

Executive summary



Maketu flood control gates (2026)
Photo credit: Tim D

THE CASE FOR LONG-TERM INVESTMENT CERTAINTY

We are seeking Crown co-investment of \$240 million per annum in flood resilience infrastructure to help protect our nation.

Aotearoa New Zealand is planning to invest hundreds of billions of dollars in infrastructure over the coming decades, but those investments can only deliver their intended value if they are protected from flooding – our country’s most frequent and costly natural hazard.

The very first point of defence for our country’s infrastructure – along with the people and the interdependent systems that rely on it – is flood resilience infrastructure. This shares the same objectives and outcomes as our national infrastructure – while also protecting it; yet, it has remained largely peripheral to the long-term investment conversation despite its direct and indirect reach across almost every asset and stakeholder in the country.

As the regional sector collective will argue throughout this document, flood resilience infrastructure is not simply an investment in stopbanks, floodways, and drainage systems; it is an investment in the continued functioning of the people, places, businesses, and infrastructure that underpin Aotearoa New Zealand’s economy and wellbeing. That’s why the conversation about infrastructure must include flood resilience.

The time for a national commitment to co-investment is now.

We are therefore seeking a long-term co-investment commitment from the Crown of \$240 million per annum, alongside the \$160 million per annum provided by regional and unitary councils.

This 60/40 co-investment split builds on the successful tranches of projects delivered since 2021 – and will provide the certainty for councils, communities, the rural sector, and the construction sector, to build homes and businesses, workforces and capability, and long-term certainty for our nation.

Some of the flood resilience assets of councils were originally constructed a century ago, with an eye to the protection and future prosperity of our nation. Many were constructed with support from the Crown, investing alongside local farmers and businesses and communities.

Throughout this document, we make the case that investment in protection and resilience is far cheaper than paying the costs of response and recovery; the events of Cyclone Gabrielle and even the floods of January 2026 have taught us this lesson, again and again.

So councils are seeking a renewal of our collective commitment to flood resilience, and seeking an ongoing Crown commitment to the infrastructure that we all rely on. We look forward to working with Ministers and officials to make this a reality.

