Wairau Catchment Flood Resilience

Facilitator: Chris Mene

Panellists:

- Councillor Richard Hills
- Barry Potter, Director Resilience & Infrastructure
- Tom Mansell, Head of Sustainable Partnerships, Healthy Waters & Flood Resilience

May 2025



Auckland Anniversary Weekend 2023

















fatalities



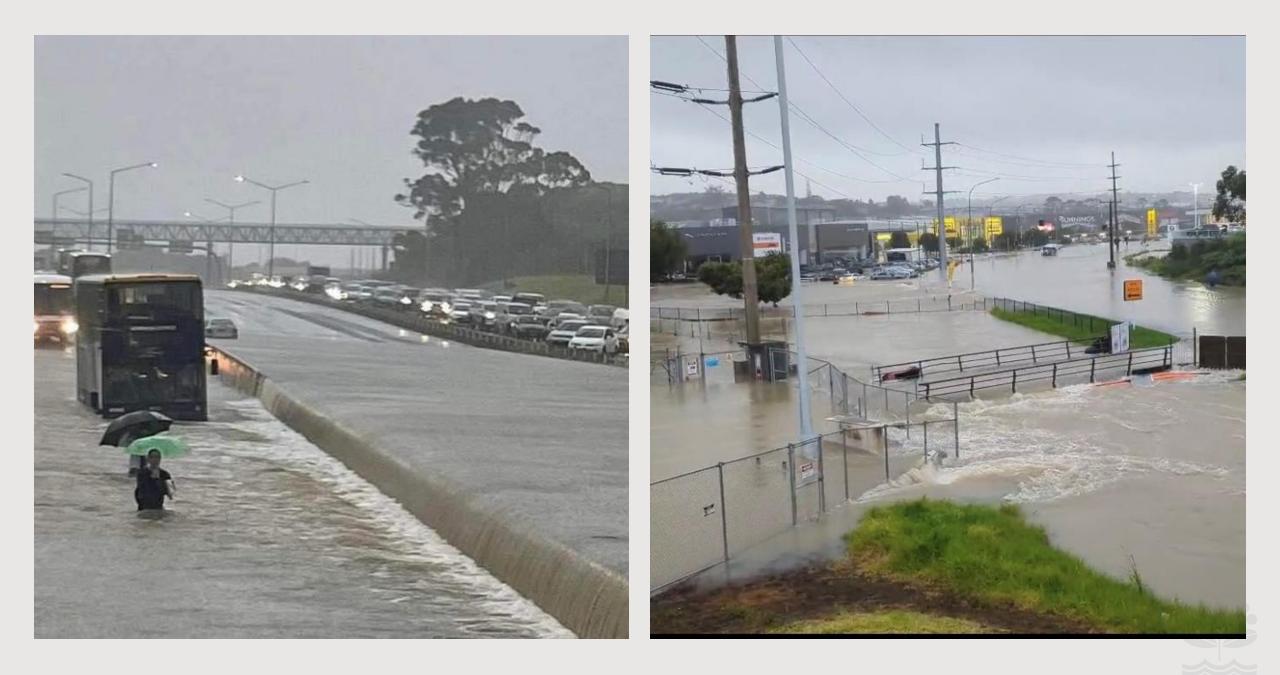


18km of waterways in 1,300ha

















Unprecedented cost-sharing deal

Approx \$2 billion joint funding with government

- Category 3 buy-outs
- Making space for Water initiatives
- Transport Network Repair



Property buy-outs and future land-use

Buyout and removal of properties is ongoing. Future use of land will depend on blue-green solutions.



