Auckland together: Recovering from the 2023 storms

June 2026

TĀMAKI MAKAURAU RECOVERY

Mihi

Tēnei te oranga o te tangata ka manaakihia	The wellbeing of the people shall be fostered
Tēnei te haumanutanga o te taiao ka whakapikihia	The restoration of the environment shall be prioritised
Tēnei te haumarutanga o ngā whare ka whakakakehia	The safety of housing will be promoted
Tēnei te manawaroa o ngā tūāhanga ka whakatairangahia	The resilience of infrastructure will be highlighted
Kia tīna; whano, whano, haramai te toki	These shall be confirmed and progressed
Haumi, ē; hui, ē; tāiki, ē!	As agreed by all!
Mātua rā ngā mihi me ngā tangi ki ō tātou mate huhua, tae atu ki ērā i riro rā i a Parawhenuamea, i ngā waipuke nui o mua ake nei. Ko te aunga o te moe ki a rātou kua wehe atu; ko te tau o te mauri ki ngā whānau ka mahue mai.	Firstly, we pay homage to and mourn the many who have departed, especially those who were lost as a result of the severe flooding. May they rest in peace; may those remaining find comfort.
E rere nei te aroha ki te tini o ngā hapori kua raruraru i ngā wheako mai i ngā waipuke, ā, ko mihi anō ka rere ki ngā ringa raupā kua āwhina atu i aua hapori rā i te wā o te hē ā mohoa nei, i te wā o te whakaoranga.	We express our heartfelt condolences to those who suffered during the floods, and we also praise the hard working people who have helped others in their time of need and continue to do so during the recovery.
E kore e maroke te puna o te whakamānawa ki ō mātou kaitiaki, ki ngā mana whenua e ārahi nei i a mātou ki te whai kia haumanutia te taiao, e manaaki nei hoki i ērā e noho ana ki waenga i ō rātou nā rohe. Mārakerake ana te kitea o te wāhi ki ngā mana whenua me te Māori hei ārahi i ētahi āhuatanga o te whakaoranga.	We will always be indebted to our kaitiaki (guardians), to the mana whenua (local indigenous peoples) who guide us in restoring the natural environment as well as provide care for those who live within their regions. It is clear to see the place mana whenua and Māori have in leading some of the recovery areas.
Koinei ā mātou mihi atu me te tūmanako anō, mā te mahi tahi e tutuki ai ngā wawata hei ngā tau e tū mai nei.	We make these acknowledgements in the hope that by working together the future aspirations will be realised.

Contents

Mayoral foreword

In 2023 Auckland endured five extreme weather events, two of those required a state of emergency. These events reshaped our city and have drastically changed the way we now build it.

It highlighted our weak points physically, financially and logistically. But what happened next was also of magnitude. The way people pulled together was astonishing and I believe lives were saved because of it. I still hear stories about what people did during the floods and the cyclone. These stories are humbling, some of them are included in this report. Our Auckland Emergency Management team worked around the clock to address urgent needs, restore services, and support communities at Civil Defence Centres while working with the National Coordination Centre following the declaration of a national state of emergency. Once it got going, the plan worked.

Moving from response to recovery, building and land assessments begun, a Solid Waste Action Plan was put together for all the rubbish that littered our streets and Healthy Waters and Watercare crews went about the huge task of clearing out water blockages throughout the city.

Auckland Council stood up a whole new office in the Tāmaki Makaurau Recovery Office to address the damage and guide Auckland through its recovery. This in itself was a mammoth task. We worked with government to change laws and to fund strengthening the resilience of Auckland through its infrastructure and built and natural environments. We consulted with Aucklanders on what they thought recovery should look like to give the office direction from communities.

The Recovery Office offered buyouts to 1200 Category 3 property owners and expects to purchase around 1150 of these. The office has made the most of these homes, relocating a third of them and diverting 80 per cent of material away from landfill.

Separate to the Office, our Long-term Plan 2024/2034 invested significantly in critical infrastructure to strengthen the physical resilience of Auckland and we stood up the Auckland Future Fund to build financial resilience into council's books.

2024-2025 saw record investment in Auckland: $3.9 billion, the highest capital programme in our history. It focussed on where investment is needed the most – on managing Auckland's growth and building resilience to the impacts of climate change. This included major progress on the City Rail Link and Central Interceptor, the backbones to our transport and water infrastructure. We invested $1.2 billion in water infrastructure to ensure safe, reliable services, reduce wastewater overflows, and protect the environment and $1.5 billion in transport upgrades to improve access to public transport, reduce congestion and upgrade key travel routes.

While these projects are securing Auckland's future, the lessons we learned along the way belong to everyone. The strategies detailed in this report are born from hard-earned experience, and they offer a roadmap for any city looking to fortify itself against an unpredictable climate. It is my hope that cities the world over use this document to help prepare for these escalating events. It's not *if*, it's when.

Auckland Mayor
Wayne Brown

A message from the Group Recovery Manager

The severe weather events of early 2023 have left an indelible mark on Tāmaki Makaurau and on the people that call it home. Flooding and landslides caused widespread damage, took lives, and left thousands of people displaced and uncertain about whether their homes were safe to return to. Parts of our roading network, water supplies, community facilities, and stormwater infrastructure were overwhelmed or destroyed. In the aftermath, there were effectively two Aucklands: one where life returned to normal, and one where daily life remained disrupted and the future deeply uncertain.

In the three years that followed, people from Auckland Council, the government and its agencies, community partners, and volunteers from affected neighbourhoods worked tirelessly to support those that were most affected and to repair the damage those devastating events caused.

Throughout the recovery we relied on the knowledge, experience and generosity of others to help the programme move forward. We extend our sincere thanks to everyone that has contributed and continue to work on creating a more resilient Tāmaki Makaurau.

Central to our recovery efforts was support for Aucklanders as they worked through a complex and unfamiliar system. The Storm Recovery Navigation Service was established to work directly with individuals and whānau, helping them to understand what was happening, access support and stay connected to services. For many people, having a navigator alongside them was what made the process manageable, turning something overwhelming into something they could work through.

Recovery is something that must be done *with* communities. From the earliest days, Auckland communities showed extraordinary resolve, and some of the most effective work happened when we stepped back and trusted local knowledge and relationships to guide the way. Where decision-making was genuinely shared, the outcomes were more meaningful and will be enduring. The contribution of communities is woven throughout the recovery.

Recovery was an opportunity to support iwi to exercise kaitiakitanga within their rohe to address the impacts of the severe weather events and to respond to the changing climate. Iwi engaged in the recovery highlighted the fundamental importance of building enduring relationships, regular communication, and a structural commitment to partnership through recovery and future resilience.

More than 3,500 properties were assessed to understand the level of risk to people living in them. For many households, this led to difficult decisions about whether they could stay or needed to move on. Others were supported to make changes so they could remain safely in their homes. Communities across the region have also benefited from investment in local initiatives to reduce risk and support neighbourhoods to recover.

Alongside the homes programme, we undertook a large programme of infrastructure repair and improvement. Roads, parks, water and wastewater systems all required significant investment, with hundreds of repair projects completed. In many cases, those repairs became an opportunity to build in greater resilience rather than simply restore what had been there before. Four major stormwater projects were accelerated under the recovery programme, and two of those – in Māngere – will be complete in 2026.