NEW ZEALAND IS IN A PERPETUAL STATE OF EMERGENCY

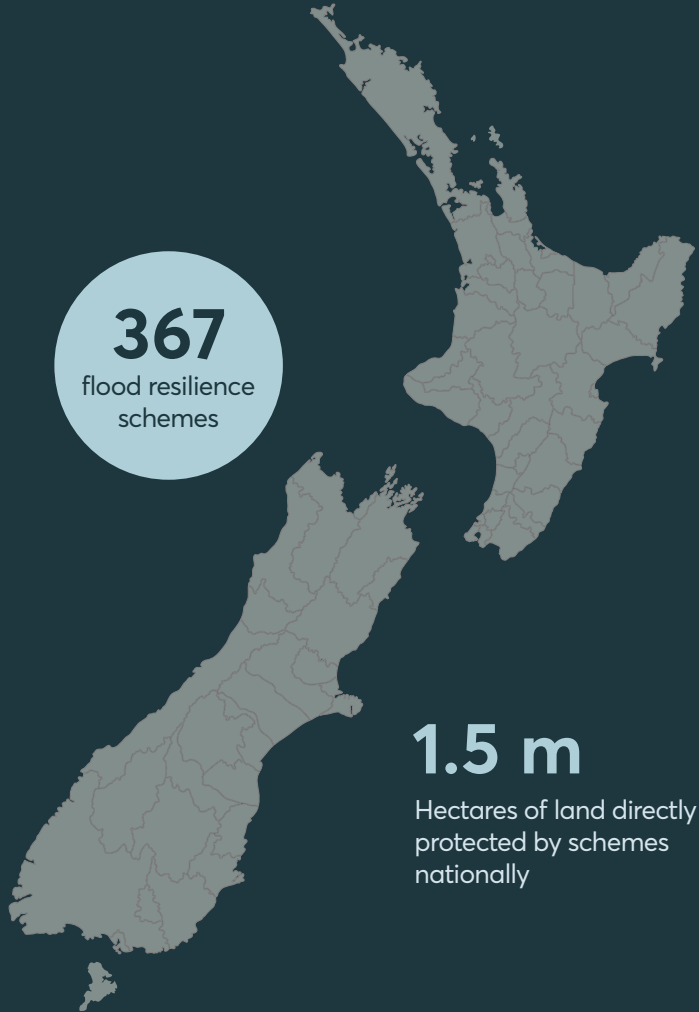
Flood risk

NO. 1 HAZARD
Floods are our most common natural hazard in New Zealand

\$213 BILLION
Replacement value of for >282,000 houses in flood-prone zones

750,000 PEOPLE
1 in 7 New Zealanders living in flood-prone zones

\$446 MILLION
Annual average cost of repairing critical infrastructure damaged by flooding alone.



Costs and benefits

\$2.3 BILLION
Capital value of schemes

\$11 BILLION
Annual benefits from schemes

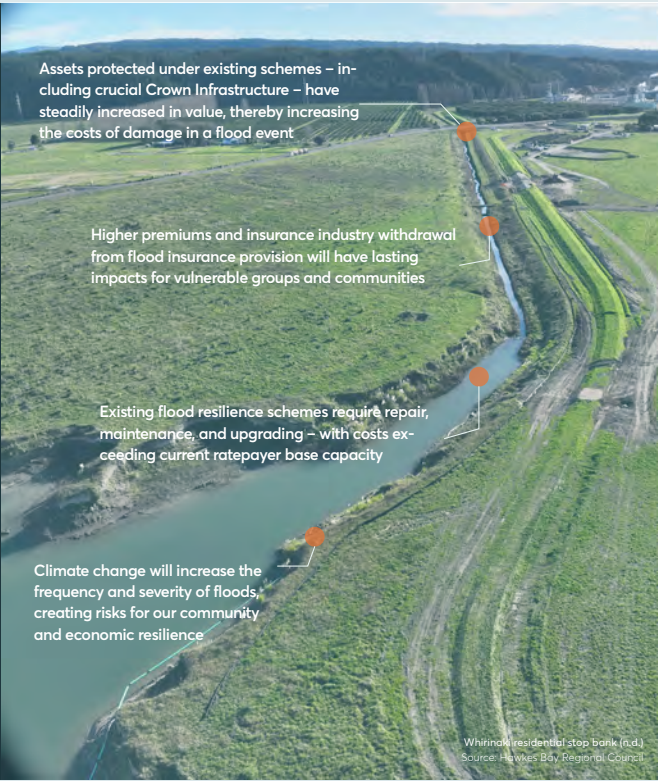
\$200 MILLION
Annual op-ex for schemes to maintain current level of service

5:1 BCR
Benefit-to-cost ratio of flood resilience in New Zealand

Flooding is the most common natural hazard in Aotearoa New Zealand, with a major flood event occurring on average every eight months. Across the country, around 750,000 people – or 14% of the population – live in areas prone to flooding.

Flood resilience schemes comprise a core economic enabling infrastructure and are crucial to the economic, social, cultural, and environmental wellbeing of Aotearoa.

Here’s where the problem lies. Our ageing flood resilience infrastructure is facing pressure from all sides: climate change, affordability, legislation requirements, and land use change. Schemes are largely funded through targeted rates and operated and managed by local and regional councils – and the pace of investment can’t keep up with the growing challenges.

