









## Quarterly Update July 2024

### Nau mai and welcome

In this update we look at some of the projects that are building more Resilient River Communities through central government grant co-funding made available to regional authorities in 2019.

One of these projects was also recognised as a finalist in the Floodplain Management Australia Excellence awards, congratulations Greater Wellington! The River Managers' Special Interest Group continues its work encouraging tertiary students to consider river management as a good career choice ensuring expertise continues to develop in the next generation.

We are also thinking of our colleagues and the community in the Gisborne and Hawke's Bay areas after another State of Emergency was called late last month due to flooding.

### Careers fair seeks to attract bright new talent

The River Managers' Special Interest Group (RM SIG), supported by Te Uru Kahika, continues its work encouraging tertiary students to consider river management as an important career path by attending the CDES (Career Development and Employability Services) STEM Careers Expo was held in at Auckland University in April.

The River Managers' Special Interest Group (RM SIG), supported by Te Uru Kahika, continues its work encouraging tertiary students to consider river management as an important career path by attending the CDES (Career Development and Employability Services) STEM Careers Expo was held in at Auckland University in April.

The successful event saw hundreds of people through its doors and those in attendance were impressed at the number of engaged students, coming away feeling very positive about the bright future pipeline of smart young students interested in a career in STEM (Science, Technology, Engineering and Mathematics). Active attendance at the fair is part of the RM SIG's strategic goal to build capacity into river engineering-

related roles in regional and unitary councils across New Zealand and is connected to its Quality People workstream.

The RM SIG also offered a summer student programme from mid-November 2023 to mid-February 2024, through councils around the country. The programme has been billed as a fantastic way to gain experience in the industry.

#### Find out more:

- Summer Student Programme
- About the CDES STEM Careers Expo





A tale of two fish pumps - Waikato's new infrastructure narrowly avoids pirates

Waikato Regional Council

The stories told by Waikato Regional Council about acquiring its two biggest fishfriendly Archimedes screw pumps make a dry (pun intended) subject a wee bit more exciting.

The pumps, which are each compared to being the size of a pre-historic megalodon shark, have replaced four non-fish friendly pumps that were past their used-by date at the Churchill East pump station in Hampton Downs.

Project manager Stephen Wilson had been nervously tracking their shipment from the Netherlands to New Zealand after building delays caused by the impacts of COVID-19.

With pirate activity occurring in the area, the pumps made it through the Suez Canal and across the Red Sea mere days before ship operators were forced to reroute, taking the lengthy detour of 3,500 nautical miles (6,500kms) around the Cape of Good Hope.

Despite a somewhat dramatic start to the project, the twin pumps arrived safely and were successfully installed on time and under budget.

And they are already impressing the Waikato Council team with their performance.

"Now, just one pump can keep on top of water levels by operating for an hour every six hours or so, on low speed," said Wilson.

Each pump measures 18m in length and 3m in diameter and can pump a maximum flow of 2.25 cubic metres per second. That is the equivalent of pumping enough water to fill more than three Olympic-sized swimming pools in one hour.

The works to install the pumps were no small feat, either. As part of the upgrade - which is critical to the protection of productive farmland and enables

safe passage of native fish - a coffer dam was created around the existing pump station. Six temporary pumps had to be installed to manage wet weather until the new pumps were operational, and they were immediately put to work.

Waikato Regional Council received \$4.48 million from the Climate Resilience COVID-19 Response and Recovery Fund, which is administered by Kānoa - Regional Economic Development & Investment Unit, for the fish-friendly upgrades of the pump stations in the Aka Aka and Churchill East drainage areas and to scope out three other sites.

Check out other works happening in the Waikato region with the help of grants from Kānoa.















# Resilience strengthened through South Canterbury river works Environment Canterbury

December 2019 in South Canterbury saw significant rainfall cause widespread flooding and damaged flood protection infrastructure. Read about the collaborative effort, led by Environment Canterbury to repair flood protection infrastructure and strengthen resilience in the Rangitata and Waitaki rivers.