This report provides a record of that work. It documents what was delivered through recovery, the decisions that were made, and the scale of the effort involved, while also capturing the observations and experience of those involved. It is intended as a resource for communities, decision makers, practitioners and others involved in future recovery efforts. By setting out both what was done and what was learned along the way, the report offers a clear reference point for understanding this recovery and for shaping how similar events are approached in the future.

While much of the physical damage has been repaired, the social impacts of the events will remain with many Aucklanders for years to come. I am acutely aware that for some, the recovery is still very much ongoing.

Auckland Council too has been on a journey. The experience of this recovery has made it clear that responding after the fact is the hardest and most expensive option. Significant work has been done to improve our emergency response capability and build permanent recovery skills within the council. We now have a far greater understanding of flood and landslide hazards because of the data collected through the recovery, and this knowledge is already shaping how we prioritise council funding and effort to reduce the toll that future weather events will have on people living in Auckland.

Reflecting on everything this recovery has asked of us, I want to share three observations that I hope will carry weight beyond this programme. They reflect our formal recommendations and are things I consider matter deeply for where we go from here.

How and where we build must change. The storms made plain what the data had long suggested; that we cannot keep building and living in places where the risks are growing. A clear adaptation pathway that sets minimum standards, accounts for future hazard and is honest about the areas from which we need to retreat, is overdue. Our planning framework needs to reflect that reality.

Risk information must be shared more openly. One of the frustrations through this recovery was that hazard and risk information existed but it wasn't always accessible or understood by the people who needed it most. There needs to be a genuine commitment across all authorities to make this information available and usable so people can make good decisions.

New Zealand needs national leadership on risk reduction and adaptation. The 2023 recovery had practical limits, such as being focussed on areas where the storms had impact and where owners have voluntarily participated in the risk assessment programme. This means in Auckland, like many other regions around the country, people continue to live in hazard-prone locations. Without a nationally adopted framework, New Zealand's effort and funding will continue to default to recovery rather than resilience and adaptation. This keeps costs high and exposes communities to repeated harm.

The Recovery Office is closing but the work does not stop. Delivering resilient infrastructure, supporting community resilience, completing changes to the Auckland Unitary Plan for natural hazards, and looking honestly at the future realities of climate adaptation all continue. This recovery has given us a new starting point and a clearer picture of what the work ahead requires. I hope this report serves as a useful record of what we achieved together, and as a resource for those who will carry this work forward.

Mace Ward, Group Recovery Manager

Recovery from the 2023 storms

2023

Weather events

Auckland Anniversary Storms
Ex-Tropical Cyclone | 27 January – 1 February 2023
286 mm rainfall

Cyclone Gabrielle
Severe Tropical Cyclone | 13-14 February 2023
248mm+ rainfall and high winds

Impacts

- floods and landslides
- **4500+** households needed assistance
- **2000+** roading slips
- **720** parks and community facilities damaged

Response

- **Local** and national states of emergency declared
- **7000** rapid building assessments
- **$2.47** billion insurance claims
- **40,000** Civil Defence Payments ($25.6m)

Recovery activities

People

- **900+** Whānau in temporary accommodation
- **$5.5m** Rates relief for uninhabitable homes
- **2000+** Whānau supported by Storm Recovery Navigators
- **14** partner organisations delivering navigation services
- **$8.3m** total community grants
- **26** communities and **10** iwi involved in local recovery planning
- **33** resident recovery groups supported
- **4000+** Business support grants

Homes

3552 Residential risk assessments

- **1164** Homes purchased
  - **Over 1000** homes removed
    - **25%** of homes relocated
    - **17%** removal work awarded to Māori businesses
    - **Over 80%** building materials diverted from landfill
  - **155** shared ownership sites to resolve
- **138** Homes mitigated

Infrastructure

4 Blue-green / flood resilience projects

- **797** Roading projects
- **222** Water supply projects
- **1200+** Parks and community facilities projects
- **Increased** maintenance and hotspot monitoring
- **50+** Intolerable risk to life housing situations mitigated
- **500+** Homes and businesses protected from frequent flood risk

Recovery legacy

- More resilient and better connected communities
- Permanent removal of risk on 1164 properties
- Storm affected land repurposed safely for service use, redevelopment, green space, flood resilience
- Flood resilient waterways and communities
- More resilient infrastructure
- Improved public amenity

Improved recovery preparedness in Auckland Council and delivery partners

Data as at 10 June 2026

Chapter 1
The extreme weather events of 2023

On 27 January 2023, a tropical atmospheric river unleashed on Tāmaki Makaurau (Auckland) an entire summer's worth of rain over a period of just a few hours. The intense downpours triggered flash flooding across the region, where soil moisture levels were already above average. Three people tragically died, hundreds had to evacuate their homes, and thousands of Aucklanders needed assistance. Auckland Airport shut down and a local state of emergency was declared.

Barely two weeks later, Cyclone Gabrielle's severe wind gusts and rain thrashed the North Island, making a direct hit on Auckland and killing two firefighters working to rescue residents in Muriwai. Due to the already sodden ground, Gabrielle had an extensive impact. Thousands of trees were damaged causing debris to further block already-overwhelmed waterways and stormwater systems. Landslides left gaping holes in roads and hillsides, destroying homes, infrastructure and utilities. The cyclone triggered more landslides across New Zealand than any other single storm event in our country's history.[1] The widespread damage across the north island meant the government declared a national state of emergency on 14 February 2023.

In Tāmaki Makaurau, as a result of these two weather events, five people died, over 2000 homes were assessed as either being unsafe to occupy or suffering extensive damage, 600 whānau needed help with emergency accommodation, over 2000 road slips occurred and more than 100,000 insurance claims totalling $2.5 billion for damage were filed.

1. Earth Sciences New Zealand: "What controlled the occurrence of more than 116,000 human-mapped landslides triggered by Cyclone Gabrielle, New Zealand?" Published in *Landslides Journal,* 15 August 2025.


Henderson, Auckland following the Auckland Anniversary Floods 2023. Photo: Stuff Limited.

“ As a city, we will be recovering from this in years to come” – Mayor Wayne Brown

Over the next few months, the onslaught continued. A tornado hit the eastern suburbs in April. Another atmospheric river system delivered the wettest May on record, with further flash flooding. By mid-year, Auckland had already exceeded its normal annual rainfall.

For many people, the anxiety didn’t lift between events, and every heavy downpour carried the threat of it happening again. That accumulated dread, layered on top of the day-to-day chaos of damaged homes, lost belongings, disrupted routines and unresolved insurance claims, meant that by the time the region turned toward recovery, many Aucklanders were already exhausted.

The effects of the storms were felt unevenly. Some Aucklanders experienced little more than the damp disappointment of a cancelled Elton John concert or inconvenient commutes with detours around broken roads. Others in floodplains and on clifftops were hit hard – many over and over again. Some left their homes with water up to their chests and swam out with only the clothes on their backs. Disadvantaged communities were over-represented at this extreme end. Ongoing housing and financial hardship, coupled with extended periods of uncertainty about homes and businesses, took a toll on physical and mental wellbeing.