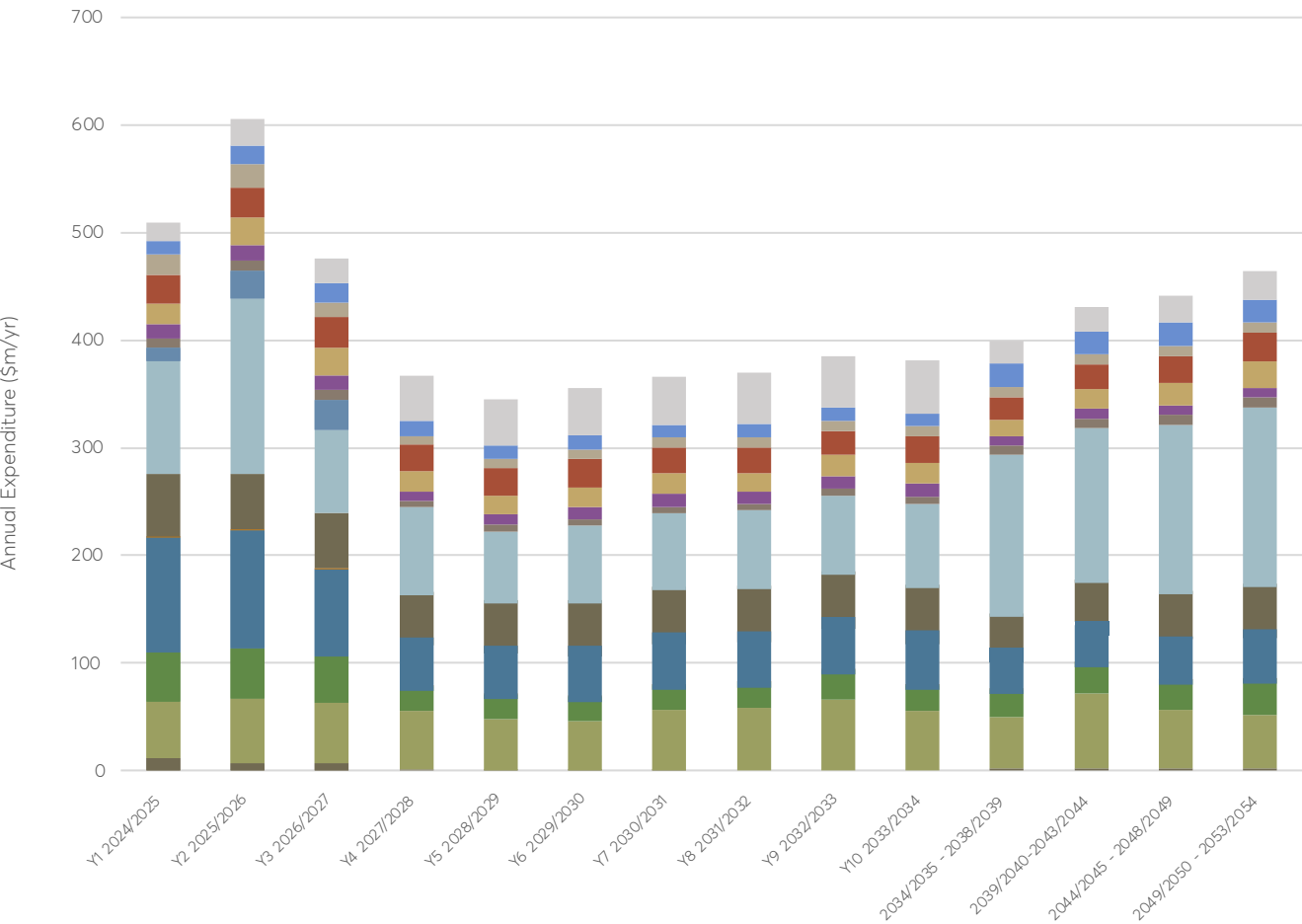


Flood schemes deliver billions in protection and avoided losses of Crown assets on non-rateable land, and critical national infrastructure such as three waters, transport networks, and energy and telecommunication links. Yet, flood resilience has sat largely outside central government conversations for the past three decades – until five years ago. While recent investments has been transformative, flood resilience cannot be delivered through stop-start funding approach.

Planning, maintaining, and upgrading infrastructure requires certainty and continuity, not intermittent funding that makes it harder to take a strategic, long-term approach.

