Collaborative Experiences in Effective Water Network Improvements

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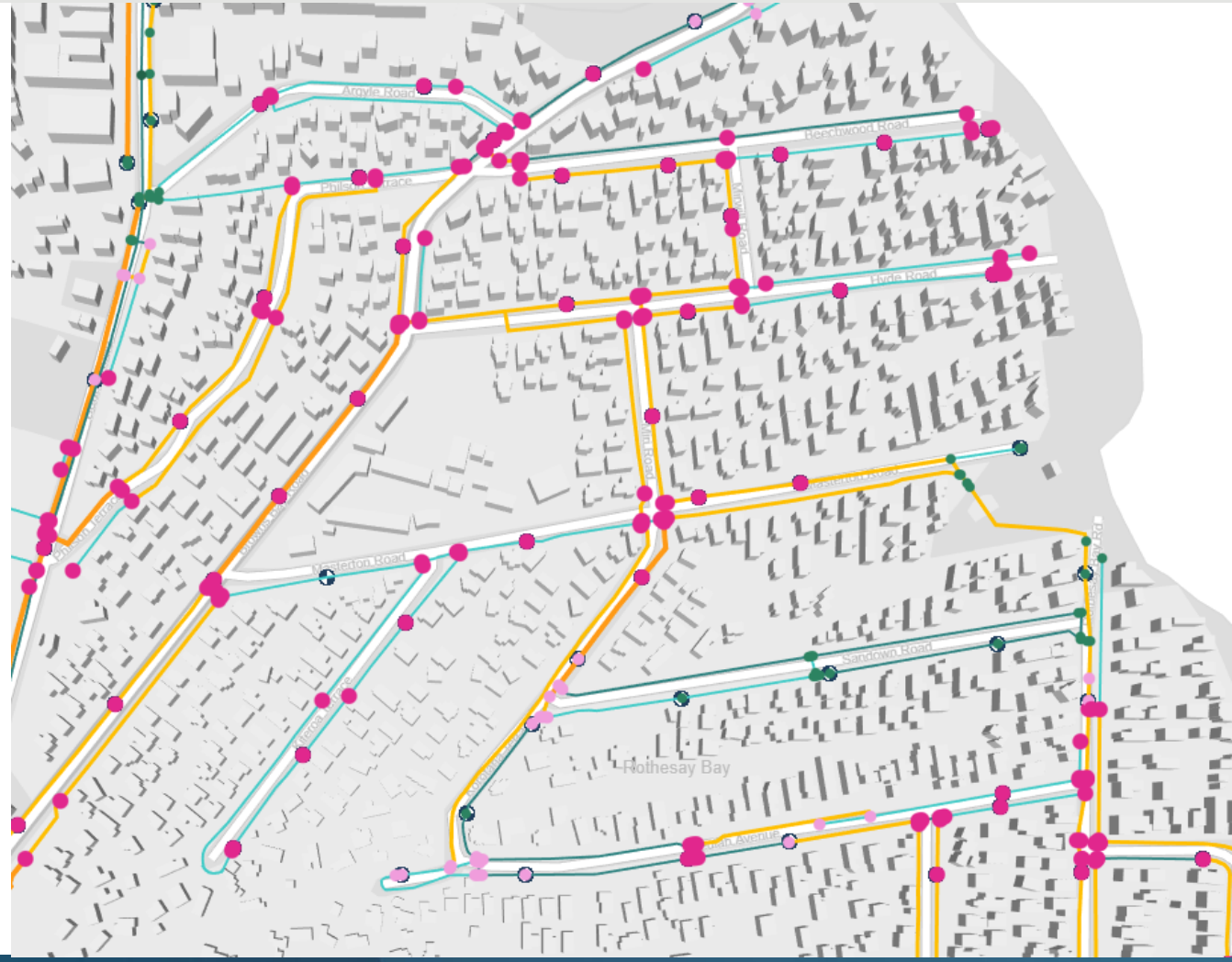
Watercare
An Auckland Council Organisation

Overview

- The Premise
- Why Collaborate?
- Case Study 1 (Lincoln Swanson)
- Case Study 2 (Albany)
- Case Study 3 (Takapuna/Northcote)
- Achieving Successful Collaboration
- The Future

The Premise

- Water Network improvements are inevitable
- They can impact a large number of people
- Our aim is to carry out the projects with the minimum amount of impact possible
- It takes different skill sets to understand the problem and develop an optimal solution



Why Collaborate?

