

An aerial photograph showing a wide, muddy river flowing through a green, rural landscape. A bridge with several concrete piers crosses the river. The water is turbulent and brown, indicating a flood. The surrounding fields are lush green, and some trees are visible in the distance. The sky is overcast.

SUCCESSFUL FLOOD PROTECTION OUTCOMES

WEATHERING THE STORMS AHEAD

Version 1.0 | 9 March 2026



**Te Uru
Kahika**

Regional and
Unitary Councils
Aotearoa

A MESSAGE FROM OUR CHAIRS

Kia ora Minister,

As everyone in the country knows, the start to 2026 has been tumultuous. More states of emergency were declared in the first six weeks of this year than for all of 2025 – and more big weather is undoubtedly on the way.

There is always a necessary degree of focus on the things that go wrong – the homes and businesses that are flooded, the landslips and closures, and the tragic loss of life. We don't want to diminish any of this, but we do wish to draw your attention to what the headlines didn't report – the successes from recent flood protection investments.

In particular, we want to highlight two projects that were funded as part of the Tranche 1 investments:

The Moutoa Floodgates, located between Foxton and Shannon on the Manawatū River, which provide vital protection for more than 280,000 hectares of land, as well as the Foxton township

The Waipaoa River stopbank strengthening project, which protects vital high-value horticulture land and the city of Gisborne in Tairāwhiti.

Without the acceleration of both of these projects as part of Tranche 1, the regions were at severe risk of flooding and damage from the January 2026 storm events. It's thanks to your foresight in approving the investments that people and buildings and businesses and farms remained protected.

There's still more to be done. As we have discussed, our challenges from severe weather events continue to grow – but so do our capabilities and capacities as Regional and Unitary Councils to deliver. So we need to continue collaborating, at scale and at pace, so we can continue to stay one step ahead of the flood waters and the devastation they bring – exactly as has been the case in the Manawatū and in Tairāwhiti.

We look forward to continuing work together on the vital investments in Tranche 3.

Nāku iti noa, nā

Daran Ponter

Chair, Greater Wellington Regional Council

Dr Deon Swiggs

Chair, Canterbury Regional Council

On behalf of chairs and mayors of Regional and Unitary Councils of NZ



The upgraded Moutoa Floodgates in the Manawatū prior to the January 2026 flooding event, showing the control gates in the foreground and the stopbank-protected spillway adjacent to Foxton.

Briefing Document | Flood Risk Resilience | Tranche 3



The significantly upgraded floodgates performed as designed, channelling around 2,500m³/s of flood waters into the spillway, protecting around 280 square kilometres of valuable farmland and the properties of Foxton.

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THE MOUTOA FLOODGATES: PROTECTING THE LOWER MANAWATŪ

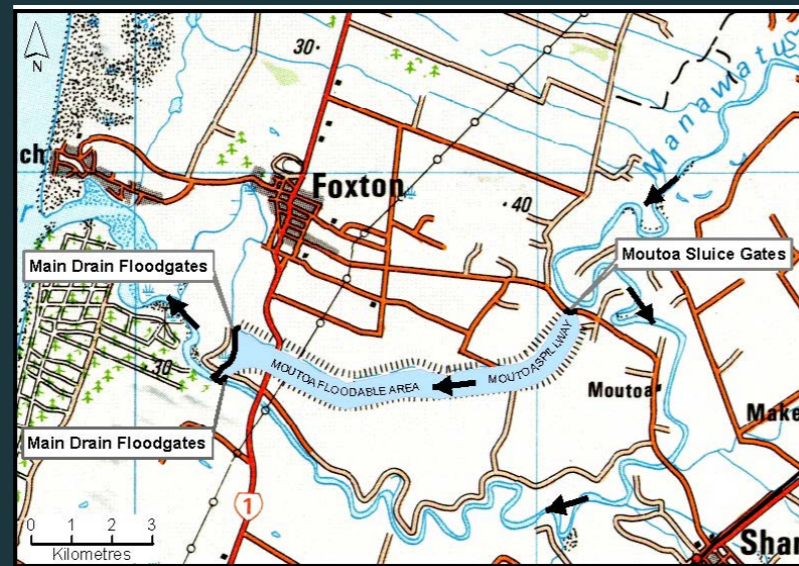
The Moutoa Floodgates, located between Foxton and Shannon on the Manawātū River, provide vital flood protection for land in the lower reaches of the Manawātū River.

