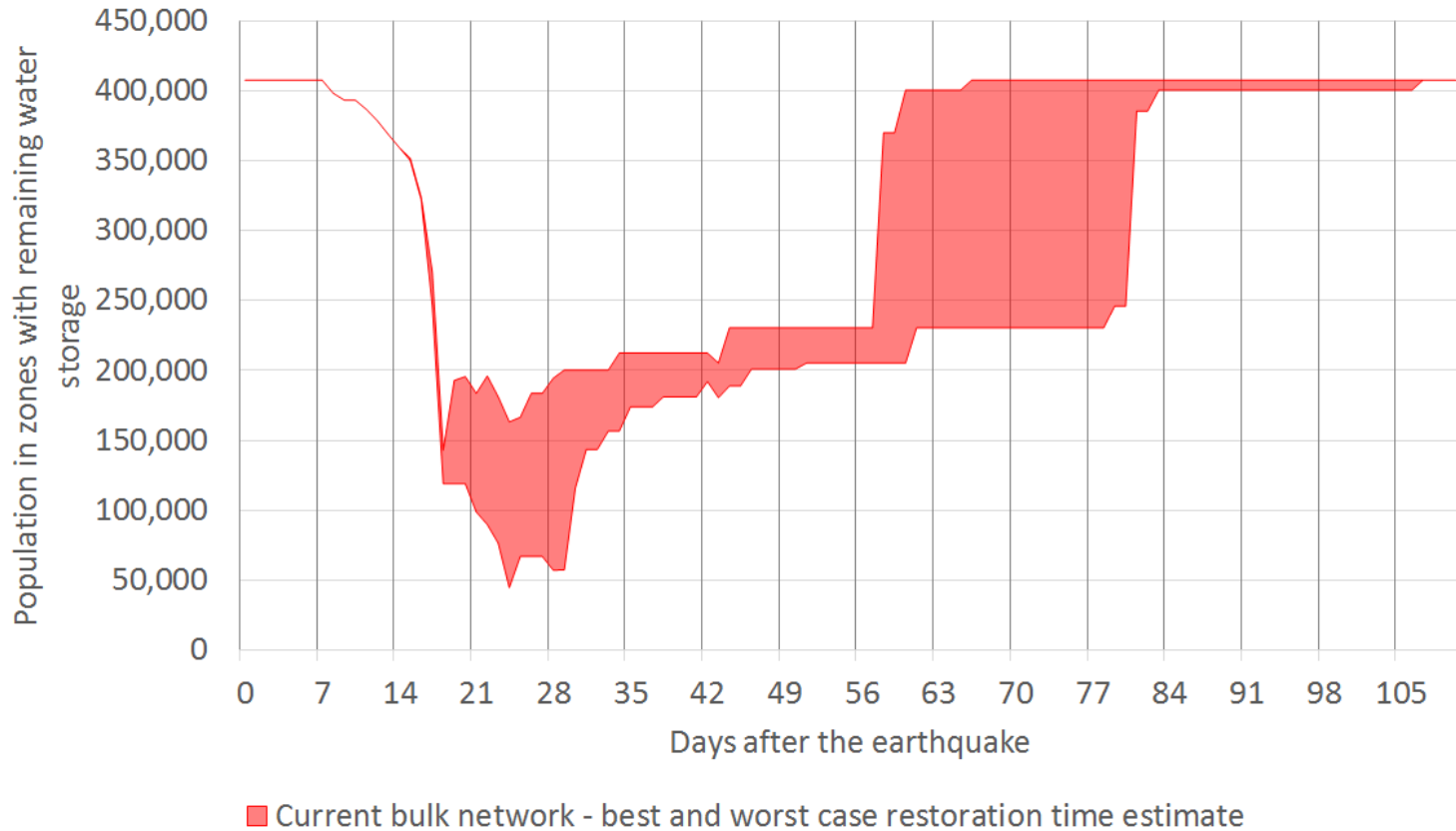
Bulk Network Vulnerability



Bulk Network Restoration



Possible Restoration Timeline



Distribution Points



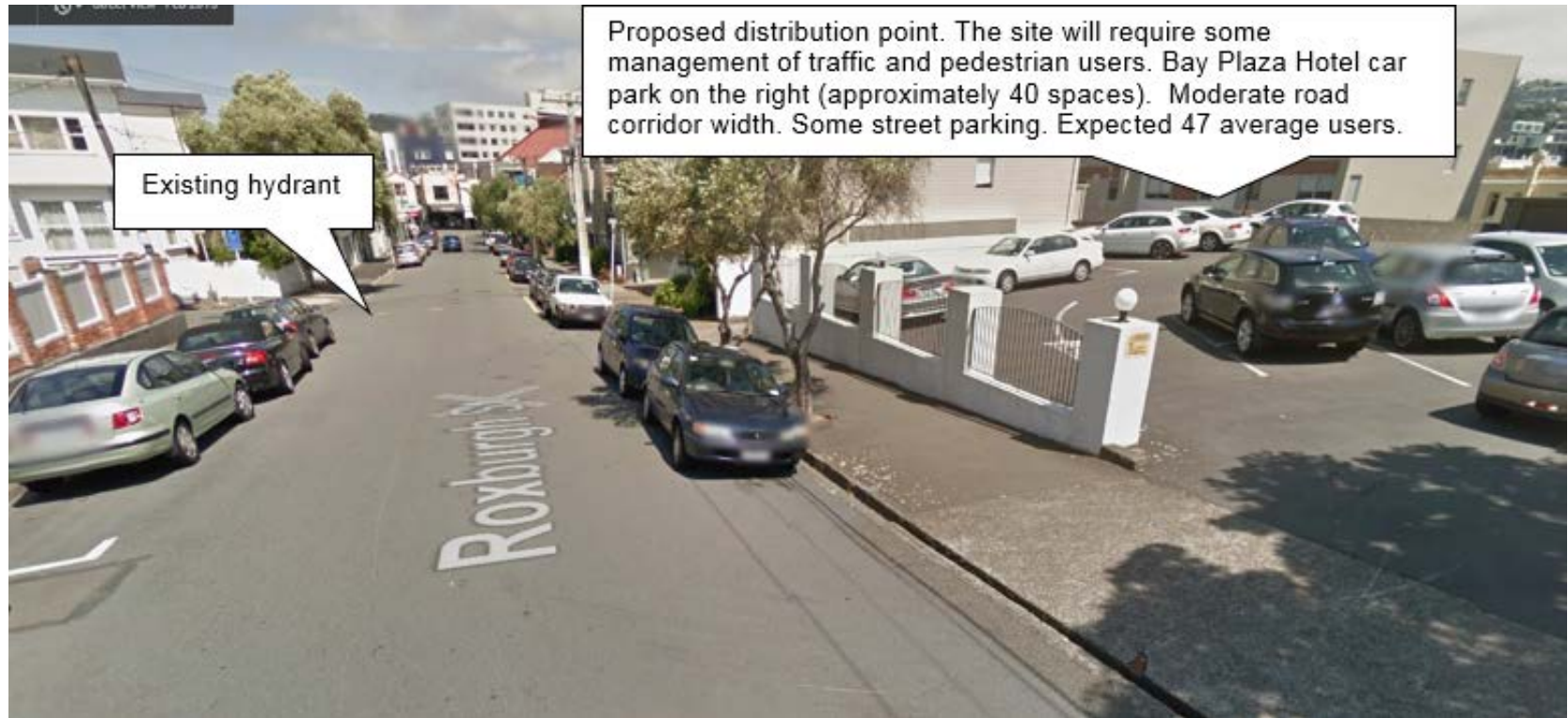
Proposed distribution point. The site is isolated from the road and easily accessible with plenty of standing space. Expected 50 average users.

Distribution Points

Proposed distribution point. High traffic area. Signage and fencing will be required. Hydrant in the bus stop. Street parking available in the area.