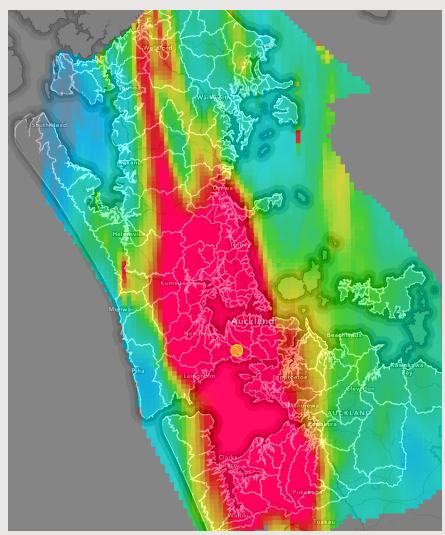
Why is development still occuring in flood plains?

- Auckland Council is bound by the Resource Management Act and the Building Act.
- Plan Change requires public consultation. Opportunity to propose greater restrictions on development in some hazard areas.

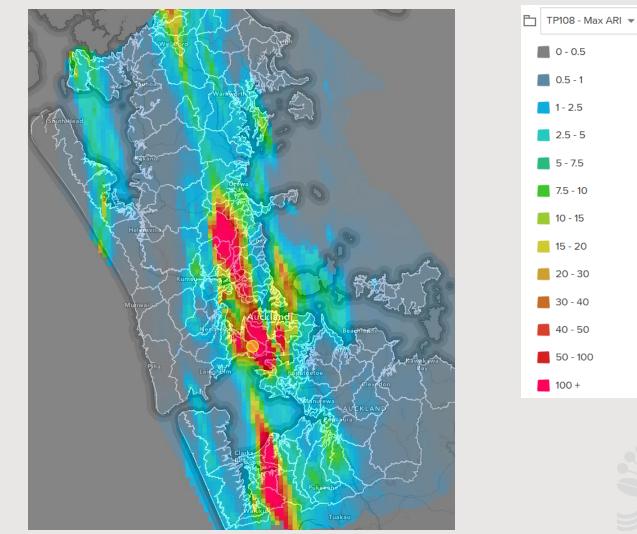


Storm event comparison (Max ARI)