The curving reinforced concrete structure contains nine steel radial gates, each 15 m wide by 4.5 m high and weighing 15 tonnes. The gates are raised by a pulley system attached to the concrete piers and are operated by a series of electric motors. Each gate can be operated independently and standby power is available in case of electricity failure.

The gates were built in response to a 1941 flood, and were completed in 1962. When operated at full capacity, they redirect approximately 2,500m³ of floodwater through a specially designed, 10km long floodway channel. This diversion of floodwaters protects approximately 280km² of land in the lower Manawātū Plain from flood damage.

After more than 60 years of operation, the gates were upgraded between 2024 and 2025 to ensure they provide flood protection for decades to come, as part of the national co-funding of urgent flood risk resilience works by the Crown and Horizons Regional Council.

During the severe weather events in January 2026, the upgraded flood gates were activated and performed as designed to divert major river flows through the spillway, avoiding what could have been catastrophic flooding in the Manawātū.



Located on Foxton-Shannon Road, south of Ōpiki and just above Moutoa, the floodgates divert water from the main river into a specially designed 10km floodway that rejoins the river at Whirokino, just before Foxton Loop.

The floodway bypasses the 30 km of slow-flowing, meandering channel that can easily flood and pour water over tens of thousands of hectares of valuable land on the Manawātū Plains. The floodway is 600m wide and is bounded on both sides by 5.5m high stopbanks, and is grazed by farmers when not in use.

Without the gates and spillway, property and infrastructure would be regularly flooded during heavy rain events:

- Dairy, sheep and beef farms – this is the dominant land use in the area, and includes Pāmu Landcorp-owned Moutoa Dairy Complex.
- Horticulture and market gardens – this is the next most dominant land use in the lower Manawātū.
- Urban and rural communities (e.g. Foxton and Shannon).
- National lifeline infrastructure (including key rail links, SH1, local roads, power and telecommunications).
- Māori-owned land and iwi interests (including marae).

THE MOUTOA FLOODGATES: MAJOR ENGINEERING UPGRADES

The Moutoa Floodgates, located between Foxton and Shannon, are the largest piece of river management infrastructure in the Horizons Region. A full mechanical, electrical, and structural upgrade of the gates was undertaken between October 2024 and July 2025 – the first major upgrades in 60 years.

- All nine gate winch sets, motors, and gearboxes were replaced with new equipment.
- All pulley systems were replaced, increasing gate movement speed and providing better reaction speed.
- A full electrical rewiring and new switchgear was completed, including automatic power switchover system for backup in case of mains power failure.
- New overhead power lines servicing the site were installed for better resilience.
- Structural concrete repairs were made to extend service life.
- New remote off-site gate operation capability was installed, enhancing operational safety and emergency response times.

280,000

Hectares of land directly protected by the Moutoa Floodgates

36+ jobs

Created across the region whilst providing local training opportunities

\$3.16m

Investment in upgrades and resilience for the flood gates and infrastructure

5x-8x ROI

Investment in prevention avoids 5-8x greater cleanup and recovery costs



TAIRĀWHITI: JUST IN TIME

As part of the Tranche 1 funding in Budget 23, Gisborne District Council began work on the Waipaoa River Stopbank Strengthening project. This involves the strengthening to the remaining 31km of flood protection along the western side of the Waipaoa River, by raising and widening the stopbanks.

Planning for the upgrade programme began in 2015 with resource consent granted in 2018, and the first construction work in 2019. The programme originally expected to be completed in 2030 but was accelerated through Government funding following both Covid-19 and Cyclone Gabrielle, and is now due to be completed 4 years ahead of schedule. The total project cost is forecast to be about \$37 million, with around \$27 million of this funded by the Crown.

The Waipaoa flood control scheme (WFCS) includes 61.2km of stopbanks, protecting around 10,000 hectares of productive floodplain land. Originally designed in 1949 and built between 1953 and 1969, the WFCS is considered one of Council's most valuable assets.