THE SECTOR IS PROPOSING A \$400M ANNUAL CO-INVESTMENT

We are proposing the Crown invests \$240 million per annum, alongside regional and unitary council investment of \$160 million per annum.



- Northland RC
- Tasman DC
- Waikato RC
- Nelson CC
- Bay of Plenty RC
- Marlborough DC
- Hawkes Bay RC
- Environment Canterbury RC
- Taranaki RC
- West Coast RC
- Horizons RC
- Otago RC
- GWRC
- Environment Southland RC
- Gisborne DC

The graph shows the projected flood resilience infrastructure investment over the next 30 years, as incorporated into the National Infrastructure Plan (NIP).

While there will be year-to-year variations and project reprioritisation as part of normal council long-term planning, the level of investment is expected to average around \$400m per annum (2026 dollars), covering both capex and opex. Funding levels and priorities will be agreed with the Crown in the context of the statutory Long Term Plan (LTP) processes.

CONTINUING THE CURRENT INVESTMENT SHARING

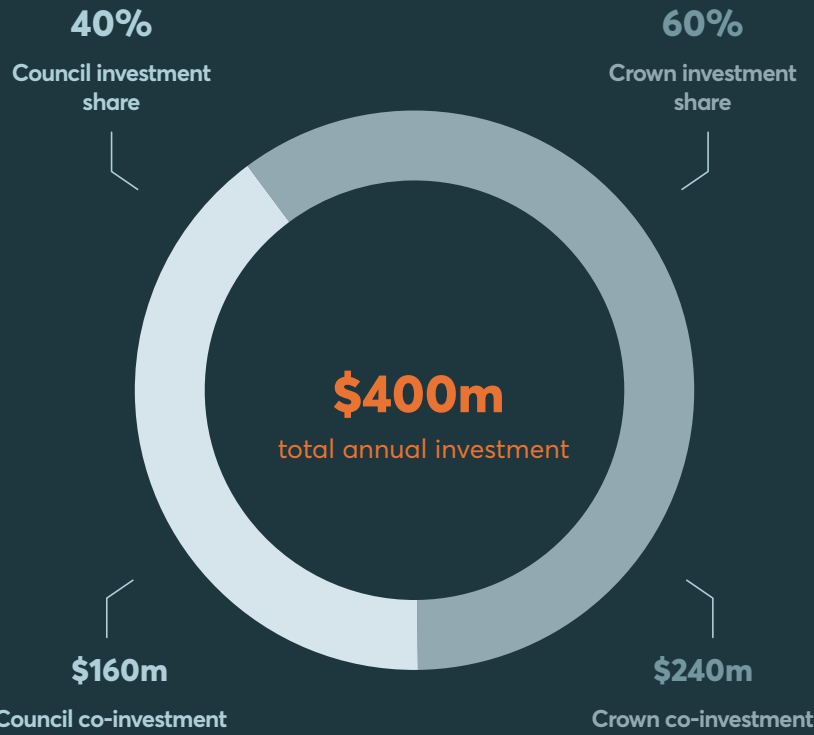
Starting with post-COVID recovery funding in 2021, the Crown and the sector have agreed four tranches of co-investment in flood resilience, totalling \$659m. This has enabled long-delayed projects to be accelerated, with resultant benefits to communities and businesses – including effective protection during Cyclones Hale and Gabrielle, and the severe weather events of early 2026.

A further \$370m of co-investment is being discussed as part of the next tranche of activity, which will enable longer-term projects to be progressed.

In all tranches, 60% of the investment has been provided by the Crown, with the remaining 40% coming from regional and unitary councils. The sector – via Te Uru Kahika – is proposing to formalise this co-investment methodology into a long-term commitment, in order to build a national pipeline of flood resilience projects.

As the graph on the preceding page shows, around \$400 million in annual investment is required to address the challenges of climate change pressure, the growing value of economic activity on land vulnerable to flooding, and a growing population. The Crown commitment being sought is \$240m per annum, significantly less than the repair and recovery costs being incurred by the government from flood events.

