



Quarterly Update December 2023

Nau mai and welcome

Councils and communities around the country are continuing to progress the 55 projects co-funded by Kānoa – the Regional Economic Development & Investment Unit, regional councils and local authorities.

In this issue we look at some of the different ways councils around the motu are building more resilient river communities, including a new bridge in Northland that accommodates triple the floodwater capacity, West Taieri floodbank upgrades in Otago protecting productive agricultural land, airport and local community, and the clearing of 1200 rugby field’s worth of exotic weeds in Canterbury increasing flood resilience.

As the year draws to a close, we wish you a safe and happy festive season!

OPINION: New Government urged to commit to 80 flood management infrastructure projects

Regional Chief Executive Officer Group Convenor Michael McCartney reflects on the urgent need to co-invest in protective infrastructure as a matter of national interest, and to reap the cost savings that arise from investing “Before the Deluge”.

Te Uru Kahika – Regional and Unitary Councils Aotearoa has recently submitted ‘Before the Deluge 2.0’ to incoming Government Ministers. It is an updated case for co-investment from central and local government in flood management infrastructure following Cyclones Hale and Gabrielle.

In late 2022, New Zealand’s regional and unitary councils submitted Before the Deluge to Government Ministers requesting urgent co-investment in flood management infrastructure. This landed with government mere weeks before the devastation of Cyclones Hale and Gabrielle.

Treasury has estimated that the total damage from both the Auckland floods and Cyclone Gabrielle to be between NZ\$9 billion to \$14.5 billion; with NZ\$5 to \$7.5 billion being related to infrastructure owned by central and local government. Without the investment made by regional authorities to protect some areas, the total damage would have been even greater.

Before the Deluge 2.0 presents this new National-led government with a ready-to-go opportunity. Regional and Unitary Councils have approved and scoped a \$131m contribution to the much-needed investment in critical infrastructure, and request Government to include \$197m in their Budget to enable 80 ready-to-go flood management infrastructure projects. Putting this request into perspective, the recently upgraded Taradale stopbank, which cost approximately \$4m to complete, saved close to 10,000 properties from flooding in Cyclone Gabrielle. The savings in lives and livelihoods from that investment has been quantified in the billions. It also requests a “continuation of a similar governance arrangement that informs and protects the investment proposition and assures quick and efficient delivery and “commitment to working with the regional sector of local government on developing a 10-year pipeline of co-investment in flood resilience infrastructure.”

"This year we have been focusing on recovery from these major weather events, but we must break the cycle of responding to tragedy and instead invest in future resilience.

Let’s turn our minds to the future and invest in a way that gives communities and business the confidence to invest in growing the New Zealand economy."

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Investment in vital flood protection infrastructure before devastation is a no-brainer. Local government cannot do it alone – nor should it have to – with this infrastructure not only protecting local economies and livelihoods, but also protecting crown-owned infrastructure such as roads, railway lines, power and communications infrastructure, as well as hospitals, homes, and schools. This protection is what New Zealand communities expect of both central and local government. It is a cost-burden too large to bear by local ratepayers, alone.

The \$217m Covid recovery co-investment into 55 flood management projects across New Zealand is proof that the co-investment model works. It enabled projects to accelerate far beyond – sometimes years ahead – of their planned completion dates and has created significant momentum, with local councils and businesses well-equipped and staffed to continue this work across the next tranche of critical projects.

The Before the Deluge 2.0 proposal has the support

of Mayors and Chairs on behalf of their communities throughout New Zealand. For the sake of long-term benefits, now is the time to maximise current capability, social licence, and achieve cost-benefits to put up better defences that will ultimately avoid or considerably minimise the extraordinary recovery expenses when the next extreme weather event hits our shores.

This is a moment in time for New Zealand. We can choose to invest extraordinary amounts in recovery, or we can choose to invest intelligently, before the deluge.