As part of the upgrade, stopbanks are being made both higher and wider. The top crest width is being increased from 1.5 metres to 4 metres, and in some areas, stopbank heights are being raised by 1–2 metres. The aim of the project is to increase the level of flood protection provided by the WFCS to a 1-in-100-year return period, accounting for climate change effects through to the year 2090.

By late 2025, approximately 54 km had been successfully upgraded. In the final stage, work is focused on raising and strengthening the stopbank along the northern side of the Whakaahu Stream near Patutahi Township, and the western side of the Waipaoa River around Waituhi, Kaitaratahi, and Waipaoa.

This is a very significant project for a vulnerable section of the Waipaoa River. And while progress has been consistent, there were still gaps in the final design, with the last 6.5km of stopbank upgrades still to be completed, the flood gate near the ocean yet to be installed, and rock armouring of vulnerable locations still underway.



Local company Earthwork Solutions Limited has delivered every Waipaoa Stopbank project to a high standard since upgrade work began in 2019.

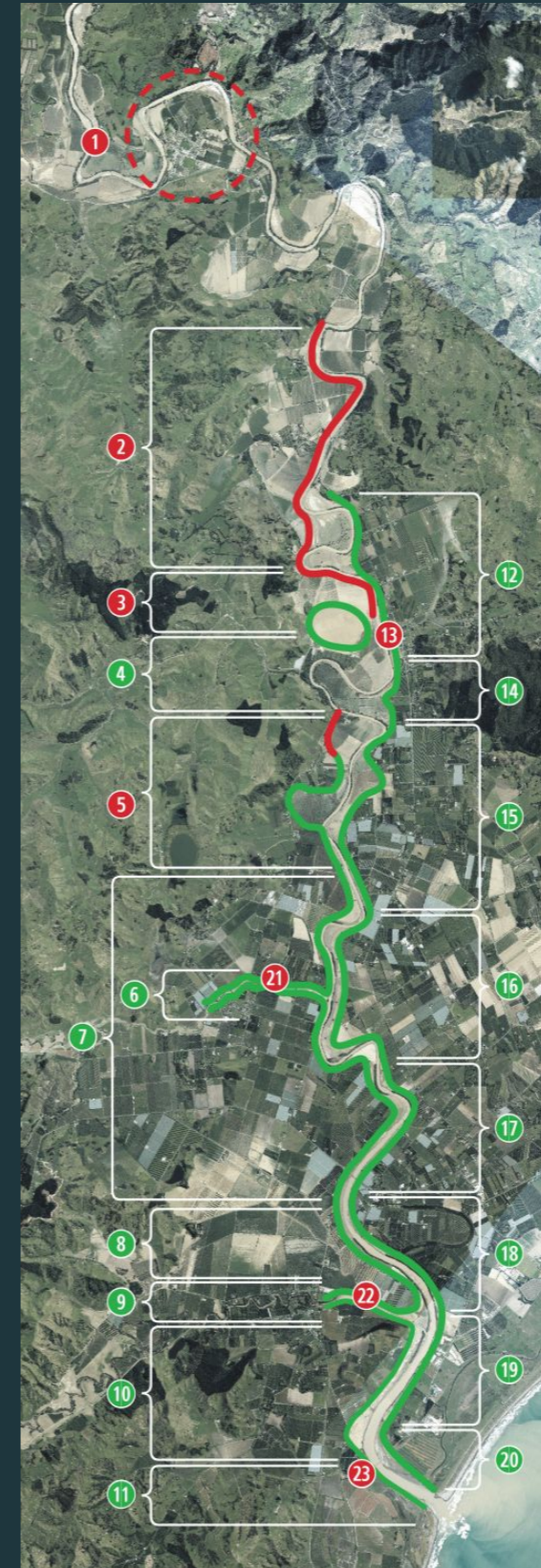
Photo credit: Gisborne District Council

Despite the limitations, the partly-constructed WFCS performed well during Cyclone Gabrielle and again in the January 2026 floods, with the protection measures largely keeping floodwaters out of the valuable horticultural land and Gisborne City itself.

The economic effects have been significant. While businesses such as intensive horticulture have suffered considerable operational and transport disruption, there has been no large-scale flooding that has stripped soils or destroyed high value assets, allowing the production of crops to continue.