Media

Operations

Maintenance Services

Downer
Relationships creating success

Citycare Water

Contractors

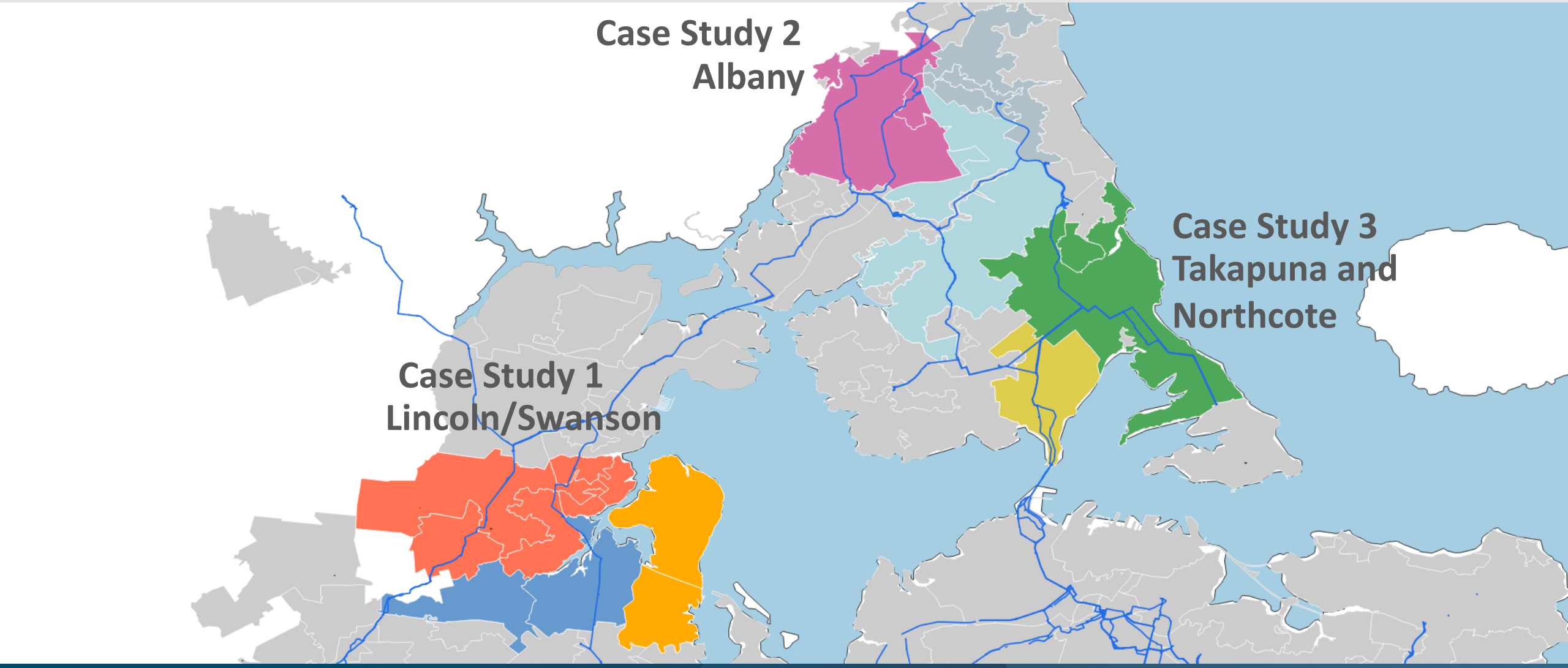
Customers

Planning

Council

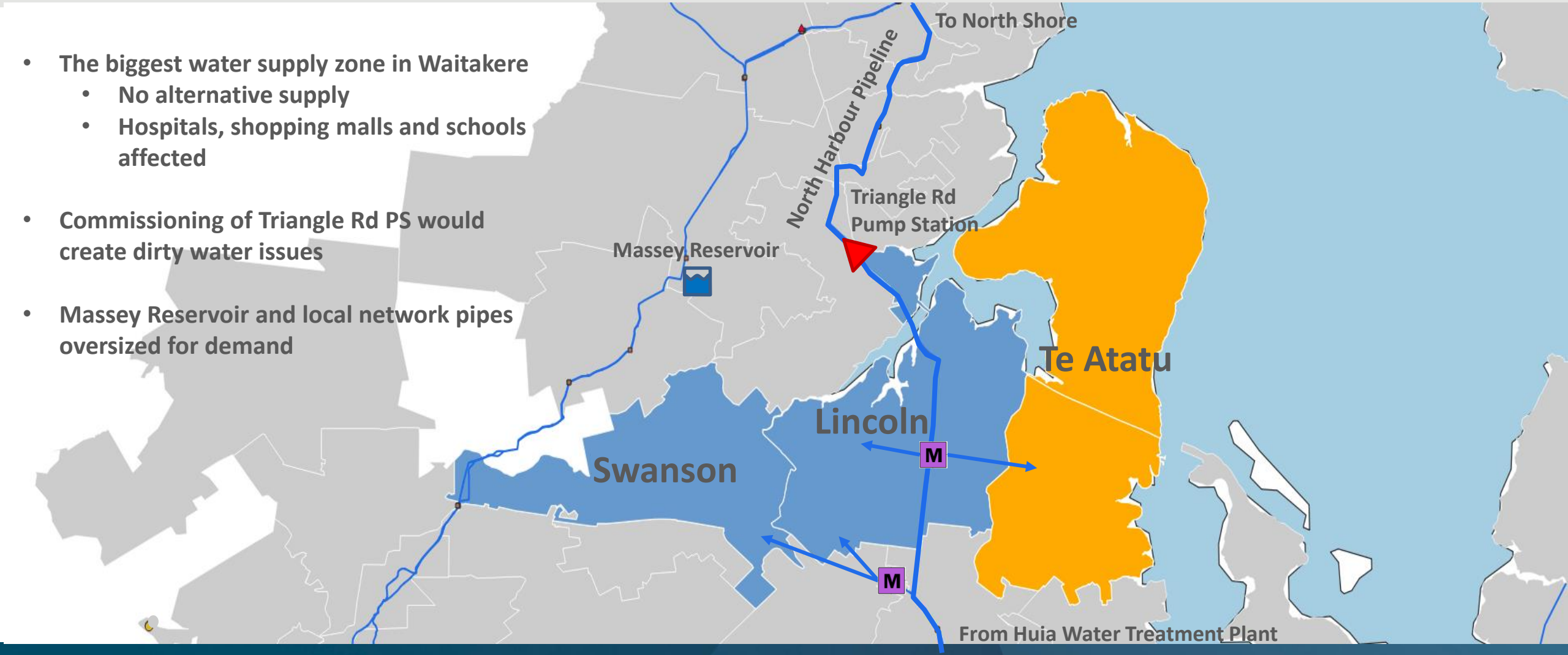
