



Kaipara te Orangahui • Two Oceans Two Harbours

Submission on Proposed Kaipara District Plan

Form 5 Submission on publically notified proposal for policy statement or plan, change or variation

Clause 6 of Schedule 1, Resource Management Act 1991

To: Kaipara District Council - District Plan Review

Date received: 30/06/2025

Submission Reference Number #:119

This is a submission on the following proposed plan (the **proposal**): Proposed Kaipara District Plan

Submitter:

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Attachments:

Submission on the Proposed Kaipara District Plan Kaiwaka Stormwater.pdf

Submission on the Proposed Kaipara District Plan Kaiwaka Stormwater.pdf

I wish to be heard: No

I am willing to present a joint case: No

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- No

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(a) adversely affects the environment; and

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- **Yes**

Submission points

Point 119.1

Section: Urban Form and Development

Sub-section: Objectives

Provision:

SD-UFD-O3 Infrastructure

Support / Amend / Oppose: Amend

Submission:

Stormwater management

Relief sought

include provision for stormwater management

see attached

Submission on the Proposed Kaipara District Plan

Submitter: Mandy Harris

Date: 25 June 2025

Address: 1947 State Highway 1, Kaiwaka, Kaipara District

Topic of Submission: Stormwater Management

Plan Chapter(s):

- Infrastructure and Network Utilities
- Subdivision
- Land Use Zones
- Ecosystems and Indigenous Biodiversity
- Landscape, Landforms and Natural Character
- Natural Hazards

1. Introduction

I support the inclusion of comprehensive urban stormwater planning provisions in the Proposed Kaipara District Plan 2025. With Kaiwaka identified as a key growth area, it is essential that the District Plan embeds robust, future-focused infrastructure policies to safeguard environmental health, reduce flood risk, and support sustainable community development.

2. Key Points and Recommendations

2.1. Chapter Integration

Stormwater provisions should be embedded across multiple chapters of the District Plan to reflect the cross-cutting nature of water infrastructure and its impact on land use, biodiversity, and hazard management.

2.2. Nature-Based Infrastructure

I recommend the Plan promote low-impact, nature-based design—such as swales, wetlands, rain gardens, green roofs, and permeable paving—to manage runoff at source. These methods align with *Te Mana o te Wai*, reduce pollution, and enhance climate resilience.

2.3. Alignment with Statutory Policies

The Plan should integrate and reference:

- **Stormwater Strategic Activity Management Plan 2021–2031**
- **Stormwater & Land Drainage Bylaw**
- **National Policy Statement for Freshwater Management 2020**

Without firm direction in the District Plan, Kaipara risks being reactive to changing government policy rather than proactive in protecting its unique environment.

3. Summary of Current Gaps and Risks

Kaipara’s stormwater infrastructure includes over 63 km of pipes and 46 km of open drains across five key drainage schemes—Kaiwaka among them. However, the current system is insufficient to mitigate the visible and worsening impacts of climate change and urban development.

3.1. Community and Cultural Values

Māori and local lived experience are essential for designing resilient, place-based infrastructure. I support the inclusion of policy that reflects the knowledge and expertise of local Tangata Whenua.

3.2. Monitoring and Enforcement

The Plan should include:

- Clear performance standards
- Independent monitoring
- Publicly accessible reporting

Without enforceable obligations, stormwater systems risk becoming reactive rather than preventive.

4. Climate Change and Infrastructure Resilience

Extreme weather and rising groundwater levels are already impacting infrastructure resilience:

- **Kaiwaka’s wastewater treatment plant** leaked into the Kaiwaka River following heavy rainfall in May 2025.
- **Urban runoff from SH1** contributes heavy metals, hydrocarbons, and sediment to receiving waters.
- **Flood-prone development** and limited Council resourcing have resulted in unsafe footpaths, damaged properties, and insufficient drainage.
- **Insurance risks** are climbing, with some properties potentially becoming uninsurable.

5. Current Stormwater and Wastewater Issues in Kaiwaka

Recent events underscore the urgent need for improved infrastructure:

- The May 2025 overflow of the Kaiwaka Wastewater Treatment Plant led to a health warning for the Kaiwaka and Otamatea rivers and Kaipara Harbour.
- Urban development along SH1 has intensified runoff and pollutant loading.
- Two open gullies currently drain unfiltered stormwater directly into the Kaiwaka River.
- Many private properties have inadequate or unsafe stormwater systems, with limited Council capacity to enforce compliance.