Had the project proceeded to the original 2030/31 timeline without Crown support, it is likely the region would have suffered significant flooding damage in the storm events. The prudence of timely and considered investment has been amply demonstrated in Tairāwhiti.

TAIRĀWHITI: JUST IN TIME



1. Te Karaka Flood Resilience Project - hydraulic modelling, detailed design, consenting, implementation 2024/25 ongoing
2. Wi Pere to 1913 Matawai Rd, 6km to be upgraded 2025-27
3. Wi Pere Trust raising 2km 2025/26
4. Wi Pere Trust mitigation measures, completed Dec 2022
5. Renner Rd to 678 Lavenham Rd 3.5km completed, 1.4km expect to complete May 2026
6. Whakaahu Stream, upstream of Lavenham Bridge 1.7km, completed Dec 2024
7. Matawhero Bridge to Lavenham Rd Bridge, north side Whakaahu Stream, 1.7km upstream. 12km completed Nov 2024
8. Opou Rd to Matawhero Bridge (SH2) 3.4km, completed November 2023
9. Whatatuna Stream to Opou Rd 3.4km, completed January 2023
10. Railway Bridge to Te Arai 3.2km, completed December 2022
11. Railway Bridge to ocean, completed January 2024
12. Kaitaratahi Hill to Whitmore Rd, 3km completed April 2022
13. Mahunga Stream floodgate construction, completed January 2024
14. Caesar Rd to Whitmore Rd 1.5km, completed January 2024
15. Ceasar Rd to Ferry/Ingram Rds 4.7km, completed October 2019
16. 359 Bushmere Rd to Ferry/Ingram Rds 4.7km, completed February 2022
17. Matawhero Bridge to 359 Bushmere Rd 3km, completed June 2021
18. Willows/Dunstan intersection to Matawhero Bridge 3.8km, completed March 2021
19. Railway Bridge to Willows/Dunstan 2km, completed February 2020
20. River mouth to Dunstan Rd 2km, completed December 2020
21. Whakaahu culvert upgrade 2025/26
22. Whatatuna flood gate upgrade 2025/26
23. Railway Bridge swing gate 2025/26

SUSTAINING THE MOMENTUM IN FLOOD RISK RESILIENCE

The events of early 2026 show that severe weather will continue to challenge the country in the immediate future. And in order to keep protecting property and assets and our economy, we need to keep investing in flood risk resilience

The inclusion of flood protection in the Infrastructure Commission's National Infrastructure Strategy is recognition of how important this area of investment is – and the economic and social costs that can be avoided by tailored and effective interventions.

And the public agrees with the importance of flood protection. A recent poll from Freshwater Strategy shows the most popular investment projects are "large-scale flood protection for regional cities" – backed by 77% of respondents. The events of the past few years, particularly Cyclone Gabrielle and its aftermath, seems to have focused the attention of New Zealanders on the impacts flooding can have on homes and livelihoods.

With this in mind, Te Uru Kahika has put forward 30 critical regional projects on behalf of Regional and Unitary Councils, covering the length of New Zealand. This is the third tranche of investment, totalling \$370.6 million, which will take action on some of the country's most pressing flood risk challenges. Once again, Te Uru Kahika is proposing the 60/40 investment approach used in prior tranches.

Across multiple Budget cycles, the Government has acted decisively to address the flood protection infrastructure deficit that has been accumulating for the last few decades. And as the results of investment in Manawatū and Tairāwhiti show, homes and businesses and our primary sector has been protected when big weather has come calling.

The proposed tranche of 30 projects begins the process of proactive investment, rather than simply addressing pressing infrastructure deficits. These are longer-run and in some cases significantly larger projects which will protect communities for many decades to come, and which will have a more significant economic impact.

The diagram at right shows the extent and value of the assets and infrastructure being protected by the 30 priority projects – 960 square km of urban and productive land, thousands of kilometres of roads and pipelines, more than 200,000 people, and \$67 billion of buildings.

Work is well underway on the design and consenting process for each of these projects, and following Budget approval, Councils can begin to tender for contracts to start on the physical construction, with completion due to progressively occur over the next five years.

The nature and scale of many of these projects means they will act as significant regional drivers of employment and economic activity. As was the case in the Manawatū, training and employment effects will be felt in local communities, bringing opportunities for local companies and their staff.