Communities

Case Studies - Overview



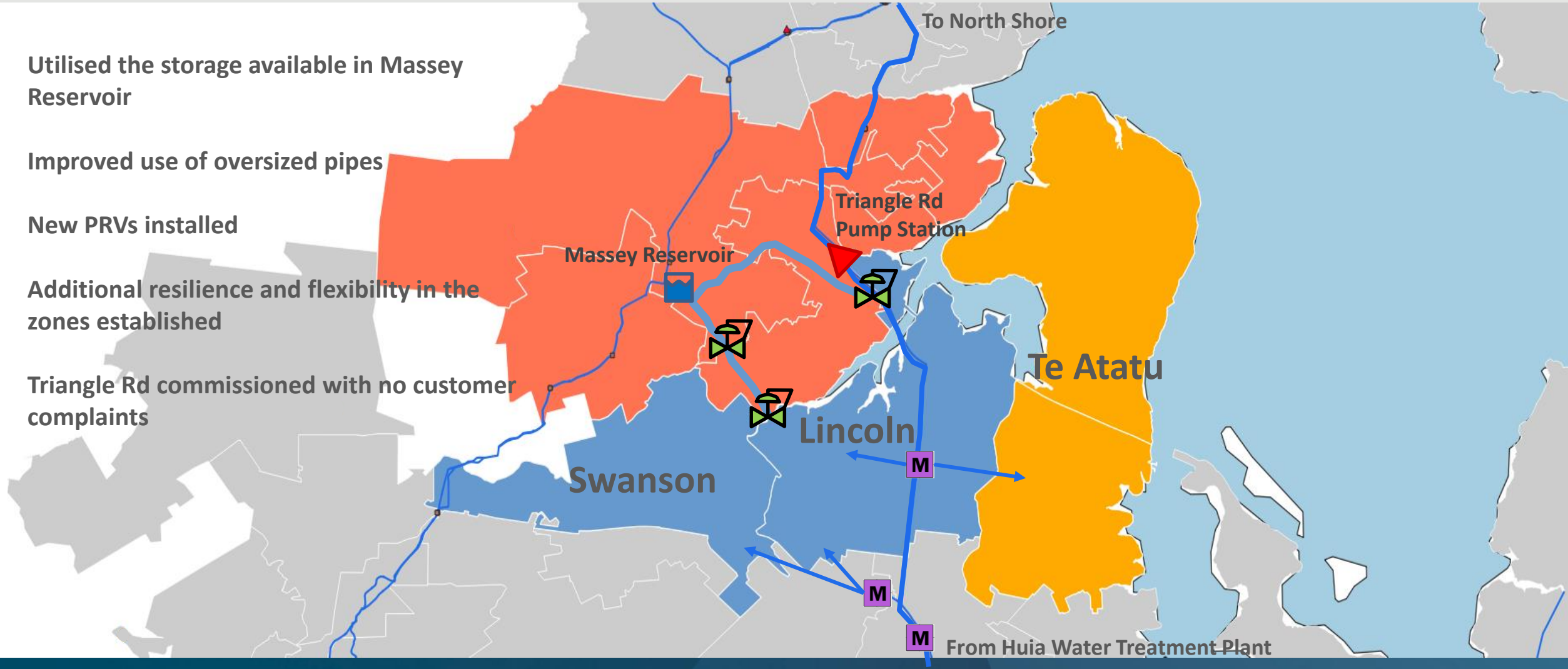
Case Study 1 – Lincoln Swanson - Issues

- The biggest water supply zone in Waitakere
  - No alternative supply
  - Hospitals, shopping malls and schools affected