For everyone, the effects of climate change had arrived, and they were impossible to ignore.

The 2023 severe weather events

27 Jan – 1 Feb
Auckland Anniversary floods: record levels of rainfall (286mm) fell across the region

13 – 14 Feb
Cyclone Gabrielle: Over 248mm of rain, high winds and landslides

5
people tragically lost their lives

4500+
households needed assistance

40,000
received Civil Defence Payments through MSD

600
whānau provided with emergency accommodation

7000
Rapid Building Assessments of damaged properties

2193
red or yellow placards issued

2000
Roading slips

720
community facilities and parks damaged

$2.5 billion
insurance claims

Auckland Anniversary floods

200mm+ of rainfall was recorded at various sites.

49 sites exceeded the 24-hour total 100-year average recurrence interval of 165mm (based on the longest historical records from Albert Park).

286mm (24-hour total) was measured at Cutler Park in New Lynn.

River flow monitoring at **32 sites** exceeded all previous water level records.

Cyclone Gabrielle

An additional **200mm** of rain was recorded at sites across the region.

Waitākere experienced the highest rainfall with **248mm**.

Wind gusts of up to **130-150 kilometres** per hour were recorded at the most exposed sites.

Capturing the human experience of extreme weather

Storm-impacted children at Matua Ngaru School in Kumeū published a book in 2025 which shares their stories, words and illustrations following the flooding of the Kumeū River during the 2023 severe weather events.

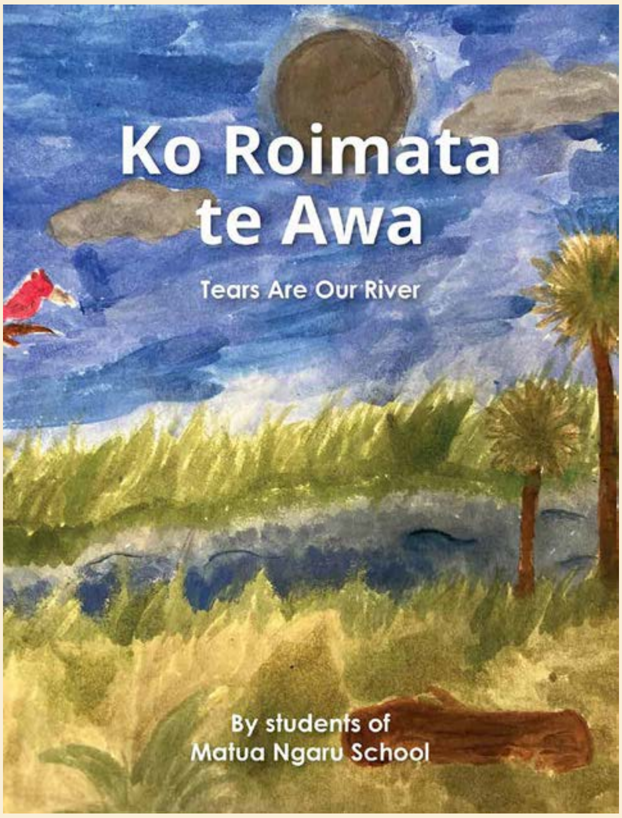
Ko Roimata te Awa, Tears Are Our River, was produced by 20 children ranging in age from five to seven. The book was proudly funded from a Recovery Office Wellbeing Grant.

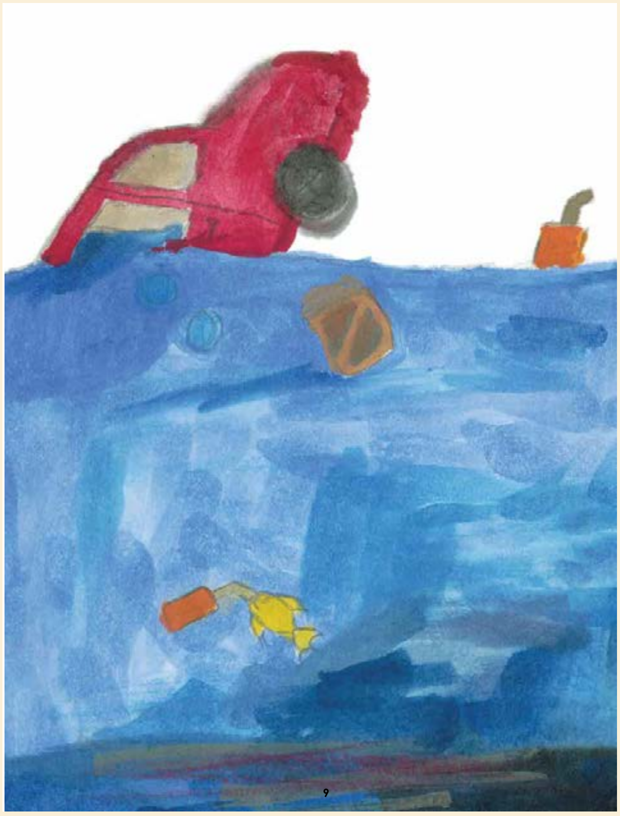
'Sad Stories' by Lydia Butterfield Illustrated by Emily Pyzhanov

"Here are some sad stories from the 2023 floods. Trushar and his family had just moved into their new home when the floods happened. The waters rose so fast they had to flee and leave all of their belongings. After this they lived in temporary houses and struggled with mental health. They feared the sound of heavy rain, and thunder. Their story reflects the hardship of losing a home, and the emotional toll on the family.

It was raining so hard a lady couldn't see the flood ahead and drove straight into it. Her car was washed to the side and water started pouring in. Luckily she escaped out of the car. She remembers seeing her lunch floating in the water.

One family with a young baby were trapped due to the high water levels and had no way to get to safety. They were rescued by a local resident, Briar Dunn, who used an inflatable boat to get to the family as floodwaters came in their house. Other community members then drove them to safety, illustrating strong local support."





Rapid responses to meet Auckland's immediate needs

A coordinated range of responses geared up to address urgent needs, restore services and support affected communities during and after the severe weather events.

Incident management activated: Auckland Emergency Management activated the Incident Management Team on 27 January 2023 in response to the flood. The Emergency Coordination Centre (AECC) was set to Orange Status, and the response continued through Cyclone Gabrielle.

National coordination: From 14 February, the National Coordination Centre led the response after the National State of Emergency was declared, supported by AECC.

Fire and emergency response: Over 2300 callouts were handled, including evacuations and rescues from flooded properties.

Welfare response: 24 Civil Defence Centres provided shelter, food and medicine, including temporary accommodation services.

Support for isolated communities: Coastal communities like Piha, Karekare, Muriwai and Āwhitu faced severe isolation due to landslides and flooding. Helicopter flights delivered supplies, cordons were managed to prevent unnecessary traffic into communities, and local leads coordinated support.

Building and land assessments: Over 7000 rapid building assessments were conducted, with placards issued to indicate damage levels (red, yellow, white). Geotechnical assessments were prioritised for severely impacted areas and closed landfills were checked for erosion or leaching of pollution. Teams ensured parks, playgrounds and community spaces were safe to re-open.