Balancing budget and urgency

Te Uru Kahika recognises there are always budgetary pressures on the Government's accounts, and so the project listing has been extensively prioritised by the sector. The priority projects:

- Have a benefit cost ratio of 4 or greater, meaning they deliver at least \$4 of benefit for every \$1 invested
- Are able to be commenced in the near term, as they are either proceeding through consenting or are nearing the point at which construction contracts can be let.

As noted in the material provided to the Infrastructure Commission, the sector foresees a pipeline stretching out over the next three decades. Beyond the immediate priority projects, a further \$600-\$700 million in investments is planned, albeit on a longer timeline with extended start and completion dates.

IMPACT OF THE PRIORITY PROJECTS

The impact of flood protection on our infrastructure and economy is significant. According to research from NZIER, we know that \$1 invested in protection saves \$4-\$5 in response and recovery, reducing costs for individuals and businesses and the Government alike – and the diagram shows why.

flood protection outcomes

Proposed Council co-investment
\$148.25

Proposed Crown co-investment
\$222.37



215,401
Total people affected by the flood schemes



with a replacement cost of
\$67.89 billion

3064 km
roads

221 km
railway lines

124 km
transmission lines

2116 km
wastewater pipes

3449 km
water supply pipes

1447 km
stormwater pipes

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	Area (km ²)	Capital value (\$b)	Improvement value (\$b)	Land value (\$b)
Built-up area or infrastructure	87.62	70.19	33.90	40.28
Water	4.84	2.68	1.15	1.52
Productive land	867.97	32.89	14.76	18.11
Total	960.44	109.73	49.82	59.92

THE 30 PRIORITY PROJECTS

The table shows the 30 high priority projects across the country and their co-investment requirements, in geographical order from north to south.

Council	Project	Total cost (\$m)	Crown (\$m)	Council (\$m)
Northland Regional Council	Donald Road Capacity Improvements	\$ 1.70	\$ 1.02	\$ 0.68
Waikato Regional Council	Lower Piako Stopbanks - Phase 2	\$ 25.00	\$ 15.00	\$ 10.00
	Smartification of Pump Stations in the Waihou & Piako	\$ 3.90	\$ 2.34	\$ 1.56
	Wharekawa Coast Flood Resilience	\$ 1.50	\$ 0.90	\$ 0.60
Bay of Plenty Regional Council	Waioweka - Otara Rivers Scheme, Wharf floodwall and stopbank upgrades	\$ 2.20	\$ 1.32	\$ 0.88
	Rangitāiki-Tarawera Rivers Stopbank strengthening	\$ 6.20	\$ 3.72	\$ 2.48
	Waioweka - Otara Rivers Scheme, Duke Street Pump Station	\$ 3.50	\$ 2.10	\$ 1.40
Gisborne District Council	Te Karaka Stopbank Upgrades	\$ 35.00	\$ 19.20	\$ 15.80
Taranaki Regional Council	Waiwhakairo FPS: Rimu Street to Devon Road protection improvements	\$ 3.00	\$ 1.80	\$ 1.20
Horizons Regional Council	Reid Line Spillway	\$ 15.00	\$ 9.00	\$ 6.00
	Rangioutu Floodgates	\$ 5.20	\$ 3.12	\$ 2.08
Hawke's Bay Regional Council	Waitangi / Ngaruroro Confluence - Channel Capacity Improvements	\$ 10.00	\$ 6.00	\$ 4.00
	Wairoa River Mouth	\$ 20.00	\$ 12.00	\$ 8.00
Greater Wellington Regional Council	Te Wai Takamori o Te Awa Kairangi stage 1	\$ 50.00	\$ 30.00	\$ 20.00
	Moonshine stopbank upgrade	\$ 6.50	\$ 3.90	\$ 2.60
	Waipoua Urban Reach stopbank upgrade	\$ 30.00	\$ 18.00	\$ 12.00
Nelson City Council	Saltwater Creek Pump Station	\$ 4.80	\$ 2.88	\$ 1.92
Tasman District Council	Tapawera Township Stopbank Assumption and Refurbishment	\$ 3.00	\$ 1.80	\$ 1.20
	Motueka Stopbank Upgrades	\$ 20.00	\$ 12.00	\$ 8.00
Marlborough District Council	Taylor Dam Revitalisation	\$ 12.00	\$ 7.20	\$ 4.80
Canterbury Regional Council (Environment Canterbury)	Ashley Rakahuri Secondary Stopbank	\$ 15.00	\$ 9.00	\$ 6.00
	Structure upgrades/adaptation programme #3	\$ 36.53	\$ 21.92	\$ 14.61
West Coast Regional Council	Westport Flood Resilience Programme	\$ 25.05	\$ 15.03	\$ 10.02
	Greymouth Small Catchments Programme	\$ 3.46	\$ 2.08	\$ 1.38
	Hokitika Stopbank Construction Stage 2 (Kaniere)	\$ 8.72	\$ 5.22	\$ 3.48
Otago Regional Council	Riverside Road Spillway Resilience Improvements	\$ 5.00	\$ 3.00	\$ 2.00
	Lake Ascog Pump Station - Pump Renewals	\$ 1.00	\$ 0.60	\$ 0.40
Environment Southland	Invercargill City Flood Resilience Stage 1	\$ 5.77	\$ 3.46	\$ 2.31
	Tuatapere Domain Bank	\$ 0.25	\$ 0.15	\$ 0.10
	Mataura Flood Resilience Stage 2	\$ 19.55	\$ 11.73	\$ 7.82
		\$ 370.62	\$ 222.37	\$ 148.25

