Resilient River Communities | Te Uru Kahika Regional and Unitary Councils Aotearoa | Kānoa Regional Economic Development & Investment Unit | Environment Canterbury Regional Council Kaunihera Taiao ki Waitaha

REGENERATION: THE FUTURE OF FLOOD PROTECTION

ENVIRONMENT CANTERBURY

Project: Regionwide River Berm Transition Programme **Location:** Canterbury/Waitaha

The challenge

Climate change affects Canterbury through rainfall, sea-level rise, temperature and river channel changes which all impact flooding in the region. Currently, most river berms are choked with exotic weed growth which climate change is likely to worsen. Weed infestation is a region-wide issue that compromises the health of trees and the performance of the berm during flood.

River berms have an important function in flood protection as they carry water when the river is high, slow down water flow to mitigate erosion risk, and absorb excess water into the ground.

River berms and margins are the strips of land directly beside the river, or between the river and the stopbank.

The project

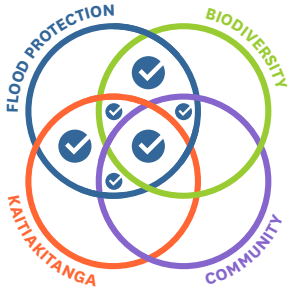
The goal of this visionary three-year project is to transform selected areas within the current braided river berms into multifunctioning areas, increasing their value, resilience and function.

This will be achieved by regenerating river berms in Canterbury with native flora, resulting in significant environmental and community benefits as well as increasing the resilience of the river berms for flood and erosion.

The awa will benefit from targeted weeding and enhancement planting. Targeted weeding means leaving flood protection trees, native undergrowth, and native forest untouched while eliminating pest plants like old man's beard. Benefits of this work include decreasing flood risk by supporting our flood protection trees, increasing seed source to re-establish native plant growth, and increasing habitat for manu.

These areas provide examples to inspire future management of further identified sites in this manner. This project is one of Environment Canterbury's six Climate Resilience Programme of Flood Risk Management Projects to be accomplished by December 2023.

Early results of the work are already looking very positive.



Project funding

Kānoa $6.4m | Council $3.6m

Multiple works

23 rivers around the region

Length of river berms

1,600km

Key Benefits

- ✔ **A natural infrastructure solution:** which focuses on long-term regeneration of river berms in Canterbury with native flora.
- ✔ **Significant environmental benefits:** better flood control function, an increase mahinga kai abundance and use, and greater genetic diversity of native plant species. A vital step towards a revival of precious braided rivers.
- ✔ **Community benefits:** improving recreational activities and the enjoyment of the area.
- ✔ **Future-focused and upskilling:** a mix of traditional and new climate change adaptation solutions requiring: new technical specifications, a mindset-shift in the way that work is undertaken, contractor training.
- ✔ **Inspirational:** early results already looking positive and inspiring management solutions for further identified sites which could be supported by further, future investment.
- ✔ **Collaborative:** working with treaty partners ngā Papatipu Rūnanga and the community taking into account functional, environmental, cultural and social values in decision making.
- ✔ **Enabling affordability:** many communities cannot absorb increased cost of rates to pay for new or upgraded flood protection schemes. Contribution by central government has enabled increased resilience to climate change and protection against flooding.

Saltwater Creek Planting - Year 1