Waste removal: A Solid Waste Action Plan was implemented to clear flood-damaged household items. Over 6000 tonnes of waste were collected, with efforts focused on public health and safety.

Stormwater response: Healthy Waters and Watercare addressed over 3000 service requests, cleared blockages and managed flooding impacts.

Transport response: There were widespread road closures and disruptions to public transport, with 2000 roading slips. Efforts focused on clearing roads, restoring services and addressing isolated communities.

Lifeline utilities: Power and water outages affected thousands of properties, but most were restored in the days following the weather events. Temporary fixes on the wastewater system ensured ongoing access while mitigating any health risks.

Public information: Regular communication with the public continued through social media, websites, and daily media updates. Fact sheets and translated resources were distributed.

Kevan Lawrence Park, Waiuku

After the sirens faded

When the rain finally stopped, the immediate danger had passed, and emergency teams moved on, a different challenge began. Thousands of households faced an uncertain future, and roads, water systems and the environment would take years to repair. Communities that had already been stretched thin found themselves navigating insurance claims, government programmes and bureaucratic processes on top of everything else.

Recovery at this scale, where thousands of people across a whole region were affected, required sustained coordination between council, government, insurers and and communities. Difficult decisions about where to prioritise efforts and funding, and how to decide whose land was safe to return to and whose wasn't, lay ahead.

The three years that followed were marked by real progress, genuine difficulty, and some tough lessons.

Chapter 2
What is recovery?

Under the Civil Defence Emergency Management Act 2002, recovery means bringing about the immediate, medium and long-term regeneration of a community following an emergency – social, cultural, economic, natural and physical.

For Auckland in 2023, that meant thousands of damaged homes, fractured communities, overwhelmed infrastructure, and people waiting to find out whether the place they'd called home was safe to return to.

"Recovery is not the same as the immediate clean-up, and it doesn't end when the roads reopen or the power comes back on." – Group Recovery Manager Mace Ward

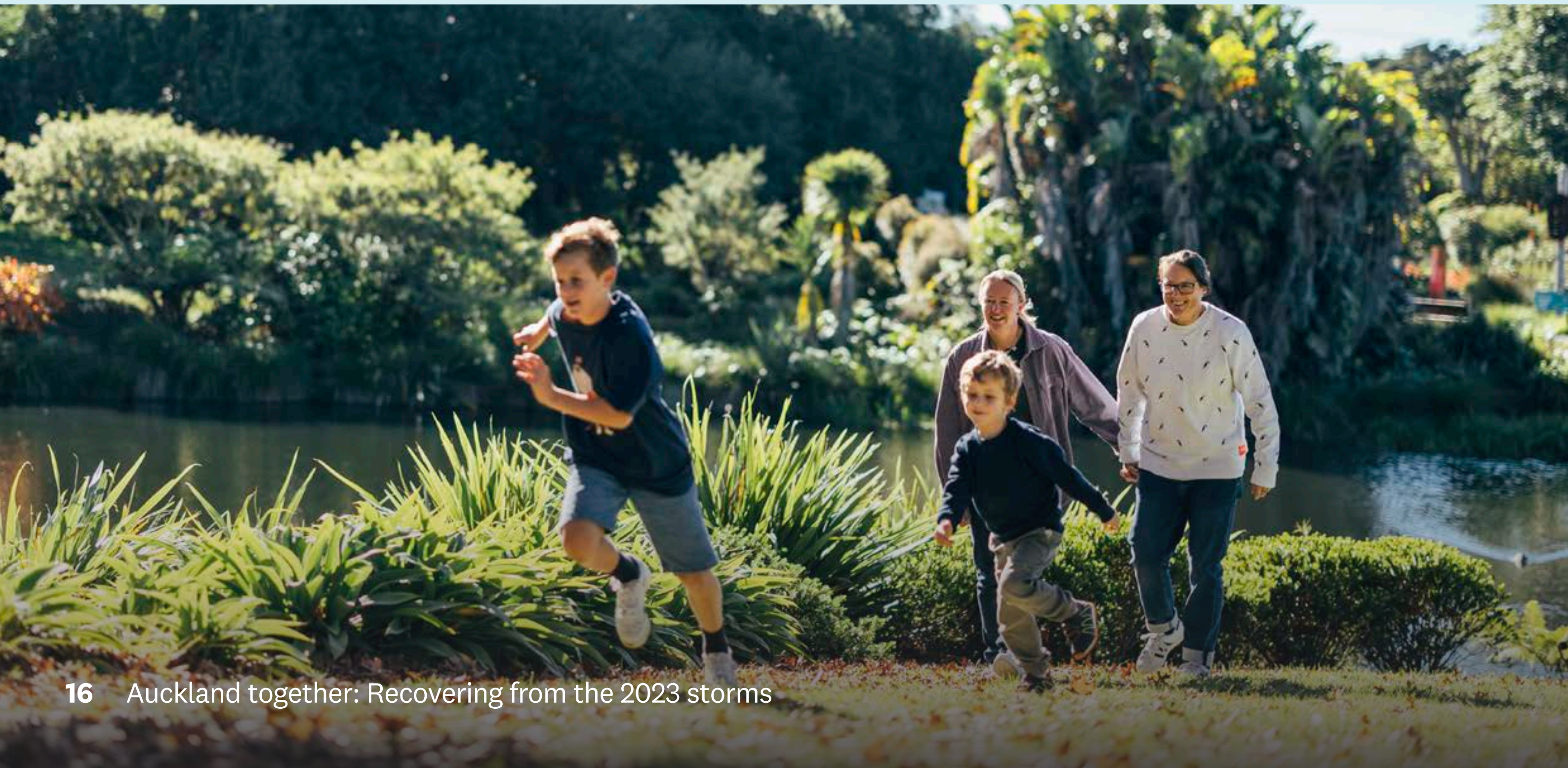
What is recovery?

Recovery is multifaceted and takes time, it involves:

- Understanding and responding to the needs of those affected
- Working across government, iwi, communities and organisations
- Restoring the built, natural, social and economic environments
- Supporting communities to lead planning for their own futures
- Reducing risk and building resilience for what lies ahead

The scale and unevenness of the damage shaped the way recovery was approached in Tāmaki Makaurau. From the beginning, recovery efforts focused on four interconnected areas: **people and communities, economic recovery, the natural environment,** and **damaged properties and infrastructure**.

The transition from emergency response to recovery began in March 2023. In May, a Group Recovery Manager was appointed and the Tāmaki Makaurau Recovery Office was established. This signalled the shift from providing for the immediate, short-term needs of Aucklanders to the longer-term view of supporting people and communities to recover and move on from the storms.



Centrally supported, locally led

Auckland was not the only region trying to recover following the brutal weather events of early 2023. Northland, Waikato, Bay of Plenty, Gisborne (Tairāwhiti), Hawke's Bay and the Tararua district were all significantly affected, making this one of the most widespread weather recovery challenges New Zealand had faced.

In February 2023, in response to these events, the Government appointed a Minister for Cyclone Recovery to lead the recovery, and established the Extreme Weather Event Cabinet Committee to coordinate and direct the Government recovery. A Cyclone Recovery Taskforce was also established to provide independent advice to government decision makers.