OUR NATIONAL FLOOD RISK REMAINS ELEVATED

Due to external effects, both the weather and the economy are likely to remain turbulent in 2026.

The challenge of the climate

As the planet warms, our weather grows more severe and more variable. The increased moisture in the atmosphere brings more rain in shorter intervals, increasing flooding likelihood and intensity.

Through 2025 and into 2026, New Zealand felt the effects of a La Niña weather pattern, which tends to bring more north-easterly winds with moist, rainy conditions to the north-east of the North Island, and reduced rainfall to the south and south-west of the South Island, although there are regional and seasonal exceptions.

During these periods, as the events of early 2026 have shown, the country is at risk from large-scale weather events. For instance, the Tropical Cyclone Outlook for November 2025 – April 2026 indicates a normal to elevated risk for ex-Tropical Cyclone interaction for New Zealand. Although the season has been quiet so far, we remain in the peak climatological risk period for part of the outlook period, and there are indications of increased tropical activity over the next month compared with earlier in the season. More major weather events and flooding may occur during 2026.

This is our new normal in a less predictable climate. As a result, the flood risk profiles developed by River Managers over the last 50 years are having to evolve. In turn, the greater risk means we need to bring forward projects that might have been able to wait a decade or more, in order to protect the economy and our communities, creating pressures on budgets and construction capability.

The opportunity of our capability

Alongside growing weather challenges, our capability to plan and deliver flood risk resilience projects across the sector has accelerated. The investment in earlier tranches of co-funding has brought forward planning and consenting in Regional and Unitary Councils, and has helped build capacity and capability in the construction industry.

The Manawatū and Tairāwhiti case studies demonstrate this effect. Engineering skills and capabilities have been developed, staff have been trained, and investments have been made in the plant and machinery necessary to deliver large-scale projects in regions throughout New Zealand. In turn, this means the employment effects of flood risk resilience projects are growing in importance.

Compared to the situation five years ago, the sector can now deliver a greater number of projects on faster timelines, from consenting to completion. Costs are more predictable, and the quality of the design and construction work continues to advance as experience is gathered.

These factors help offset the risks from a more erratic climate. We can now design, consent and construct large-scale projects at a faster pace, allowing us to stay ahead of the effects of more severe and more frequent storm events.

All of the projects listed on the previous page form part of multi-decadal programmes of flood risk resilience, across Regional and Unitary Councils throughout the country. The limiting factor is now becoming the ability of communities to fund the required works, which is why co-investment alongside the Crown is the key to ensuring major storms are events to remember rather than disasters to suffer.

We look forward to continuing this essential work in the years ahead.



**Te Uru
Kahika**

Regional and
Unitary Councils
Aotearoa

Te Kāwanatanga o Aotearoa
New Zealand Government