



The Rangitīkei River Climate Resilience Project

Over time the course of the Rangitīkei River has been influenced and changed – initially through clearing along the banks for farming and planting of exotic vegetation and later through river management. As late as the 1940s the Rangitīkei River was wide and braided.

The narrowing we see today has occurred due to traditional river management practices, based on frequent and spatially restrictive interventions, as well as through large scale flood events like 2004.

See image over page.



For more information visit www.horizons.govt.nz
or freephone Horizons on 0508 800 800

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These aerial photographs show a semi-braided river in the 1940s which has been managed into a single entrenched channel by 2020.

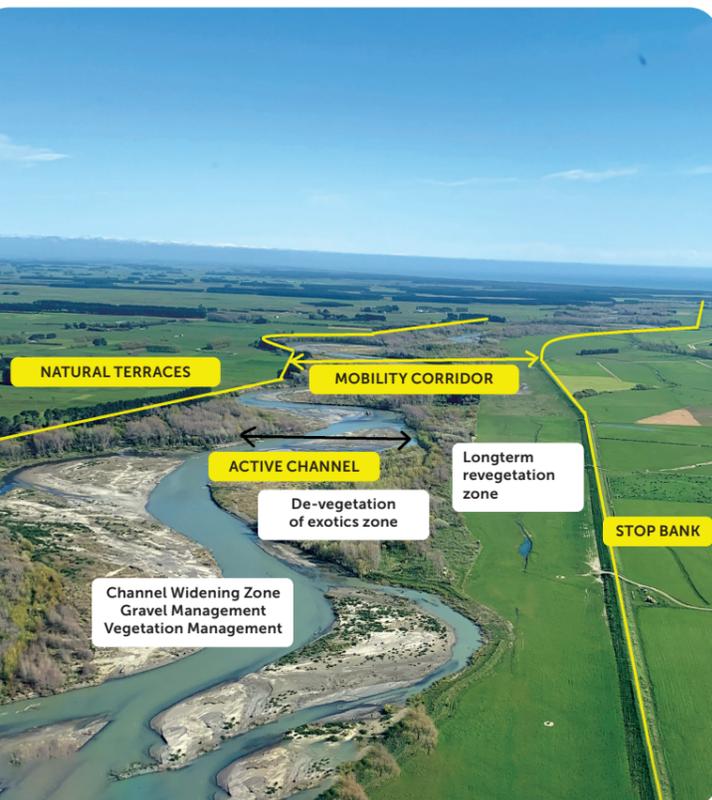
A mobility corridor - a new way of working with the Rangitikei River

Horizons Regional Council's Rangitikei Climate Resilience Project is looking at a new way of working with the river called 'a mobility corridor' or 'room for the river'. The concept defines a corridor in the river flood plain where engineered solutions will not be used to control erosion or river flow.

It recognises a healthy river is highly dynamic, constantly adjusting its path, and impacted by land, catchment and climate disturbance, as well as the amount of water and sediment coming from the wider river system that feeds into it.

A mobility corridor strikes a balance between the benefits of allowing the river to move freely within wider boundaries, and the economic benefits that come from protecting property and infrastructure.

This approach also recognises the principles of Te Mana o te Wai, respecting the river's mana and its need to change and adjust its course as a living entity.



A more resilient river system

The intention of the Rangitikei River Climate Resilience Project is to create a mobility corridor which will enable the river to flow more naturally and, when it is in flood, to disperse water across a wider area while still protecting the stopbank.

The project goals include:

- Reinstating a greater river character through a wider active river area and sections of multiple semi-braided river channels;
- Increasing biodiversity through the re-introduction of native plant species into the river corridor; and
- Enhancing public access and recreational opportunities.

The Mobility Corridor lines on this image mark the outer limit of the Rangitikei River. These lines are positioned to take advantage of, and reflect, natural geological features and controls such as the presence of hard mudstones, as well as private land and existing infrastructures like stopbank and bridge positions.

Planned work

This project focuses on the lower Rangitikei River from Bulls to the sea and includes:

- Addressing the risk of river erosion against the Parewanui stopbank. This will be done by widening the channel through the removal of non-native vegetation (both mechanically and with aerial spraying). Gravel management will also be used to create multiple river channel options;
- Slowly transitioning pastoral land into a continuous native plant corridor alongside the river;
- A wetland along the Parewanui No.1. Drain;
- The construction of pathways for recreational use along some parts of the stopbank; and
- Flood resilience work - for example Scotts Ferry rock lining repair.

This work will be achieved in various ways including putting some of Horizons leased land back into native vegetation to protect the stopbank. A recreational multi-purpose use track from the Tutaenui confluence to Scotts Ferry, that highlights cultural and historical sites along the way, is being considered. There is also opportunity to develop wetlands around some farm drains that feed into the river.

The combination of native planting and wetland creation will enhance the ecological value of the river environment and improve water quality, while the shared pathway will improve the community connectivity to the river. A target of 25% lease land planting has been set for the project with the intention of returning all lease land to vegetation gradually over a longer 30 year term.



Stream clearing work along the Tutaenui Stream undertaken winter of 2021. Fencing and riparian planting will follow with a pathway meandering along the stream down to the Rangitikei River. Prior to this clearing the stream was clogged and overgrown – the large tree on the right was pulled out and was just one of many things impeding the stream's flow.



Project funding and social procurement

In 2020, central government's budget included \$210 million for climate resilience and flood protection projects across New Zealand. This funding formed part of government's response to the economic impacts of COVID-19. Horizons received \$26.9 million of this funding from Kānoa, the government's Regional Economic Development & Investment Unit (REDIU), for four climate resilience projects. Horizons' contribution to the four projects is a further \$9 million. This collaborative funding has enabled Council to accelerate work on these four projects, including the Rangitikei River Enhancement Project which is costing \$5.2 million, to increase our river communities' resilience to the effects of climate change.

This project is intended to have positive environmental and social outcomes for the Rangitikei River and its users. It will not only assist in keeping our communities safer but also help boost the region's economy, through employment of

local businesses and iwi, as work on maintaining and building new infrastructure progresses.

The completion date for all four projects is March 2024.

To keep up to date with work underway visit the Infrastructure Climate Resilience Projects page on Horizons' website www.horizons.govt.nz or scan the link below.