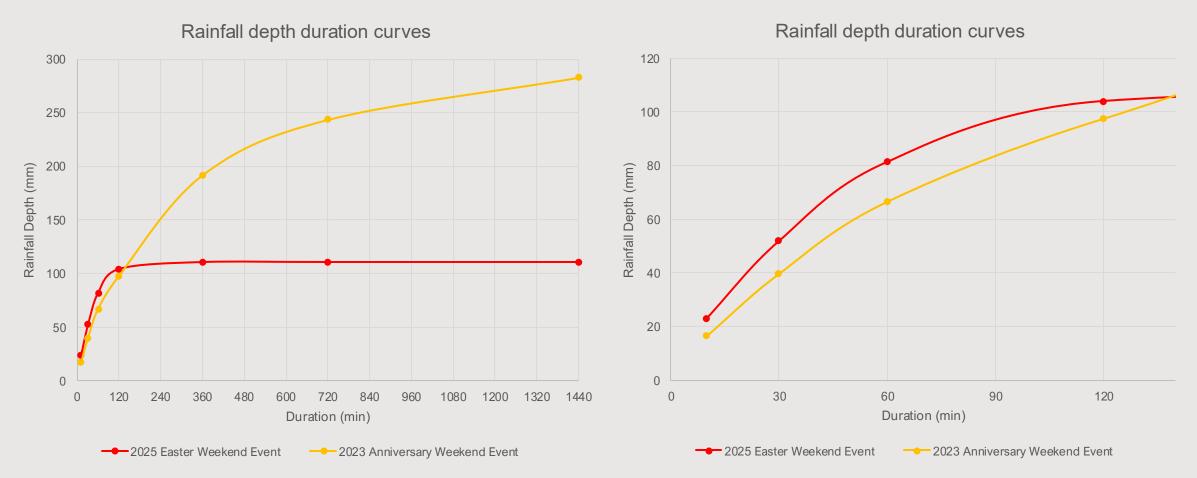
2023 Auckland Anniversary Weekend

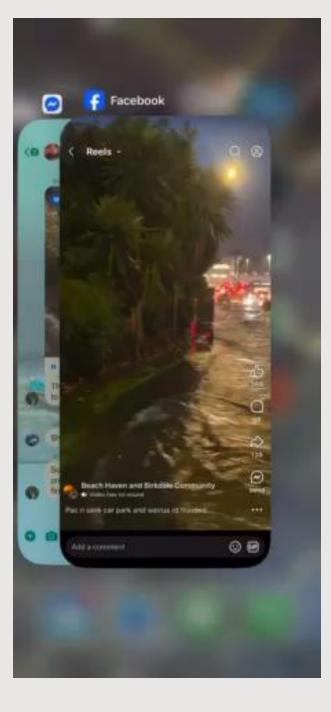


2025 Easter Weekend Storm



Storm event comparison: 2023 vs 2025 Easter weekend

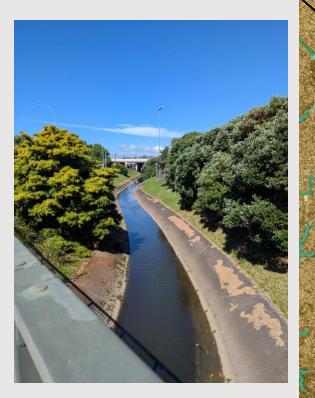




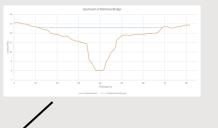


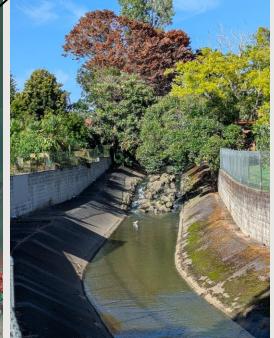


Ground Level Aximum Flood Level









Wairau catchment constraints

What's been done – Stormwater network improvements



- 36 Hotspots inspected monthly and before storm.
 - $\,\circ\,$ 5 monitoring cameras installed
- Increased catch-pit cleaning of 2,500.
- New water quality treatment device installed.
- Watercourse at Bryan Byrnes Reserve dredged, desilting of Link Drive pond.
- Other increased inspections and maintenance.



Hotspot cameras

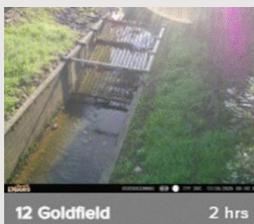


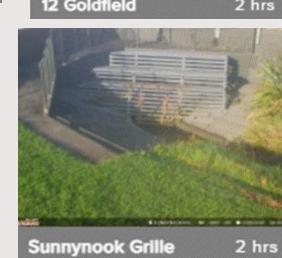
26 Croftfield Lane

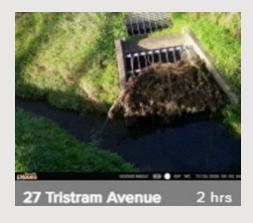
ADDRESSANT AND IN HER TANK MADE IN CO.