Cabinet decided on a locally led, centrally supported model for the north island recovery. This approach was informed by the lessons learned from the 2011 Canterbury earthquakes, and by the clear message from affected regions that they, and their communities, needed a genuine voice in shaping their own recovery.

In practice, 'locally-led' meant councils took responsibility for coordinating recovery in their regions, and accessing some government funding while managing delivery on the ground. This placed significant demands on councils that were simultaneously dealing with their own damaged infrastructure, stretched finances, and communities under pressure.

The Cyclone Recovery Unit, based within the Department of Prime Minister and Cabinet, supported regions and coordinated the national work programme.

The Government introduced the Severe Weather Emergency Legislation Act 2023 (SWERLA) which allowed the Government to make "Orders In Council". These orders relax requirements under various laws to give councils flexibility and help recovery go faster.

One of these Orders – the Severe Weather Emergency Recovery (Local Government Act 2002 – Long-term Plan) allowed Auckland Council to use a rapid public consultation process when deciding whether to commit public funding for property buyouts.

Future of Severely Affected Land (FOSAL)

A key part of the north island recovery was the government's Future of Severely Affected Land (FOSAL) programme. It was optional for councils, and for those regions that participated, the programme was led locally with central government support.

Under the programme, councils were required to assess storm-impacted residential properties to determine which were considered too dangerous for people to continue living there (referred to as having "intolerable risk to life"). If the risk could not be mitigated, voluntary property buyouts could be offered to provide a way for people to move out of harm's way and begin again. These buyouts would be funded 50/50 between the council and Government.

Following consultation with Aucklanders, Auckland Council chose to participate in the FOSAL programme. There is no statutory requirement for councils to compensate people affected by natural disasters, so this was a significant discretionary commitment. The step was extraordinary for the council, and it was made clear that its support of the buyout initiative was a one-off.

Listening and working with communities

How a recovery unfolds is shaped by the people living through it. Communities know what they need better than any council or government agency, and the role of those organisations is to listen and respond, rather than arrive with a predetermined plan. Across Tāmaki Makaurau, communities pulled together quickly, identified their own priorities, and made clear where support was needed most.

But not every community starts from the same place. The storms hit hard in areas that were already dealing with economic hardship, overcrowded housing, and limited financial means. Many households had no insurance. For these communities, the gap between the damage and the ability to recover was far wider than in more affluent areas, and without a deliberate effort to address that, a standard recovery response would have left them further behind. Māngere, Henderson/Rānui, and Mt Roskill/Wesley were identified early as priority communities, with targeted investment, community convenors and local grants directed to these areas where the need was great.

“Recovery from disasters of this scale takes time and requires sustained investment and ongoing collaboration to support communities. The storms of early 2023 will shape Tāmaki Makaurau for years to come.” – Mace Ward, Group Recovery Manager

In August 2023, Auckland Council asked Aucklanders about their experience of the storms and what recovery should look like. The 2051 submissions received shaped the Tāmaki Makaurau Recovery Plan and guided the recovery programme that followed

50%

Around half of respondents said their community was affected by the 2023 weather events, and around a quarter experienced direct damage to their property or contents.

1/3

A third credited community spirit for helping them get through. About a quarter relied on themselves or their family.

A third called for better stormwater maintenance and infrastructure upgrades, and a clearer Civil Defence and Emergency Management response plan.

A third highlighted the need for better development planning, including flood mitigation measures, as mechanisms for helping Auckland to be better prepared for weather events in the future.

Nearly half supported the Making Space for Water programme, though around a quarter felt the funding should not come from rates increases

The Tāmaki Makaurau Recovery Plan

In August 2023, Aucklanders were asked what recovery should look like. The consultation that followed with affected communities, mana whenua, businesses and organisations, shaped **Te Mahere Whakaora mō Tāmaki Makaurau, Tāmaki Makaurau Recovery Plan**. It connected immediate priorities like safe housing, business continuity and environmental restoration with longer-term goals around resilience and risk reduction.

The plan gave the recovery programme its direction and set the course for the years that would follow. Delivering it required collaboration, resources, knowledge and time from people well beyond Auckland Council and central government. Mana whenua, community groups, non-government organisations and not-for-profits were all central to making it work.

The plan provides a framework for coordinating their efforts and:

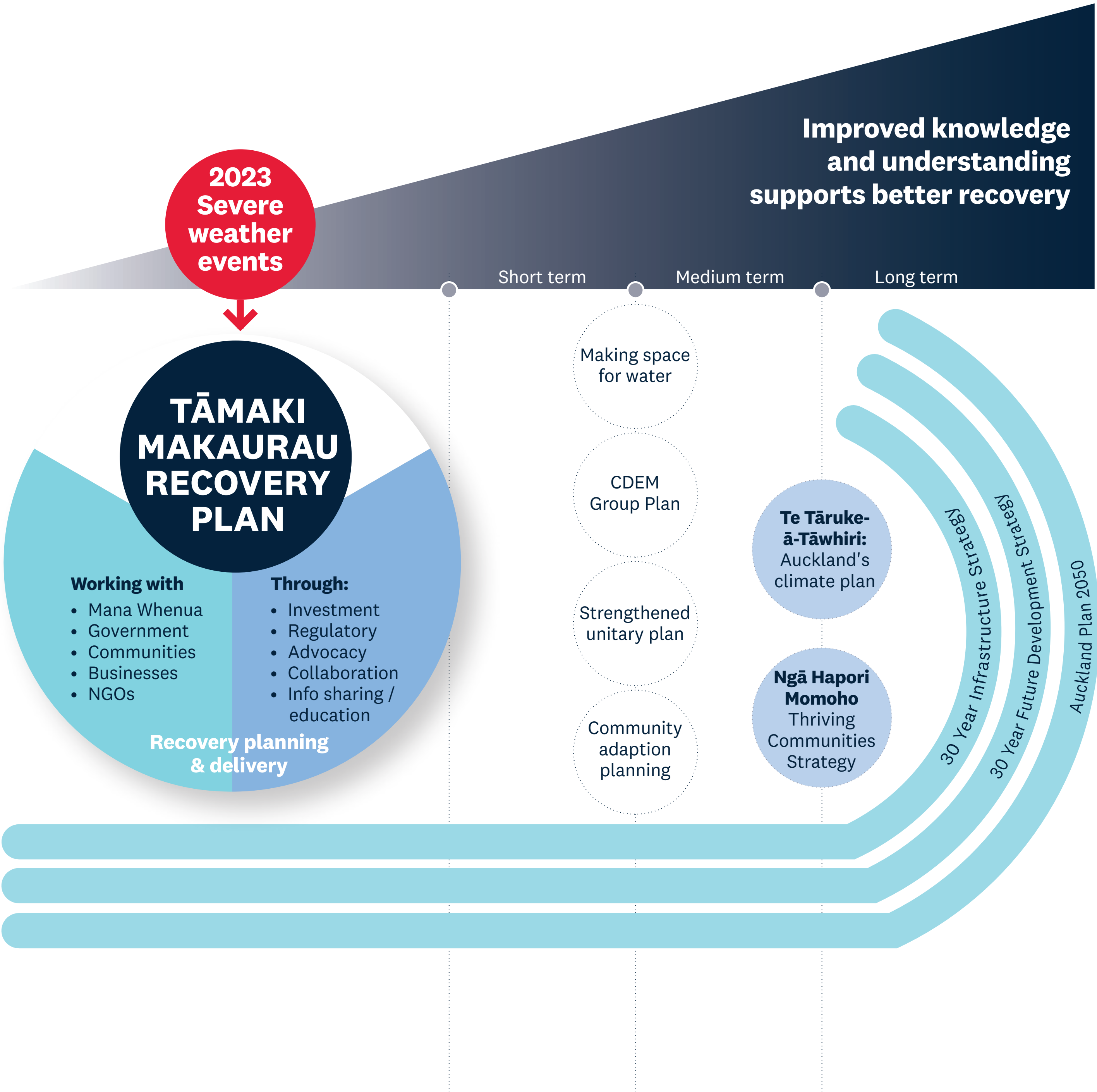
- sets principles and outcomes for recovery and the objectives to achieve
- describes work programmes already underway and future programmes
- identifies those involved in collaborative delivery of projects and initiatives
- sets out the funding approach for major programmes
- paves the way for recovery planning at a local level – when the time is right.