- Commissioning of Triangle Rd PS would create dirty water issues
- Massey Reservoir and local network pipes oversized for demand



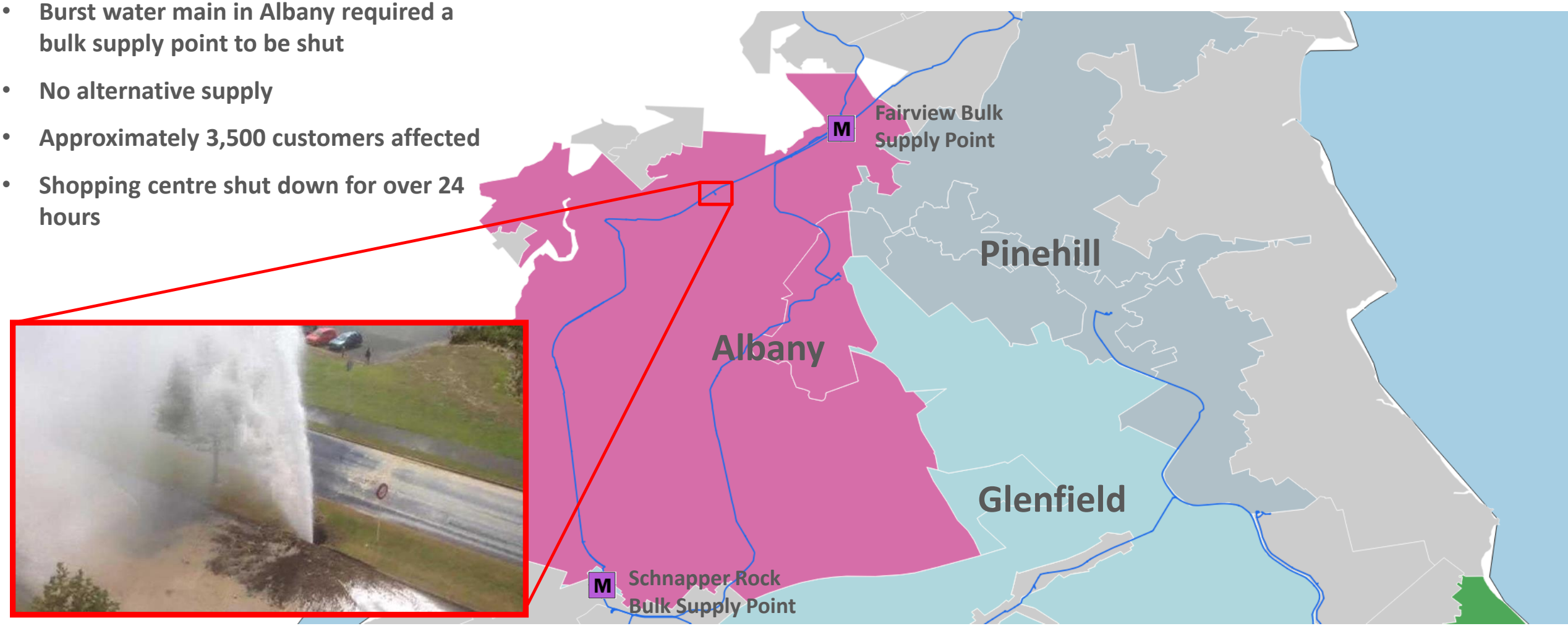
Case Study 1 – Lincoln Swanson - Solution