2 hrs

1 East Coast Road



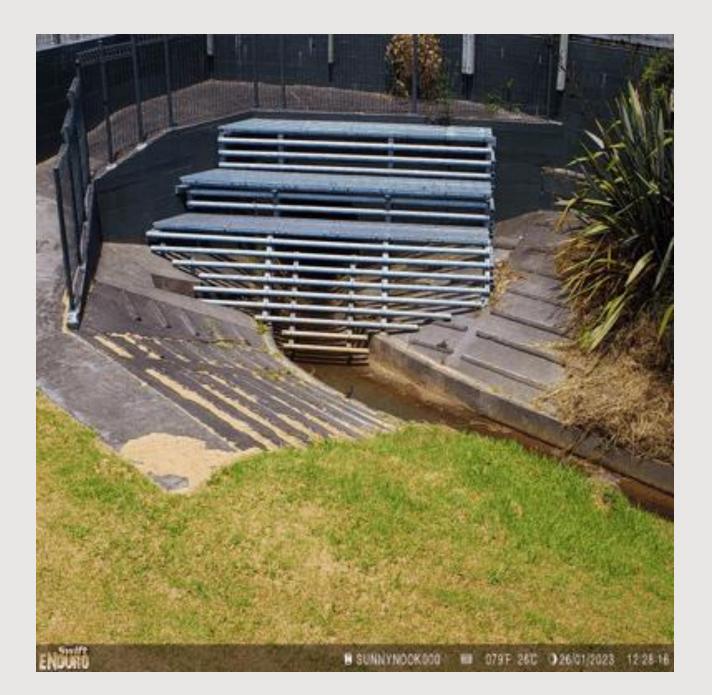








Outcomes





What's been done – Healthy Waters Community Engagement

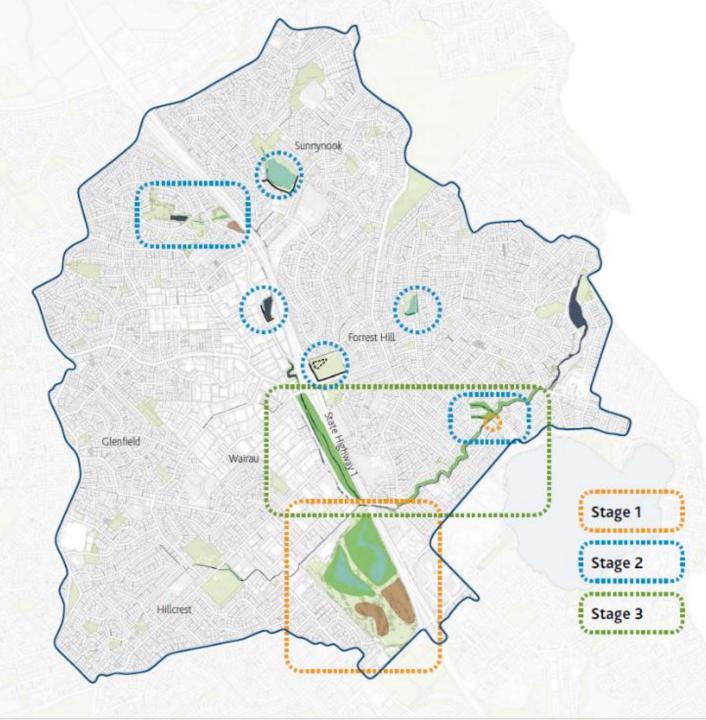


- Door knocking spreading awareness of how to prepare for flooding and use Flood Viewer
- Northern Community Flood Resilience: stream care and clean ups, resilience activities, pest plant control and rubbish clean ups.
- Predator monitoring
- Regular community clean ups funded by Local Boards and Healthy Waters.









Wairau Blue-Green Network

Stage 1: (co-funded with Crown)

- Increased stormwater detention at AF Thomas Park
- Removal of the Woodbridge Lane Bridge.

Stage 2: (subject to future LTP funding)

- Blue-green network upgrades to informal overland flow paths, stream widening and daylighting in and adjacent to Nile Road and Totara Vale.
- Minor existing detention upgrades.

Stage 3: (long-term and currently unfunded)

 Works to widen the creek along Wairau Road and from State Highway 1 to Kitchener Road.

Primary Objectives of Wairau Blue-Green Network– Stage 1 & 2



Reduce flood risk

- Over 10 ha (260 homes) with reduced flood risk.
- Protect vital roads.





Protect core infrastructure

- Maintain access to North Shore Hospital, supermarkets and schools.
- Secure utility systems: power substation and wastewater systems.

Increase resilience of stormwater assets

- Slowing run off, promoting infiltration and reducing peak flows reducing system overload.
- Integrating with traditional systems increasing capacity.