The Tāmaki Makaurau Recovery Plan identifies four outcome areas, referred to as 'whenu':

- Community and social recovery
- Māori partnership and participation
- Natural and built environment
- Economic recovery.

The plan is focused on the following priorities:

- providing information, advice and resources for Aucklanders
- delivering programmes and initiatives to support wellbeing and recovery
- making repairs and improvements to key infrastructure
- enabling mana whenua to partner and lead in the recovery
- empowering communities to lead their own recovery.


Improved knowledge and understanding supports better recovery
2023 Severe weather events
Short term
Medium term
Long term
TĀMAKI MAKAURAU RECOVERY PLAN
Working with
• Mana Whenua
• Government
• Communities
• Businesses
• NGOs
Through:
• Investment
• Regulatory
• Advocacy
• Collaboration
• Info sharing / education
Recovery planning & delivery
Making space for water
CDEM Group Plan
Strengthened unitary plan
Community adaption planning
Te Tāruke-ā-Tāwhiri: Auckland's climate plan
Ngā Hapori Momoho Thriving Communities Strategy
30 Year Infrastructure Strategy
30 Year Future Development Strategy
Auckland Plan 2050

Chapter 3
Delivering the recovery programme

Recovery on the scale faced by Tāmaki Makaurau after the 2023 storms could not have happened without strong partnerships and a collaborative approach to delivering for affected Aucklanders.

The Tāmaki Makaurau Recovery Office

The scale of the 2023 events on Tāmaki Makaurau required a purpose-built approach to coordinate recovery once the immediate response was over.

The Tāmaki Makaurau Recovery Office was established quickly and initially with a small team. There was an obvious and immediate goal to coordinate recovery, but it started without a full picture of what the coming years would require. That uncertainty was built into the way of working from the start, with flexible resourcing approaches and budgets that could scale up as the needs of the region became more clear.

Based within Auckland Council, the Recovery Office was the link between affected communities, council services and central government agencies. Its job was to make sure support reached people in a coordinated way and that the recovery programme responded to actual needs on the ground rather than assumptions made from a distance.

In practice, that meant being constantly adaptive. The initial focus was on the repair programme, but in May 2023, when the government announced the property categorisation and buyout scheme, the Recovery Office pivoted quickly to stand up a large-scale residential assessment programme. It was demanding work, and the ability to respond to emerging needs as they arose, rather than stick rigidly to an early blueprint, was central to how the office operated.

The recovery leadership team set the overall direction, guided by the needs of Aucklanders and the political direction of the mayor and councillors. A Senior Executive Group provided guidance on the wider recovery programme, and a Political Advisory Group including the mayor and deputy mayor provided oversight on recovery schemes and policies.

The Recovery Office brought together existing council staff and new recruits across a wide range of disciplines – community connectors, engineers, mātauranga Māori experts, communications specialists, wellbeing practitioners, finance experts, programme managers, public law experts, GIS/data experts, customer service advisors, property advisors, and many others. That breadth of expertise was deliberate and necessary because the recovery touched almost every aspect of people's lives, and the team needed to reflect that.

The mandate of the Recovery Office was always specific and limited to recovering from the 2023 Auckland Anniversary Weekend floods and Cyclone Gabrielle. But the experience of standing up a dedicated recovery function has left a lasting mark on how Auckland Council thinks about future resilience at a regional and community level.

Structure of Auckland's recovery programme

Strong partnerships

From the earliest days of response, Auckland Council worked alongside iwi and mana whenua, government agencies, community and neighbourhood groups, faith-based groups, social services providers and national organisations such as the New Zealand Red Cross to rapidly deploy support to affected communities. These partnerships were especially vital where trust in council was low or where language barriers made it harder to reach people who needed help most.

Research shows that connected communities recover faster from disasters, and this was evident across Tāmaki Makaurau. In the weeks and months following the 2023 storms, local resident groups and volunteers stepped up to share information, advocate for their neighbours, and provide practical, on-the-ground support. Their efforts helped hold communities together at a time when government and council services alone could not meet the need. Much of this work was voluntary with people giving their time freely to support others.

Locally connected, collectively stronger

Resident-led recovery groups played a critical role in supporting neighbours and advocating for local needs. They organised street chats to connect with affected people, held events for youth, and worked directly with agencies to help others navigate recovery processes. Their ability to connect people with services and provide trusted, localised information proved especially valuable in communities where formal channels were harder to access.

Working with iwi and Maōri communities

The Māori Partnership and Participation outcome area in the Tāmaki Makaurau Recovery Plan set a clear direction: recovery must be shaped in partnership with Māori. Mana whenua and Māori organisations in storm affected areas have identified priorities, led initiatives, and worked alongside the council to advance positive outcomes for Māori communities.

Examples of this Māori-led contribution and partnership include cultural induction days with Te Kawerau Iwi Tiaki Trust and deconstruction specialists in Piha, ensuring sensitive handling of slip material from the protected natural area (Waitakere Ranges Heritage Area), and the deployment of mana whenua and mātāwaka Partner Navigators[1] to support whānau through complex recovery processes.

1. From organisations including Te Kawerau Iwi Tiaki Trust, Ngāti Tamaterā Treaty Settlement Trust, Te Māhurehure Cultural Society, Huakina Development Trust, Aunty Lou's Kitchen and Visionwest Waka Whakakitenga Community Trust.

Partnering with the insurance sector

For many affected homeowners, insurance was the first system they turned to after the storms, and how well it worked, or didn't, had a direct bearing on how quickly they could move forward in their recovery.

For storm-affected homeowners, the relationship between insurance payouts, buyout offers and eligibility for funding, created challenges. Those that were displaced faced their own difficulties as they needed insurance claims settled before repairs could begin, and repairs completed before they could return home, all while the insurance industry was stretched by the national scale of the weather events.

To help navigate this, the Recovery Office appointed a Principal Advisor for Insurance and Financial Recovery. While the role had been expected to operate at a systems level and build relationships with the Insurance Council of New Zealand, the Natural Hazards Commission, and the New Zealand Claims Resolution Service, the reality of the buyout programme meant it was frequently drawn into supporting individual complex cases and providing advice internally to council decision-makers.