- Utilised the storage available in Massey Reservoir
- Improved use of oversized pipes
- New PRVs installed
- Additional resilience and flexibility in the zones established
- Triangle Rd commissioned with no customer complaints



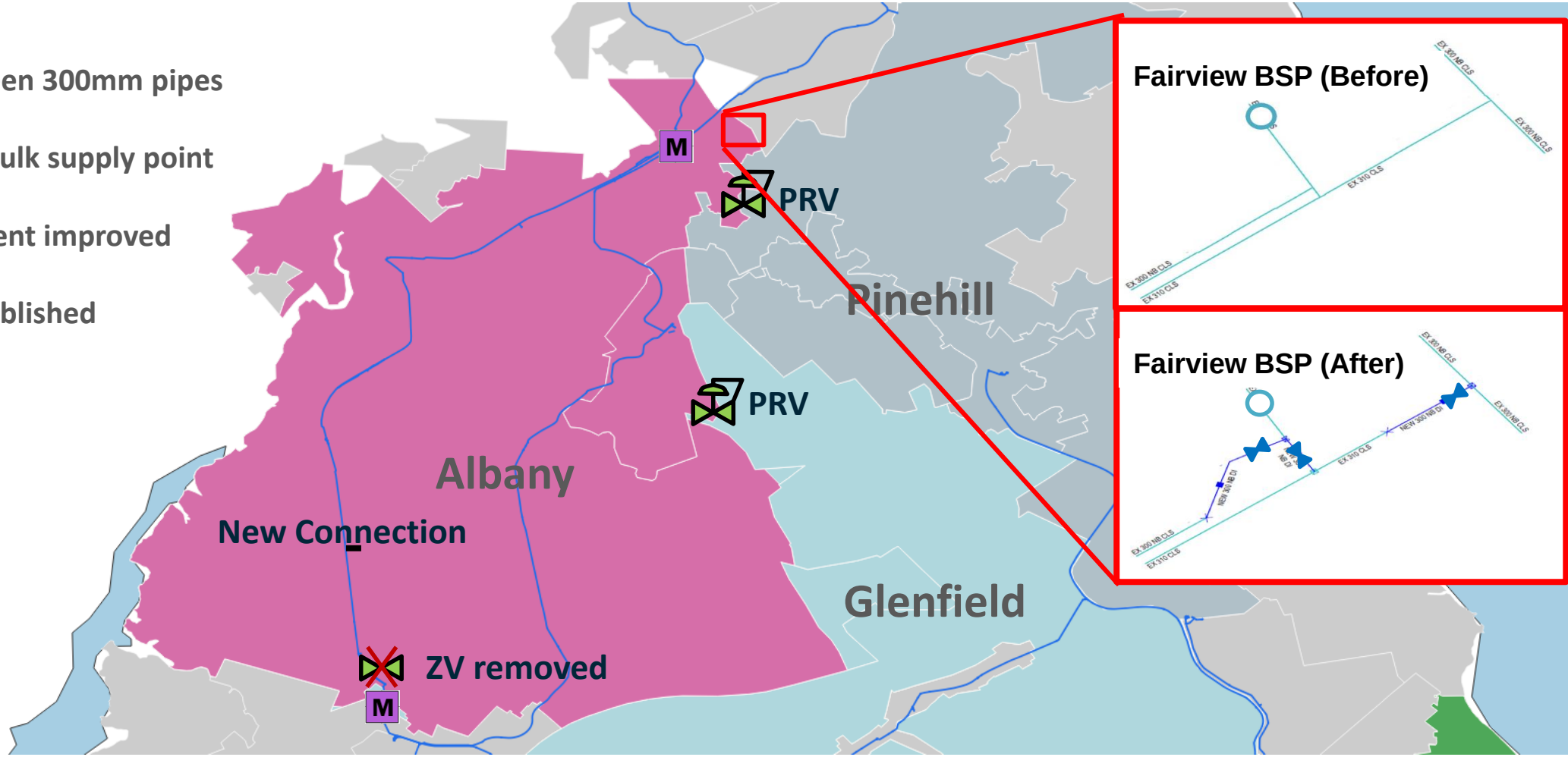
Case Study 2 – Albany - Issues

- Burst water main in Albany required a bulk supply point to be shut
- No alternative supply
- Approximately 3,500 customers affected
- Shopping centre shut down for over 24 hours