6. Opportunities for Green Infrastructure

Kaiwaka's topography offers natural opportunities for bioretention and green infrastructure. These should be leveraged to:

- Reduce runoff velocity and volume
- Filter contaminants before they reach the river
- Mitigate future leakage from the wastewater plant

7. Relief Sought

I request that the Proposed District Plan be amended to:

1. Include stormwater management provisions across the relevant chapters listed above.
2. Require nature-based infrastructure as a preferred method for new development.
3. Mandate integration of stormwater, wastewater, and climate resilience in all infrastructure planning.
4. Establish enforceable performance standards and transparent monitoring.
5. Recognise the role of Tangata Whenua and local communities in co-designing infrastructure solutions.

8. Conclusion

Addressing stormwater and wastewater issues in Kaiwaka through the District Plan is not only prudent—it is essential. The health of the river, the safety of the community, and the long-term viability of Kaiwaka as a growth node depend on it

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Kaipara council defers more than \$10 million of projects to pay for Cyclone Gabrielle repairs

7:11 pm on 10 April 2023

[Susan Botting \(/authors/susan-botting/\)](/authors/susan-botting/), Local Democracy Reporter

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subject=Kaipara%20council%20defers%20more%20than%20%2410%20million%20of%20projects%20to%20pay%20for%20Cyclone%20Gabrielle%20



Cyclone Gabrielle brought widespread flooding to Kaipara including here at Kaihu Valley. Photo: Northern Advocate via LDR

Northland's worst-hit Cyclone Gabrielle district is deferring more than \$10 million of planned work rather than almost doubling its rates to pay for major Cyclone Gabrielle damage.

Kaipara District Council (KDC) ratepayers would otherwise be facing a 10.14 percent rate increase, almost double the 5.38 percent draft rates lift they are currently looking at for the 2023/2024 financial year starting on 1 July.

The deferments come as the council considers the vexed question of how to pay for more than \$26m of damage across the district.

Kaipara suffered Northland's worst damage when Cyclone Gabrielle hit the district on Valentine's Day.

This was followed by the 24 February Mangawhai rains which brought further damage hot on the heels of the cyclone.

All that in turn came after extremely wet conditions in Kaipara across November, December and January in the months leading up to the cyclone.

KDC infrastructure services general manager Anin Nama said in a severe weather updated to a council briefing meeting in Mangawhai on Wednesday that early estimates showed Gabrielle had brought a \$26.39m hit for the district.

This was made up of \$20.9m in transport and roading impacts, \$2.55m damage to stormwater, \$1.53m damage to the council's wastewater treatment plants, \$1.21m damage to the district's land drainage systems and \$200,000 damage to drinking water supplies.



Winner 2022 Voyager Awards Best Reporting Local Government (Felix Desmarais) and Community Journalist of the Year (Justin Latif)

The council is looking at deferring \$5.1m of work on bridges and to a lesser extent road sealing is to be deferred, along with \$5.4m of work across a variety of plan plus.

Nama said the \$5.4m of potential general projects deferment included work on: aspects of Dargaville's wastewater treatment plant, council vehicle replacements, the council's Waitua drinking water reservoir north of Dargaville, public consultation about the council's waste strategy, the council's Kaihu River Rotu water intake and Wood Street Mangawhai stormwater system and beautification.



Cyclone Gabrielle damage to Baylys Beach's new boardwalk where pedestrians accessing Ripiro Beach can for the first time be separated from a constant stream of vehicles also using the coastal area. Photo: LDR / Susan Botting

KDC will be writing to Waka Kotahi and the minister of transport seeking an extension to the 30 June deadline for up to 100 percent Cyclone Gabrielle government funding available towards the bridge work and to a lesser extent road sealing. Should this be achieved, this part of the deferred work of this type would be back on the radar.

The council is also to seek a lift from its current business-as-usual 62 percent Waka Kotahi subsidies for local roading.

Councillor Mark Vincent said one cyclone repair funding option could be to increase council debt.