The experience underlined that for future recovery planning, insurance can't be seen as a separate system running in parallel to council processes. Establishing relationships, shared protocols, and data-sharing arrangements with insurers before an event occurs could significantly reduce the complexity homeowners face when it matters most.

Recovery is a shared responsibility

The partnerships that shaped recovery in Tāmaki Makaurau were not always straightforward. Auckland Council, iwi, community groups and government agencies were all advocating for people, but from different positions and with different pressures including competing budgets, different priorities, and the constant strain of limited resourcing. That tension was natural, and in many ways, it was a sign that everyone involved cared deeply about the outcome.

Despite those pressures, the partnerships held and when formal systems reached their limits, it was the connections within and across communities that carried people through. The relationships built through this recovery will be enduring. Networks that didn't exist before 2023 now know how to work together. Organisations have shared knowledge, and a clearer sense of what future recovery requires from all of them.

Chapter 4
Defining residential property categories

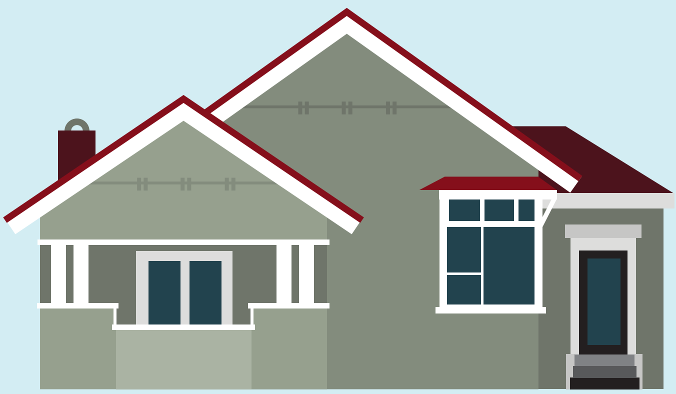
When the government announced its property risk categorisation framework in May 2023, it was the first time anything like it had been used in New Zealand. For Auckland Council, that meant designing and resourcing an assessment system from scratch to deliver fair, consistent decisions across thousands of properties, all while homeowners were waiting anxiously for answers.

For many of those homeowners, the wait was deeply unsettling. The categorisation process was unlike anything they had encountered before, and because it was new to everyone, including council, it was hard to explain clearly or predict timelines with confidence.

Government's risk framework

After Cyclone Gabrielle tore through the North Island, the then Cyclone Recovery Minister Grant Robertson established a Cyclone Taskforce to work with insurance companies and local councils to assess the scale of risk across affected regions. From that work, the government developed a national property risk categorisation framework.

The framework identified four risk categories, based on a single guiding principle: an assessment of **intolerable risk to life at a residential property**.



The assessment focused on the risk to people living in the dwelling, rather than whether the dwelling had been damaged or might be damaged again. That distinction was important and was also a source of confusion and tension between council and homeowners throughout the process.

Properties where the risk to life could not feasibly be reduced to a tolerable level would be eligible for a voluntary buyout.

Category	Definition
Risk Category 1	These properties do not meet the threshold for intolerable risk to life.
Risk Category 2A*	These properties have intolerable risk but further work is required to see if that risk can be reduced.
Risk Category 2C	These properties meet the threshold for intolerable risk to life, however there is community-level project to reduce the risk of future weather events.
Risk Category 2P	These properties meet the threshold for intolerable risk to life, however there are property specific measures to reduce the risk of future weather events.
Risk Category 3	These properties meet the threshold for intolerable risk to life and are eligible for a council buyout.

* A small number of Auckland properties were categorised as 2A following initial assessment. 2A was effectively a 'holding' category where intolerable risk was identified but further investigation was required to see if there was a mitigation available. These properties were subsequently changed to a final category.

What could be categorised?

The categorisation framework applied only to properties with a legally established residential dwelling. For mixed-use properties, only the residential component was included. Vacant land, commercial properties, Crown-owned land, and non-consented dwellings fell outside the programme, as did non-habitable areas of a property such as garages or basements.

For some homeowners, these exclusions were a source of frustration. People who owned vacant sections adjacent to their home, or who had carried out work without consent, found themselves outside a programme that their neighbours might qualify for. Those who had purchased storm-damaged properties after 26 January 2023 were only eligible at the council's discretion and on terms it agreed because the programme was focussed on supporting the homeowners that had been affected by the January and February storms.

Defining 'intolerable risk to life'

Categories were based on risk to life, rather than risk to property, and identified where there was a high risk that there could be loss of life at the property in a future weather event.

- **For landslide risk,** intolerable risk to life is defined as Annual Individual Fatality Risk (AIFR) of 1 in 10,000 or greater for the most vulnerable person on the property – meaning a one in ten thousand chance of a fatality in any given year. This was assessed by geotechnical experts in two stages.
- **For flooding risk,** intolerable risk to life was defined as a high risk to life for vulnerable people in a flood event with a one per cent chance of occurring or being exceeded in any given year (1% Annual Exceedance Probability (AEP).

Placards vs. Categories

Adding to the complexity of the recovery programme was the existence of two separate building assessment systems running simultaneously.

In the immediate aftermath of the storms, Auckland Council conducted Rapid Building Assessments and issued placards (red, yellow or white) to indicate whether a property was safe to occupy at that point in time. This is a statutory process set out in the Building Act 2004. Red placards restricted all access, and yellow placards partially restricted access. In the case of red and yellow placards, repairs were needed before the property could be declared safe and have the placard removed.

Property categorisation was an entirely separate matter. Where placards addressed immediate safety, categorisation assessed the long-term risk to life from future severe weather for the sole purpose of identifying eligibility for a buyout (Category 3) or mitigation grant (Category 2P). It was a non-statutory process set in motion by the Government following the 2023 storms.

The two assessment systems were unrelated, but many homeowners assumed they were connected. Some property owners received a red placard and assumed they would automatically be Category 3, only to find their property was Category 1. Others were surprised to discover that a white placard, didn't guarantee a low-risk category. The confusion was understandable, but it added another layer of distress to an already difficult process.

Photo taken
by Ross Roberts

Getting to a category

The Government's framework placed a new obligation on Auckland Council to assess risk of existing individual properties and categorise every registered property.

It meant building a detailed end-to-end system for assessing thousands of properties from scratch.

Two separate technical programmes ran in parallel: one for flooding risk, one for landslide risk. Each required different specialist expertise, and both underwent rigorous external peer review to ensure the decisions they produced were robust. Getting the process right mattered as these were decisions that would determine people's futures.

Although property owners could voluntarily register from June 2023, assessments could not begin until Crown had approved both the categorisation approach and risk framework, and the co-funding agreement had been finalised. This sat in constant tension with the pressure to move quickly. Over 3500 properties were registered for assessment, and many of the homeowners were still displaced, and deeply anxious about their futures. Despite the complexity, Auckland's first buyouts were completed at the end of December 2023, less than a year after the storms.