The co-investment approach is similar to that agreed with councils for local roads, via the NZ Transport Agency, where there is a proportional commitment that allows the Crown, councils, and the contracting sector to plan and deliver projects with certainty. The approach will be supported by a national prioritisation framework provided via Te Uru Kahika, which will deliver a high degree of investment transparency.



This value represents the long-term average annual investment, comprising both CAPEX and OPEX, split evenly (50/50) and expressed in constant 2026 dollars.



Recent upgrades in Paeroa worked as intended during Cyclones Hale and Gabrielle, and most recent severe weather events (2026). Photo credit: Flood Control International

THE BENEFITS TO THE CROWN
ARE SIGNIFICANT

There are significant savings to be made by the Crown by investing in protection rather than recovery.



Homes, businesses, farms, and roads flooded in south Dunedin (2024)
Photo credit: Otago Regional Council

The size of the risk to Aotearoa New Zealand’s economic and social infrastructure from major flooding events is significant, with damage able to reach into the billions of dollars – as was the case with Cyclones Gabrielle and Hale in 2023.

This means the fiscal benefits to the nation from flood resilience are high. According to analysis undertaken by New Zealand Institute of Economic Research (NZIER) in 2021, the benefit-cost ratio (BCR) of flood resilience is at least 5:1, which means that every dollar invested returns \$5 in direct economic benefit through avoided loss. If we take into account the indirect and social benefits to businesses and communities, the benefits are even greater.

The Crown is also a direct beneficiary of investment in flood resilience infrastructure. Under the Local Government Act, councils are required to consider who benefits from infrastructure when determining how costs are apportioned. Given the significant fiscal and economic benefits that accrue nationally through avoided disaster recovery costs, protected public infrastructure, and reduced disruption to economic activity, there is a strong rationale for Crown investment alongside local government. In this context, the Crown is exposed to the fiscal impacts of flooding in a number of ways:

1. Crown infrastructure – including roads, schools, hospitals, and many other asset classes – is exposed to flood damage.
2. The Crown is the primary funder of recovery costs, as shown by 2023 weather events which costed the Government around \$6.65 billion, where national resources were mobilised to provide immediate assistance and support to affected communities and businesses.
3. The Crown becomes the insurer of last resort when flood damage exceeds commercial insurance cover and the assets are nationally important, even where the asset may not be owned directly by the Crown. Essential land remediation after a major flooding event is an example.
4. The Crown bears the long-term fiscal impacts of social and economic disruption, with social welfare costs from displacement, income support, health and education impacts, and much more. Research following Cyclone Gabrielle shows that these effects can last for years after the disaster.
5. The Crown also bears the impact of post-flood economic disruption, expressed as lower tax revenues from businesses and individuals.

Investment in flood resilience is therefore a sensible and prudent step for the Crown to take, in order to decrease the immediate and long-term impacts of major flood events. Doing so – putting money into prevention rather than recovery – brings us into line with our OECD peers, who tend to invest to a greater level than Aotearoa New Zealand does in the first lines of defence against the most common natural disaster.

PRIORITISING AND AGREEING
THE CO-INVESTMENT PIPELINE

We need to meet the challenges of our times by providing certainty to communities and businesses.



Construction of stopbank in Porangahau (n.d.)
Photo credit: Hawkes Bay Regional Council

A key component of our national investment in flood resilience is ensuring we’re prioritising the right projects at the right time. The first step in this process is to co-develop a pipeline of investment, and the sector is proposing an approach similar in concept to the National Land Transport Programme, as follows:

- 1 **Three-yearly statements**
The Government publishes a three-yearly policy and prioritisation statement, potentially as part of updates to the National Infrastructure Plan
- 2 **Project prioritisation**
Regional and unitary councils respond to the policy statement by providing a prioritised national list of flood resilience investments, including the cost-benefit assessment for each project
- 3 **Agreed pipeline**
The pipeline of prioritised projects is agreed between the government and councils, and co-investment milestones and drawdowns are agreed on an annual basis as part of normal Budget processes
- 4 **Oversight and monitoring**
Oversight and monitoring is provided by a responsible government agency, with progress reporting provided by councils.