KDC sustainable growth and investment general manager Sue Davidson said the council would be getting close to its agreed \$60m debt ceiling in the next 18 months.

Kaipara recovery manager Glynis McCarthy updates Kaipara District Council councillors about the district's cyclone recovery in Mangawhai on Wednesday. Photo: LDR / Susan Botting

The council's Kaipara recovery manager, Glynis McCarthy - one of three newly-appointed district council recovery managers in the north reporting to a regional recovery manager - said the scale of the damage facing the district was overwhelming for many.

McCarthy said there had been 150 applications totalling more than \$2m to the council's Mayoral Relief Fund and applications closed on Monday, 3 April. This was four times its available \$485,468.94.

The fund is made up of \$5000 from Waikato's Pirongia Golf Club, \$250,000 from the government's disaster relief fund, about \$209,600 from Stuff, \$10,800 from Toyota Finance and \$5000 from Mitre 10.

McCarthy said fund applications had come from around the district.

Staff had been working with applicants in the face of its oversubscription to help direct them to other available funding options. Oversubscription meant applicants would probably get only part of what they had applied for.

McCarthy said the council's executive would make final decisions on paying out on those applications before the end of the month.

"We want to get the money out to people as soon as possible," McCarthy said.



Damage on the road to Kaipara Harbour's remote harbourside community of Tinopai which was initially cut off the outside world by the cyclone's damage. Photo: Kaipara District Council via LDR

Cyclone Gabrielle damage is expected to take years to repair to the point where the lives of those affected are returned as closely as possible to normal.

McCarthy said Kaipara's immediate response work for Cyclone Gabrielle had finished. Immediate response work had included emergency stopbank repairs, making sure wastewater, stormwater and drinking water suppliers were working adequately and restoring transport links so supplies and essential services could reach affected communities.

The council had now moved into the recovery phase of dealing with the cyclone's impact. This focused on fixing identified damage.

McCarthy said recovery work had a much longer tail than the short-term immediate nature of response.

Council recovery work would continue until 2025. After that, the work involved in getting back to normal after the cyclone would shift into business-as-usual mahi.

Longer term response included enhancing council infrastructure to better withstand future weather events then returning to business as usual.

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Wet and forget: why this attitude to flooding needs to change

Water New Zealand Stormwater Group chair, Peter Christensen says our boom and bust cycle of quick fixes needs change.

The summer events have caught the attention of the nation in a way that other flood events have not. Yet since floods are Aotearoa New Zealand's most frequent natural disaster we only need to scan through past news media to see that flooding is a common headline.

Calls to 'fix flooding' overlook the nature of natural hazards. They can't be neatly solved and forgotten: there will always be a bigger event or one that falls outside of design parameters and we need to move away from the mentality that nature can be squashed into a box and contained. Climate change impacts are already making these scenarios more frequent and severe, and without a new way of thinking we will continue to see lives lost and buildings flooded.

Flood and forget

The current model for addressing urban stormwater flooding is often driven by a big flood. This kicks off a cycle where attention is focused on the areas that flooded, reactive work commences, there is a dryer period where attention drops off, and then further flooding restarts the cycle again.

Currently, less than 15% of the national Three Waters budget is spent on stormwater. While infrastructure is only a part of the solution, this small sum is indicative of the attention paid to stormwater. Unfortunately, investment in flood management is easily pushed aside as the most recent flood recedes in people's memories.

Worse still, the current event-based funding model works for communities with a strong political voice and widespread immediate issues, but doesn't work for areas of socio-economic deprivation (which often overlap with vulnerability to flooding, but have a weaker voice); for isolated pockets of flooding; or where there is flood risk that has not yet been realised. This model also struggles to strategically address the predicted long-term impacts of climate change and other areas where long-term planning is required.

The rainfall Auckland experienced this summer is beyond what can be economically managed with traditional infrastructure. Stormwater systems are not and cannot be designed to cope with that much runoff, and it is not realistic to invest in unaffordable infrastructure for such infrequent events. However, there is still much that can be done to reduce the damage caused by flooding.

Beyond the quick fix

So, what's the alternative to the boom and bust cycle of post-flood quick 'fixes' followed by forgetfulness? This question is not new, and the Auditor General's report on stormwater[1] in 2018 effectively addressed the same question. To enable real improvements to occur a hierarchy of measures is needed, starting with 'avoid' and ending (if we have to!) with hard infrastructure like pipes as illustrated in Figure 1.