Environment Canterbury has spent \$8.5m repairing and strengthening resilience across the Rangitata and Waitaki Rivers following significant rainfall in December 2019 which caused widespread flooding and damage to flood protection infrastructure in South Canterbury.

The flood was 35 times the usual flow in the Rangitata, breaking through five different sites including the south branch, which hadn't had significant flow in 24 years.



Initial repair work post flood was done to keep the community safe. Further works including stopbank reinforcement and stabilisation, native planting, large-scale pole planting, protection of the Peel Forest landfill, debris clearance at the Rangitata Huts and aerial weed control across more than 260 hectares of the Rangitata across both the Rangitata and Waitaki rivers enabled Environment Canterbury to significantly enhance the flood protection of both rivers.

More than 60 per cent of the cost of works were covered by climate resilience funding from central government, and the rest from Environment Canterbury, contributions from government and private infrastructure owners (NZ Transport Agency Waka Kotahi, KiwiRail, Transpower, Rangitata South Irrigation Ltd) and local district councils.

Not only did the co-investment enable the recovery work to be delivered much faster than with rates alone, but most of the contracts were also awarded to local businesses strongly impacted by COVID-19, providing a much-needed economic boost. This provided employment or contracts to over 24 local businesses, reduced flood risk to around 10,000 hectares of land, and placed nearly 20,000 tonnes of rock.

Check out the Rangitata Flood Recovery project page, here.











# New Zealand project a finalist in Floodplain Management Australia Excellence Awards

**Greater Wellington Regional Council** 

Greater Wellington's Climate Resilience Programme (Tranche 1) entered the Floodplain Management Australia IAG Flood Risk Management Project of the Year awards. Not only was it the first New Zealand project to ever be included but it was also one of the award finalists in the FMA IAG Flood Risk Management Project of the Year Award category.

The winning project, announced at the Floodplain Management Australia awards dinner on 23 May, was the Hawkesbury-Nepean River Flood Study (NSW Reconstruction Authority, RHELM, Catchment Simulation Solutions and WMAWater). Although not the winner, the Greater Wellington Climate Resilience Programme is the first ever New Zealand project to enter the awards and was a finalist alongside 11 other outstanding projects across Australasia. The awards are held every year and include three categories: FMA IAG Young Floodplain Manager of the Year Award, FMA Allan Ezzy Flood Risk Management Project of the Year Award.

The Project of the Year Award is given to a project that demonstrates the highest level of achievement in areas of flood risk management including best practice, public benefit, community involvement and innovation – all of which the Greater Wellington Climate Resilience Programme has in spades. This is the first year that projects outside Australia were eligible to enter the awards, and Greater Wellington was proud to be a finalist. Sue Ribbons, President of Floodplain Management Australia, said all award finalists were of particularly high standard this year and deserving of acknowledgement, making the role of the judging committee particularly difficult. "An important role of the Awards is not just to announce winners, but to shine a light on some of the many impressive flood risk management activities being undertaken by FMA Members." "So please start considering which flood projects and champions you can nominate for the 2025 Excellence Awards."

Floodplain Management Australia (FMA) is the peak national body for flood risk practitioners in Australia and has an Associate Member category for international members.



The theme of the 2024 Floodplain Management Australia conference (held in Brisbane in May) was 'Floods in a Changing Climate' and covered flood risk management, environmental and cultural river management projects and issues, community engagement, policy and planning. The conference attracted 486 practitioners who are working in or interested in flood risk management, including Commonwealth, state and local government representatives, research organisations and education providers as well as consultants, engineers, land-use planners, emergency responders and community volunteer organisations from New Zealand, USA, UK and Singapore.

Having received a Highly Commended award at the at 2023 LGFA Taituarā Excellence Awards, and as featured in the **September 2023 Quarterly Update**, Greater Wellington's Climate Resilience Programme has delivered wider cultural, social, economic and environmental outcomes alongside their flood protection work.

### Find out more:

- View the finalist entries, here (Greater Wellington is on page 17)
- Information about Floodplain Management Australia
- Read more on the Resilient River Communities website: Broader outcomes initiatives
- Watch the video to find out more about the wellbeing focus within this project













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### **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.