Michael McCartney is the Convenor of the Regional Chief Executive Officer Group. Before the Deluge 2.0 has been presented to the Government by the regional sector of New Zealand’s local government, governed by the mayors and chairs of regional councils and unitary councils, directed by the Regional Chief Executive Officers’ group, and supported by Special Interest Groups made up of subject-matter experts from around the country.

Otago project protecting highly productive agricultural land, airport and community

Otago Regional Council

The next phase of the Otago Regional Council’s \$5 million upgrade of its Contour Channel floodbank on the Taieri near Mosgiel is underway. The project is co-funded by ORC and Central Government, through Kānoa; the Regional Economic Development & Investment Unit within the Ministry of Business, Innovation and Employment (MBIE).

The Contour Channel project is the largest of the projects in the ORC Climate Resilience Programme and includes 3.5km of channel upgrades and the replacement of two ORC owned bridges. It is one of four projects which together makes up the ORC’s Climate Resilience Programme.

The Contour Channel intercepts runoff from various steep streams on the Maungatua Range and conveying the runoff into Lake Waipori, protecting 7,300ha of highly productive farmland, Dunedin International Airport, and the surrounding community from inundation in a heavy rainfall event.

Initially constructed in the early 1900’s, the upgrade brings the channel up to present-day construction standards by improving the floodbank’s resilience. These works form part of ongoing improvements required across ORC’s floodbanks to ensure resilience and mitigation to flooding events is at a sustainable level.

Across Otago there are seven flood schemes protecting approximately 43,000ha of land, which include 218km of flood banks and 12 pumping stations.

Find out more about this project.





Pokapu bridge

Pokapu bridge triples previous infrastructure floodwater capacity

Northland Regional Council

Around a hundred people celebrated the milestone opening of the \$3.5m, 60m long Pokapu Bridge in October. The new bridge is a critical part of the Otiria and Moerewa flood scheme and is designed to better protect the communities of Otiria and Moerewa from flooding.

The previous bridge infrastructure acted like a dam in a flood, diverting flood waters towards Otiria and Moerewa and worsening flooding problems in the area. While floods will still occur, parts of the area previously subjected to potentially damaging and life-threatening half-metre deep floodwaters should see that reduced to just ankle height.

The new structure and an associated spillway due to be completed before Christmas 2023 are designed to allow three times more floodwaters to pass underneath, enabling it to cope with a once in a century flood event. Beams from the old bridge have found a new home at Whangārei's Quarry Gardens.

Stage I of the Northland project – construction of the downstream section of new \$1.4 million 80-metre-long spillway at Otiria – was completed last year. Stage II is the now-completed bridge, and Stage III which was 80 per cent completed at the time of the bridge opening – involves excavation of the remaining 800-metres of spillway, removal of the existing Pokapu Rd road bridge and earthworks to tie the new bridge into the wider scheme.



Mother and Child - 2020 Flood Moerewa

The works cumulatively mean that in a flood, most water will be sent down the new spillway and into the Waiharakeke River, where the river is considerably wider and deeper, and where the river flowed for centuries, restoring some of the River's Mana and delivering on Te mana o te Wai.

A large number of people and organisations played a role in the work including the local community, the whānau shareholders of the Māori-owned block where the new bridge is built, and local kaitiaki who had worked closely with the construction crew. Local marae and hapū Ngati Kopaki and Ngati Te Ara kaumatua, kuia and kaitiaki, the Far North District Council and Kānoa - Regional Economic Development & Investment Unit were also acknowledged for their contributions as part of the opening of the bridge, as was the many years' of work of the Taumarere Flood Management Working Group who were credited for their role in bringing the project to a reality.

Find out more about this project.



Gravel groynes have been placed at a 45-degree angle to the river flow at this site on the Ashburton River/Hakaterere to deflect flood flows back into the fairway. Willow poles (young tree stems) and anchored tree protection (ATP) have also been installed in order to re-establish the river berm and provide much improved protection. As an innovative trial we have also included native species in the scour bay to boost vegetative cover.