Te Uru Kahika is proposing that the prioritised pipeline of investments is maintained within the GIS-based Flood Resilience Investment Prioritisation Platform (FRIPP) – currently under development. One of the key objectives of the FRIPP platform is to enable decision makers at all levels – community, regionally, nationally – to assess options and set priorities for the decades ahead through a combination of functions such as scenario modelling, prioritisation modelling, regional and national flood modelling, and valuation layer. More on this in Section 5.

The approach builds on the mechanisms developed through multiple tranches of co-investment via the Regional Infrastructure Fund, and establishes the processes as a permanent part of the machinery of government.

There are some open questions that will require further discussion with the Crown, such as the choice of overseeing agency, integration of the pipeline with the National Infrastructure Plan, and whether any enabling legislation is necessary for long-term certainty. These and related operational matters can be explored by officials and council staff as part of the implementation plan discussed later in this document.

“Storms and flooding will become more severe and frequent over the next 30 years due to climate change. Infrastructure investment will be needed to respond to damaging events and to improve community resilience.”

– National Infrastructure Plan, ten priorities for the coming decade ahead



My name is Graeme Campbell, I'm a Chartered Professional Engineer, a Fellow of Engineering NZ, and I'm the Principal Flood Management Advisor at Te Uru Kahika.

We're a nation shaped by water, enriched by our rivers, and threatened by rains and floods. Our rivers have determined where we've built our cities and the kinds of activities we undertake on the land. They provide the life to our land, nurture our wellbeing and they help drive our economy. So whether we appreciate it or not, our rivers are at the heart of our country and how we inhabit this land.

My career has followed the trajectory of flood risk resilience in Aotearoa New Zealand. I started by designing and building major flood resilience projects in Tairāwhiti around Cyclone Bola, which led to flood risk management roles and 20 years at Greater Wellington Regional Council, managing the flood resilience team. So my career has gradually evolved into working with people, then convening the national River Managers Special Interest Group for a decade to 2025, and now facilitating our national response to the emerging flooding challenges.

We need all the tools in the box to help communities live with and be resilient to the floods that are happening with ever increasing regularity and intensity. This business case focuses on the flood infrastructure investment, but it's only part of the story. We also need good emergency management capability, and to match our land use to the flood risk that remains after the infrastructure is in place. This is going to be the biggest challenge we face into the future and will take time to address, so in the meantime we have to invest in infrastructure to give communities and businesses time to adapt.

Over the last few years – in close partnership with the Crown – we've taken the first steps to catching up on the delayed projects, and it's paid dividends. Based on all my decades of engineering experience, I know there would have been major flooding earlier this year if key flood gates and pump stations and stop banks hadn't been upgraded through the Regional Infrastructure Fund co-investments. I'm proud of how the sector has developed over the last decade what we've achieved working together across the sector and with Government.

But the thing about being a flood engineer is that it teaches the discipline of taking the long view. The challenges are increasing, the value of what we're protecting is growing, and we need to work together more than ever.

That's why we've developed this business case: because we need a national response to a national challenge. We need an agreed and prioritised roadmap of investment, a stable co-investment approach, a predictable pipeline of projects, and certainty for communities and businesses and farmers. We can be much more efficient in our delivery with a consistent investment stream, one that enables us to invest in training and develop our younger generations of engineers who will be essential to meeting the challenges of the future.

These projects translate into the things Kiwis want: knowing that the risk of flood waters through their homes and businesses and farms is being managed and mitigated, as much as we can. It's not in our national DNA to walk away from these challenges but we need the resources, both human and financial, to help navigate a path through them. So we're looking forward to continuing to work with the Crown to achieve as much long-term certainty as we can for our nation.

Graeme Campbell
Principal Flood Management Advisor
Te Uru Kahika



Photo credit: Tim D