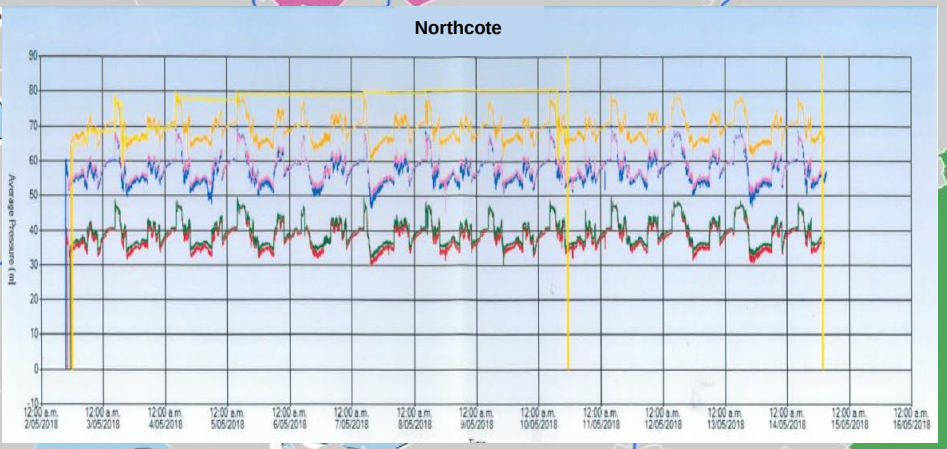


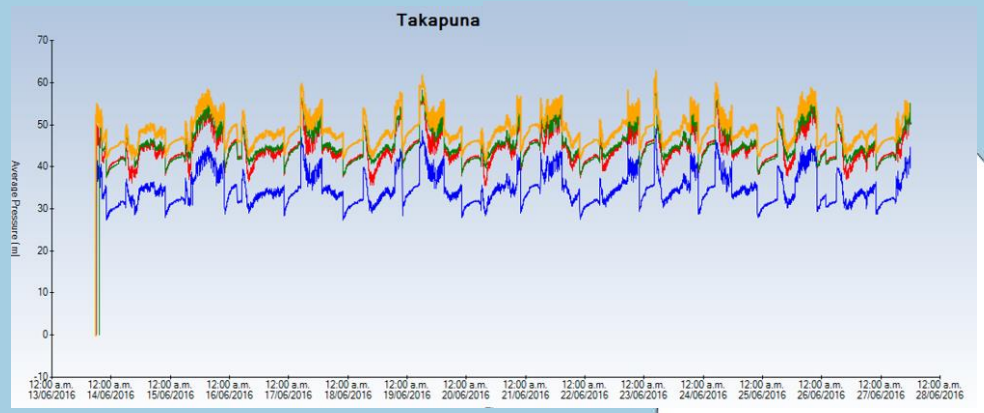
Case Study 2 – Albany - Solution

- New PRVs installed
- New connection between 300mm pipes
- Upgrades to Fairview bulk supply point
- Operational management improved
- Alternative supply established