Canterbury berm transition project clears 1,200 rugby-fields' worth of exotic weeds

Environment Canterbury

Co-investment between Canterbury Regional Council (Environment Canterbury) and Kānoa - the Regional Economic Development & Investment Unit gave the Canterbury region a unique opportunity to roll out a regionwide berm transition project - a targeted and strategic programme of weeding and underplanting along its rivers - helping to make them stronger, safer and more resilient.

Berms are the managed areas between the active braid of the river and the stopbanks. Together with stopbanks and trees, these river berms play a critical role in flood protection, helping to slow flood water and absorb force. More than 60 berm transition sites, mapped here, have been established across the region with 60ha of wetlands cleared of weeds, and the equivalent of 1,200 rugby fields' worth of exotic weeds, gone.

Weeds are a significant risk to river berms as they smother flood protection trees which if compromised can increase erosion risk to stopbanks and other essential infrastructure, decrease natural habitat diversity and negatively impact the overall resilience of rivers. Clearing weeds allows the river more space to spread and braid - something that is both rare and valued as part of the Canterbury landscape. Canterbury has the largest number of braided rivers in New Zealand. Extensive native plantings alongside these rivers, also undertaken through this programme,

will lower the chance of the weeds reinfesting.

As of August 2023, the project has reached the following milestones:

- Over 45 contractors involved in the project to date
- 80% of them local businesses, 19% Māori-owned businesses
- 130,606 total hours worked by both contractors and internal staff
- The monthly hours worked averages the equivalent of approximately 816 fulltime employees (FTEs)

This regionwide project is increasing the resilience of berms, making them more resilient to flood damage and helping to protect productive farmland, communities and public infrastructure, enhancing environmental values and enabling opportunities to establish community recreational areas.

Find out more about this project.

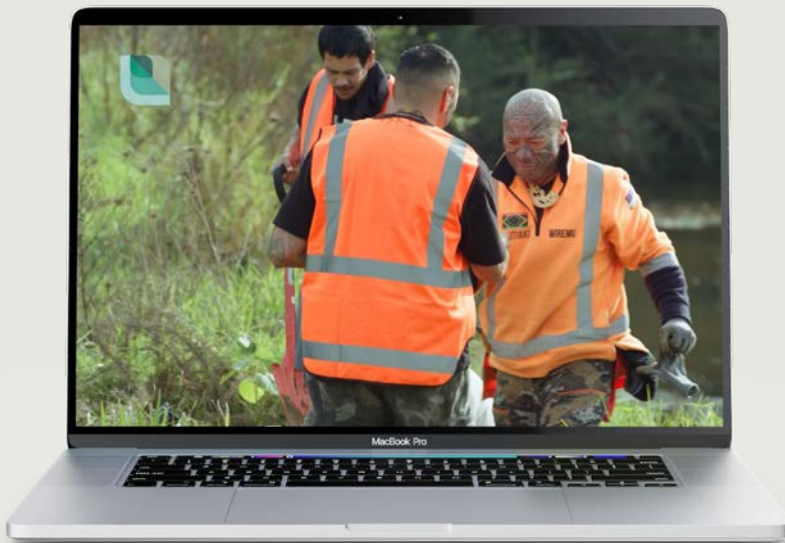


About Resilient River Communities

In 2020, Kānoa released \$217m to co-fund 55 climate resilience projects, with a total cost of \$312m, they are collectively known as the Resilient River Communities projects. Resilient River Communities is a joint initiative between Kānoa - the Regional Economic Development & Investment Unit, regional councils and local

authorities focused on developing and upgrading vital river management and flood protection schemes in Aotearoa.

More information about these projects can be found online at www.resilientrivers.nz



Resilient River Communities

Video

This short clip looks at the projects that are taking place around Aotearoa, why the Resilient River Communities programme was established and the people who are passionate about its success. Hear more about the effects of flooding on communities, as well as insurance implications and social outcomes from those directly impacted around New Zealand.

[Watch the clip here.](#)



Spread the word

If you know someone who would like to be in the loop on the latest Resilient River Communities news, please forward this email to them so that they can subscribe using the button [here](#).