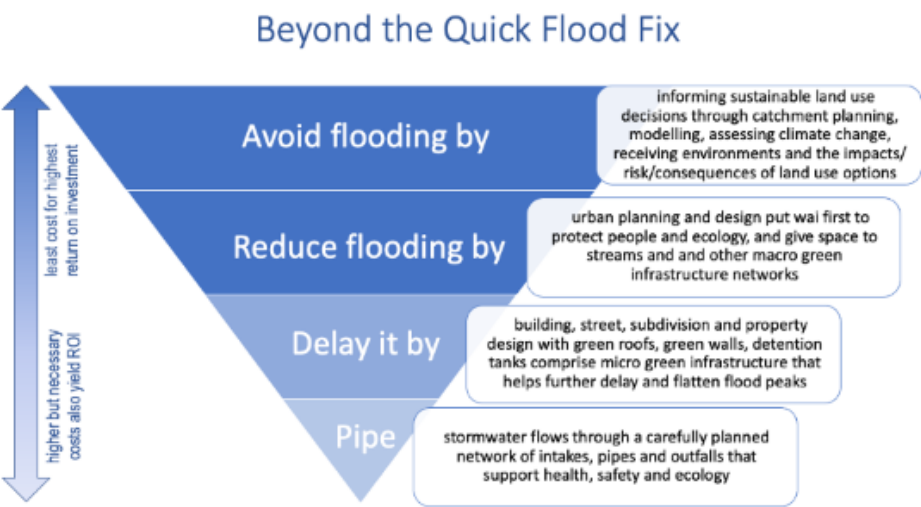


Figure 1: Flood management hierarchy (Based on Clare Feeney, Environmental Communications Ltd)

Quick fixes often start at the bottom of the pyramid ('pipe' and 'delay') and seldom reach the upper levels of 'reduce' and 'avoid'. However, that is where real change and investment are required, and the rest of this article focuses on improvements we need to make in those spaces.

A national level of service

New Zealand lacks a national level of service for flooding, so standards vary widely throughout the country. Without a national standard incorporating climate change and uncertainty, it is difficult to establish the secure and reliable funding required to drive a strategic approach. Instead, we often follow a largely reactive, inequitable and inefficient approach. As an industry, we need to push for the development of national levels of service for flooding and incorporate this into our investment planning.

A national level of service for flooding will help inform new greenfield development and intensification, but what about communities already subject to inundation? Having a national level of service will shine a spotlight on places that don't meet the standard and inform prioritisation of the most at-risk areas for improvement. With no national minimum levels of service and with our currently haphazard accountability for managing flood risk, problems can be hidden and overlooked for decades between events.

A national level of service also needs to make it crystal clear who has accountability for flood-related outcomes. At present accountability for flooding is often split across agencies or departments within agencies. As flood management systems are used relatively infrequently, it can be all too easy for everyone to think it is someone else's job and for no one to realise that the ball has been dropped. The impacts of this become apparent during a flood, but by then it is too late.

Communicating flood risk

The first three recommendations of the Auditor General's 2018 Stormwater Report hinge on having clear levels of service and making sure that people understand their flood risk. The report recommendations are still relevant, stating that councils need to:

1. *understand the current and likely future flood risks in their district or city sufficiently to take a proactive approach to reduce the risk and effects of flooding;*
2. *provide elected members with the necessary information and options, including about local flood risks and their stormwater systems, to make well-informed and deliberate decisions about investment in their stormwater systems;*
3. *improve the information they make available to their communities so that people can understand:*
 - *the potential risk of flooding;*
 - *what the council is doing to manage that risk, including how it is managing the stormwater system and at what cost; and*
 - *what the remaining risk is to the community;*

Some councils are doing well in understanding where the flood risk is – Auckland has had flood-prone areas and overland flow paths mapped for over a decade – but many in the community still do not understand the risk they are living with. We need to learn how to communicate risk better. Do people understand that a '1 in 100-year flood event' is really something with a 1% probability of occurring each year? And that if they live for 20 years in a house with a floor at the 1% flood level, then there is nearly a 20% probability of them experiencing a '100-year' flood while they are there?