Case Study 3 – Takapuna and Northcote - Issues



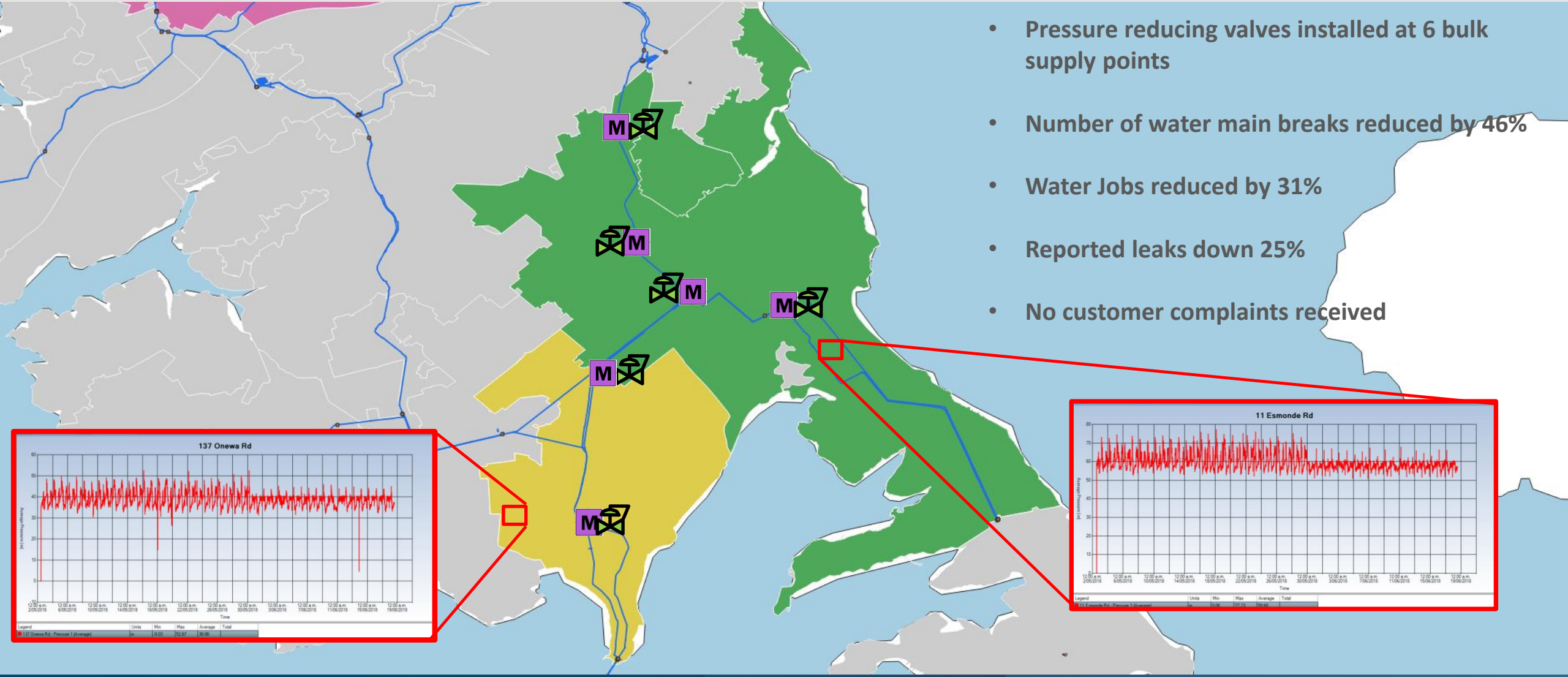


Takapuna

Northcote

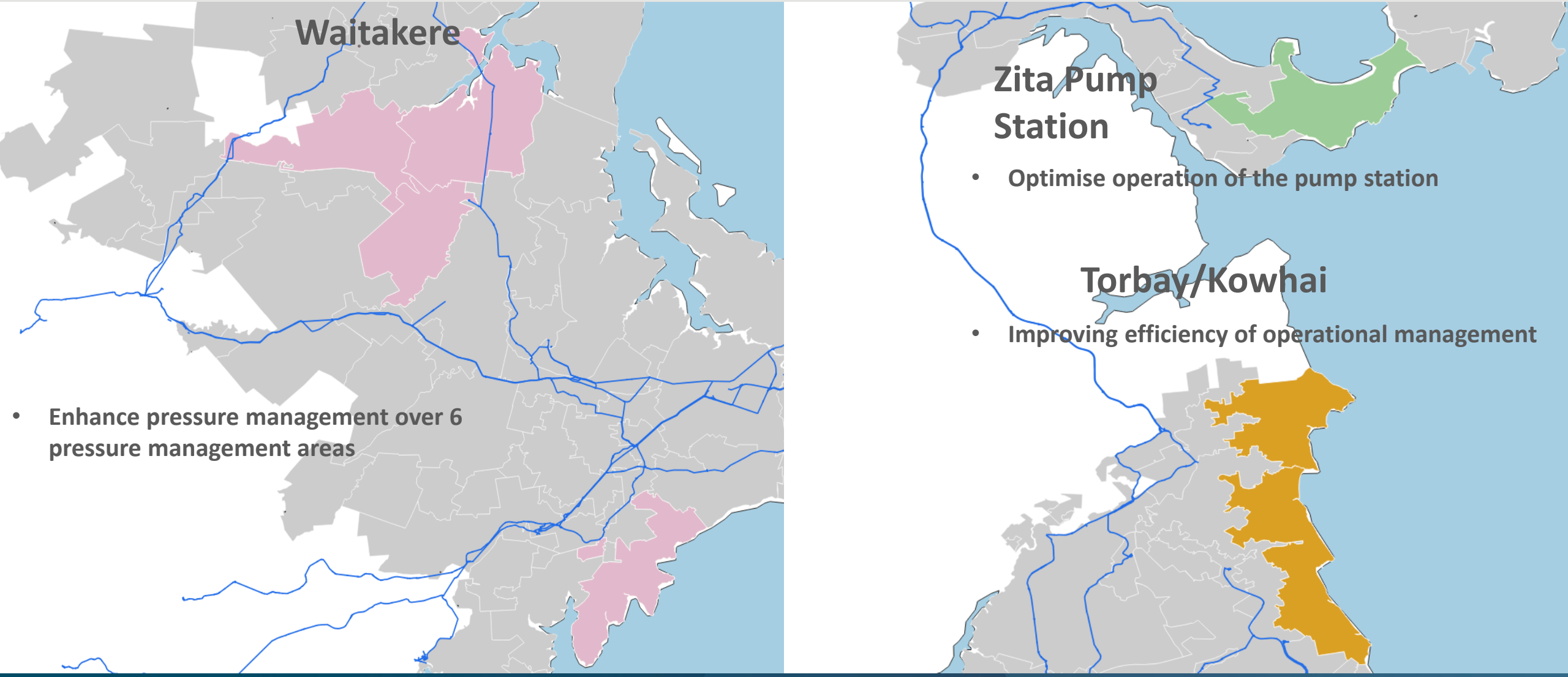
- Over 20,000 customers experiencing high and unstable water pressures
- Large numbers of breaks, leaks and complaints