Secondary Objectives of Wairau Blue-Green Network – Stage 1 & 2



Enhance water quality and reduce sedimentation



Better and more equitable open space and connectivity



Economic uplift



Enhanced biodiversity



Social wellbeing



Support mana whenua partnership outcomes



Optimise acquired Category 3 land

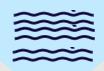


Efficient operations and maintenance



Flood Management - Stage 1

Increased Stormwater detention



Increasing storage from 60,000m³ to 500,000m³ (220 Olympic pools) through wetland(s), dry detention and formalising overland flow paths.



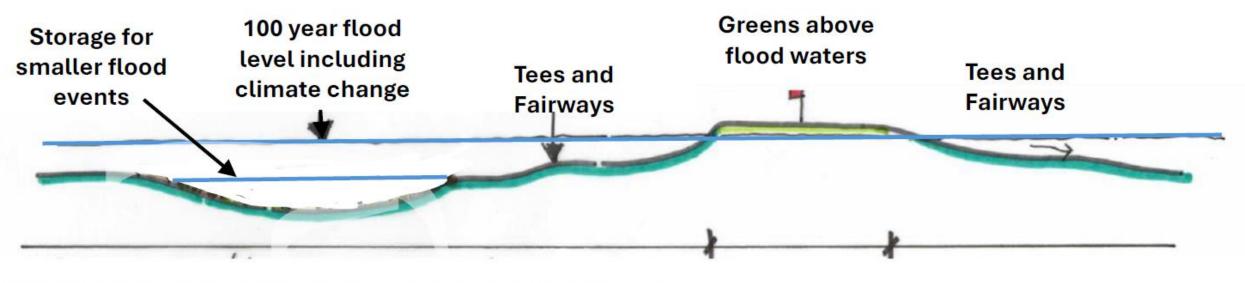
Enabling Works

Bridge removal in lower catchment to reduce obstructions increasing flood waters.









Lower existing ground to create interlinked detention areas

CROSS-SECTION THROUGH FLOOD DETENTION AREAS, LOWERED GOLF HOLES (nts)

Potential AF Thomas Park Stormwater Detention Artist impression only

View looking south towards Takapuna and CBD

Potential AF Thomas Park Stormwater Detention Artist impression only

View looking south towards Takapuna and CBD



Stage 2

Milford and Totara Vale

- Using Category 3 buy-out land for stream widening, daylighting and improved overland flow paths.
- Building on Recovery Office work; designs will be developed in collaboration with the Storm-affected Land Use team.
- Improvements to existing detention basins.



Stage 3 – Potential Wider Catchment Interventions

• Included in long-term strategy but currently unfunded, widening of Wairau Creek (Wairau Road to Kitchener Road).

Sept 2024	March-April 2025	Mid 2025	Late 2025	2026	2027
RECOVERY RESPONSE					
STORMWATER NETWORK IMPROVEMENTS					
INTENSIVE BLUE-GREEN NETWORK COMMUNITY ENGAGEMENT				ONGOING COMMUNITY ENGAGEMENT ACTIVITIES	
WAIRAU BLUE-GREEN NETWORK	Concept Design	Preliminar	y Design	Detailed Design	Construction
	<text><text><text></text></text></text>	Assessment of AF Thomas Park options Planning for Woodbridge Lane bridge removal Technical investigations Ongoing community engagement	<text><text><text></text></text></text>	Develop deta designs Consent applications Business Case presented to relevant governance group	construction begins

Project Partnerships



- Elected representatives
- Community Advisory Group
- Mana Whenua
- Internal council groups
 - Healthy Waters and Flood Resilience
 - Community and social innovation
 - Parks and Community Facilities
 - Recovery Office
 - Storm Affected Land Recovery



Community Advisory Group

An inclusive catchment wide group to ensure community aspirations and concerns are addressed membership includes:



- Local Board representation
- Ropū Māori
- Resident Associations
- Business associations
- Sports and recreation
- Schools and education
- Community organisations

Working with nature







To stay informed, email bluegreen@aucklandcouncil.govt.nz
to be added to the Wairau Valley

blue-green contact list.