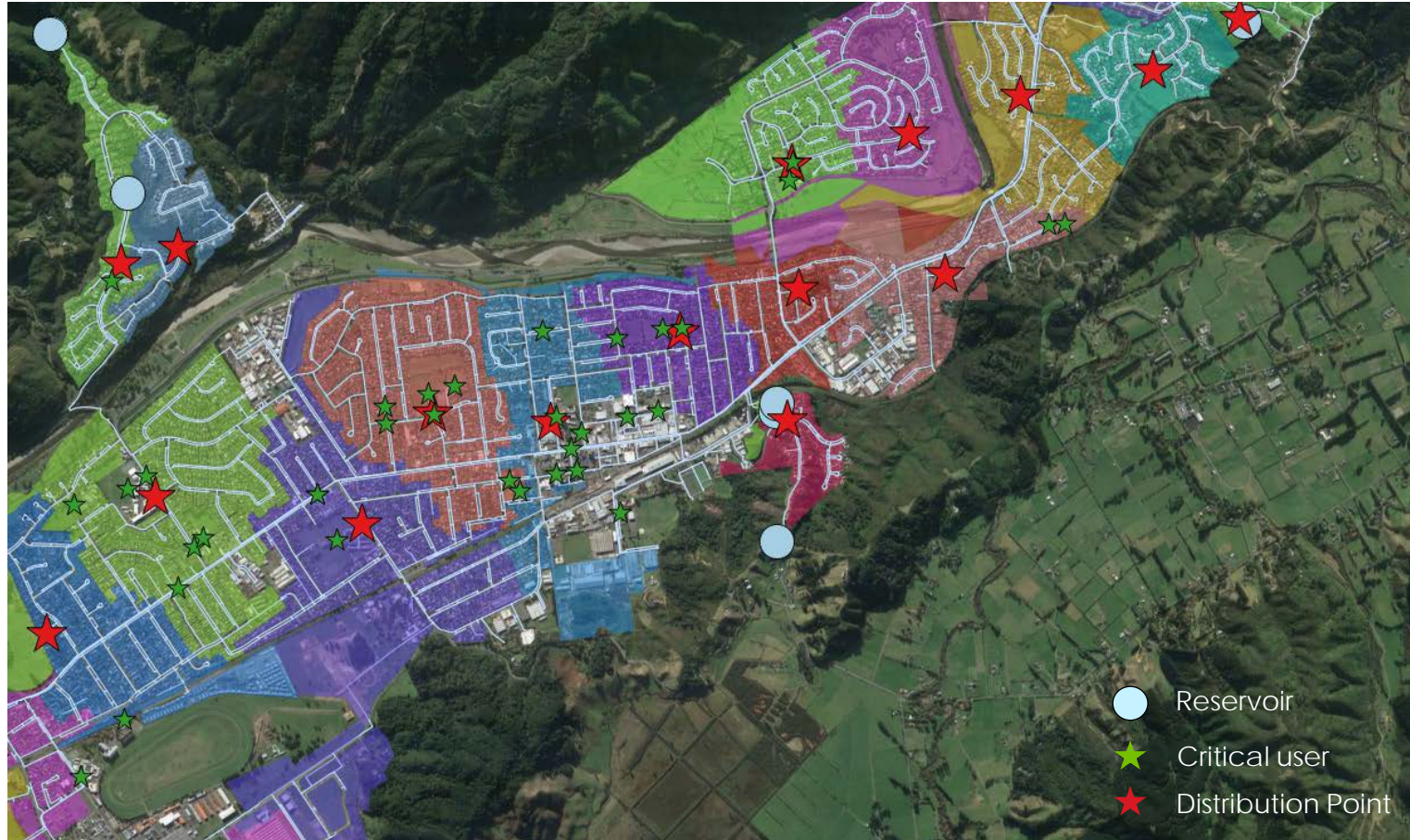
Distribution Points



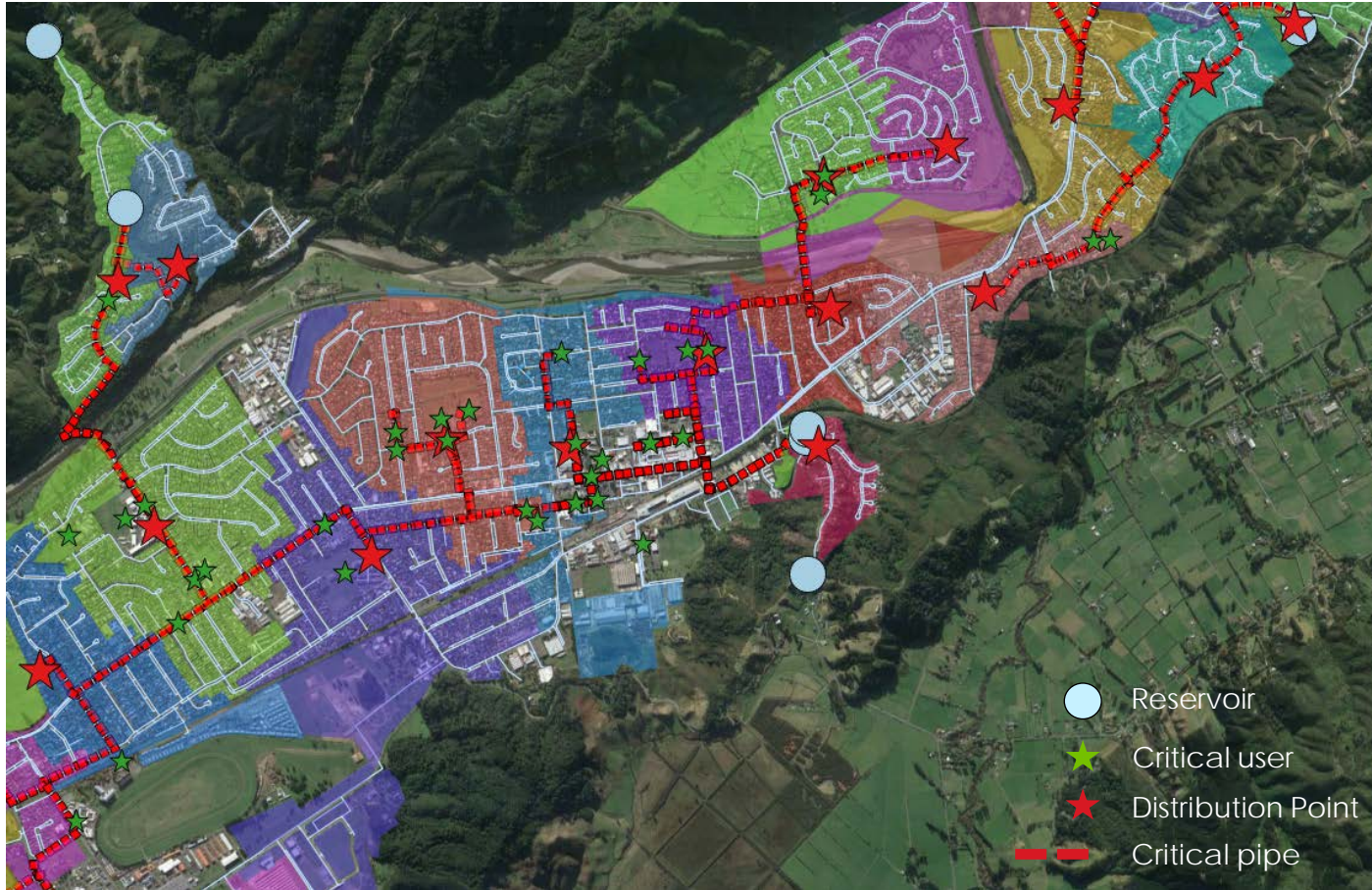
Existing hydrant

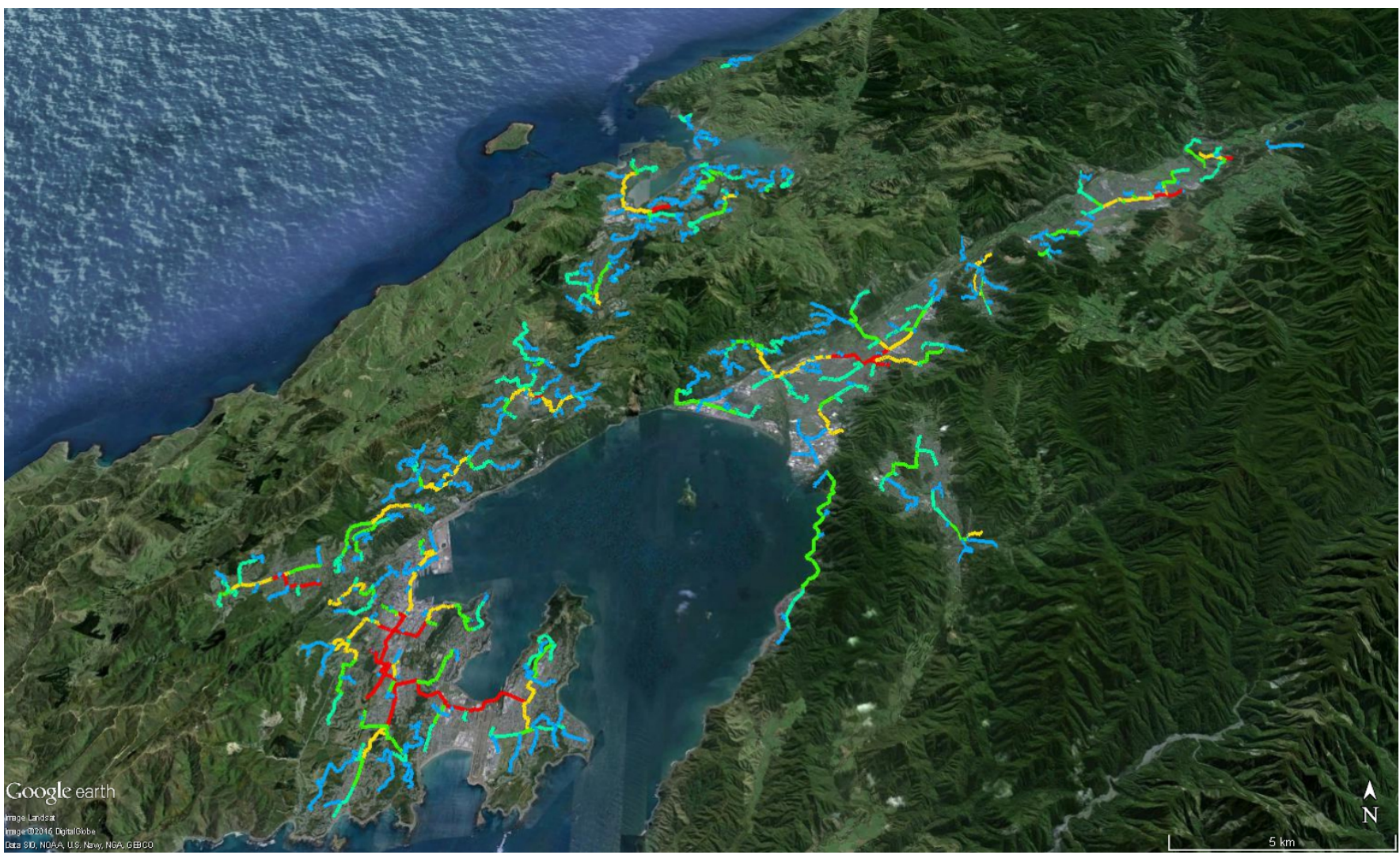
Proposed distribution point. The site will require some management of traffic and pedestrian users. Bay Plaza Hotel car park on the right (approximately 40 spaces). Moderate road corridor width. Some street parking. Expected 47 average users.

Optimising the Distribution



Connecting the Dots





Google earth

Image Landsat
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5 km



Thank you

Google earth

Image Landsat
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cedric.papion@stantec.com



5 km