As experts in this field, we have to understand, help weigh up and communicate risk clearly so that households can make informed decisions about where they live or invest. As in Christchurch following flooding in 2014 and 2017, better explanations and demonstrations may also help the community to make the hard decision to relocate from the most affected properties.

Intelligent and equitable land use planning

Avoidance comes before minimisation and mitigation. Planning rules must be improved and rigidly enforced to prevent new investment in known floodplains and overland flow paths. While there are good examples around the country of planning for flood management, there is no national consistency. In addition, the resource consent process makes it possible for commissioners to ignore the advice of stormwater and planning experts. This is particularly problematic when it occurs during the District Plan process, as it can expose large areas to unnecessary risk for a long period of time.

There are equity issues too. As flood-prone land is often cheaper this can lead to the concentration of lower socio-economic communities in vulnerable areas. It is also inequitable if developers make their profit from poorly placed development but the risk and cost of disaster recovery are borne by homeowners and the wider community.

Good flood management also usually requires more land set aside for floodplains. This is expensive and so is often avoided as far as possible by developers. It is tempting to allow corners to be cut to follow the path of least resistance. After all, 'It won't flood there for 100 years, right?' We need to stop allowing short-term thinking to influence decisions about communities that will be located in an area for decades, if not centuries.

Catchment-scale green infrastructure approach

Green infrastructure is important to build resiliency. However, while small-scale green infrastructure is vitally important to social well-being, improving water quality and restoring a more natural hydrological response in cities, it is not the 'fix' for flooding. We also need larger-scale green infrastructure like wetlands and basins as well as 'making room for the river' (or flood)'. Christchurch has invested in over 100 hectares of basins in the Upper Heathcote to significantly reduce flood risk along the river. This is the scale of investment that is needed to reduce flood risk in our cities.

Making room for flooding and learning to live *with* water means allowing the water space to move and pond, designing our cities around water (and other natural features) rather than trying to fight against it. There are good examples of this throughout the country. In Christchurch last year the council opted to cancel a project to build low stopbanks on staff advice that this would worsen existing flood issues and increase the residual risk.^[2] In Auckland the daylighted Awataha Stream and Greenslade Reserve stormwater detention park held up well during the January floods, with much greater capacity than a traditional hard infrastructure network.^[3]

There are strong links here with Te Mana o te Wai – thinking about water first and letting it have its own life. If we were to start our urban development by allowing space for water, including flooding, human health and well-being will follow. Correspondingly, if we try to squeeze water into the smallest pipe possible then human health and well-being will suffer.

Investing for resilient communities

A robust and effective flood management system is not cheap. It costs in terms of land set aside for wetlands, basins, overland flow paths and stream corridors. It costs to model and understand flooding for each location, and then to communicate this well. It costs in terms of building the necessary infrastructure to increase capacity and direct water away from vulnerable areas if possible.

While there is a high cost in configuring and reconfiguring our communities like this, there is a much higher cost to our communities – to people – when flooding inevitably occurs. Flexible and dynamic flood management, which integrates tools from planning (including retreat) to green infrastructure all the way down to pipes, pays off when flooding is avoided. As our climate keeps changing we are going to need to step up the investment in flood management to reduce the cost to our communities from flooding.

Changing our attitude toward flooding

The concepts described in this article are not new, and many in the stormwater profession have been advocating them for a long time. There are lots of silent success stories in our country (avoided flooding gets little media attention) and we need to be constantly telling the story of how harm can be reduced if we allow space for the flooding that will inevitably occur. We need to be advocates and storytellers not only at a local level but also at a national level helping to inform central government policy and planning.

Flooding can't be 'fixed', but we can and must do a better job of reducing the risk and managing the effects. National standards, proactive risk-based investment, clear communication of risk, good planning and green infrastructure will all reduce the impacts of flooding. There are good examples of effective flood management in New Zealand, and we need to build on these. While floods will continue to be a part of our lives and we can't pipe our way out of them, we can learn to live with them better so there will be less harm caused to our communities.

This article first appeared in the March/April 2023 edition of [Water](https://issuu.com/water_new_zealand/docs/march_april_2023_proof_final_hi_res)
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