Case Study 3 – Takapuna and Northcote - Solution



- Pressure reducing valves installed at 6 bulk supply points
- Number of water main breaks reduced by 46%
- Water Jobs reduced by 31%
- Reported leaks down 25%
- No customer complaints received

Current Projects

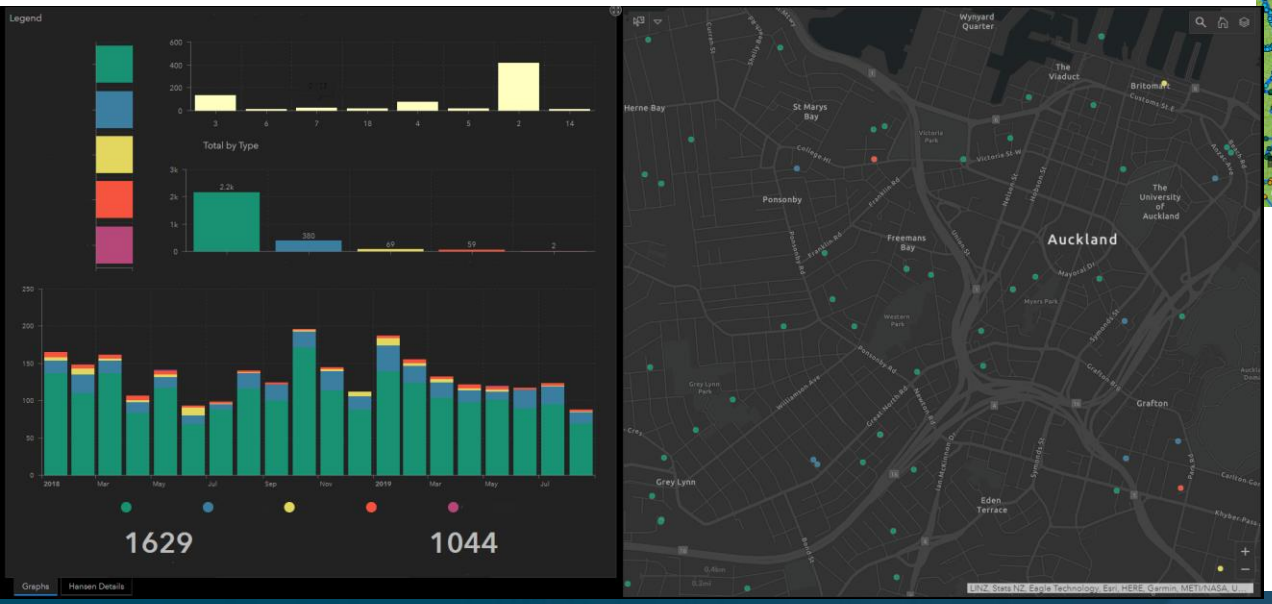


Success Looks Like

- Better Use of Resources
- Cost Savings
- No Complaints
- More resilient and flexible system

Future

- Using Better Tools to Share Data
- Data Serves up Better Insights



- Interactive technology
- More Inclusive Collaboration

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