The categorisation process:

1. **Invitation to participate:** Homeowners with affected properties invited to register for voluntary categorisation by submitting information via an online portal (registrations open between June 2023 and September 2024).
2. **Desktop assessment:** Experts assessed potential intolerable risk to life using homeowner-provided data and other sources such as flood models and hazard maps.
3. **Site assessment:** Where desktop results indicated possible intolerable risk – or where the homeowner self-assessed their property as Category 2 or 3 – a geotechnical and/or stormwater engineer conducted a site visit.
4. **Risk and mitigation evaluation:** Site assessment results were used alongside the desktop assessment results to evaluate risk. Where intolerable risk to life was identified, mitigation options and concept-level cost estimates were considered.
5. **Decision making:** All assessment data was used to complete a detailed risk assessment and recommend a property category.
6. **Final decision:** The Group Recovery Manager or Natural and Built Environment Lead approved the final categorisation decision based on expert recommendations.
7. **Communication:** The property owner was informed of the decision and next steps.
8. **Disputes and special circumstances:** Homeowners who disagreed with their category decision could seek a different outcome through the dispute resolution process. Those with special circumstances could apply for the council to consider a variance from the standard approach.

1975 Category 1 properties

138 Category 2P properties

32 Category 2C properties

1205 Category 3 properties

2686 properties assessed for flood risk within 18 months

2500+ site visits completed

550+ landslide affected properties assessed

Over 25 organisations involved across New Zealand and Australia

150+ specialist engineers and consultants

Building a robust process from scratch, while thousands of homeowners waited for decisions that would shape their lives, was one of the most complex things Auckland Council had undertaken.

For many homeowners the process was long, confusing and stressful. Because nothing like this had been done before, it was difficult to estimate how long each stage would take. When homeowners asked for timelines Auckland Council provided its best estimates, but those timeframes repeatedly grew as the scale of the programme, the pressure on resources, and the time required to conduct rigorous assessments all became clearer. Commitments were made in good faith but not always kept. That was a source of frustration for homeowners, though the council teams were working as fast as possible while maintaining the accuracy the process required.

Chapter 5
Key policy decisions

The government was clear from the outset that its co-funding contribution was a one-off response to an extraordinary event and was not a precedent for how future storm-related events would be handled. Its framework focused specifically on future **risk to life** at properties with legal residential dwellings.

This created a policy challenge for Auckland Council and required the council's Governing Body to make decisions on how public funding would be allocated to support property owners. It also required the council to consider how existing policies would need to adapt to circumstances they weren't designed for. These were decisions about significant amounts of public money being directed to private landowners, which is not something councils normally do. That added weight to decisions, and made fairness, consistency and transparency critical considerations when developing policy.

Timeline for policy decisions

April 2023
Group Recovery Manager appointed and Tāmaki Makaurau Recovery Office established to coordinate region's rebuild on behalf of council group, government and community partners

May 2023
Government announces risk categorisation framework

June 2023
Government announces buyout to be co-funded

Sept 2023
Public consultation on funding buyouts

Oct 2023
Auckland Council agrees on funding and buyout package (co-funded with government) and establishes Category 3 buy out scheme

Nov 2023
Auckland Council agrees Category 2P grants scheme

Dec 2023
First buyouts settled

Nov 2024
Road reserves grants scheme approved

April 2025
Storm-Affected Land Use Policy approved

February 2026
Category 2P grants scheme revised

Policy decisions were made with the best available information at the time and refined as the programme progressed. The policies enabled council to make difficult calls quickly and consistently, and in a way that could be defended to those affected and those funding it.

There was room to consider cases with unique or exceptional circumstances, and the live nature of the programme meant policy had to remain responsive as new information came to light. Within those parameters, Auckland Council made policy decisions that would shape the recovery for thousands of Aucklanders.

Category 3 buyouts

Based on feedback from the September consultation with Aucklanders and options presented by staff, council's Governing Body debated and decided that homeowners would contribute between 5 per cent and 20 per cent of their property's market value as at 26 January 2023, with no price cap. This meant:

- Insured properties buyout offer of 95 per cent of market. valuation (homeowner contributes 5 per cent)
- Uninsured properties buyout offer of at least 80 per cent of market valuation (homeowner contributes up to 20 per cent)

The buyout offer was calculated as the market valuation, less any insurance settlement, less the homeowner contribution. The council would also consider reimbursement for homeowners who had spent insurance payouts on repairs in good faith before receiving their category.

For some homeowners, particularly those who were uninsured, the contribution requirement was a significant financial ask on top of everything else they were already dealing with.

Rationale for the Category 3 homeowner contribution

Deciding the homeowner contribution reflected a difficult balancing act for Governing Body. This was public money being used to fund the buyout of private property, and it required a scheme that could support everyone who needed it while remaining defensible to the ratepayers funding it.

Setting the homeowner contribution at between 5 per cent and 20 per cent was intended to ensure the fund went far enough to reach all eligible homeowners, and to reflect the principle that had been raised through the September 2023 consultation – that property ownership carries some degree of financial risk. For uninsured homeowners provisions were made to allow consideration of individual circumstances to reduce their contribution to 5 per cent in some cases, for example where they had been unable to get insurance due to prior flooding.

September 2023 consultation

In September 2023, **Auckland Council consulted Aucklanders** on whether to accept the proposed co-funding agreement with the Crown. Almost 2500 people submitted feedback.

- 83 per cent supported Auckland Council accepting the funding package.
- Support for property buyouts was high but often conditional with many submitters emphasising the personal responsibility of private property owners, and that uninsured properties should bear greater cost.
- Those who opposed the package generally felt buyouts should be the responsibility of property owners or the government, not ratepayers.
- Views on valuation methodology were mixed, with slightly more favouring market value over capital value.
- There was broad support for investment in transport and water infrastructure to reduce future risk.

Category 2P grants

For homeowners where the risk to life could be reduced to a tolerable level through physical mitigations rather than requiring a full buyout, the Category 2P grants scheme offered a different path forward.

The scheme provided grants for on-site mitigations that were feasible, meaning they cost no more than 25 per cent of a property's 2021 capital value, they could be consented, and could be completed within two years. Grants were available retrospectively for homeowners who had already carried out mitigation work before receiving their 2P category. Homeowners managed the works themselves.

Category 2P provided a meaningful alternative to a buyout for some property owners and the council as it allowed people to stay in their homes while reducing their exposure to future risk, and it reduced the financial burden on ratepayers. Further detail of how the scheme worked is covered in the Category 2P chapter.

Disputes framework

The disputes framework provided practical pathways to resolve issues arising from the implementation of the Categorisation Approach and Scheme Terms. The scale and complexity of the risk assessment process meant it was important to have a way to test decisions to make sure they were right.

It was also an important signal of good faith. Homeowners were being asked to accept significant decisions about their properties and having a credible process to contest those decisions including access to an independent expert review process mattered.

Special Circumstances

We had a process for considering a homeowners special circumstances which allowed the council to consider departing from the Categorisation Approach or Scheme Terms, where it was consistent with the overall policy objectives.

Disputes Resolution Framework covered four types of dispute:

- **Category decision:** Homeowners had three months from receiving their category to apply for a review. If they were unhappy with the outcome, they could seek a further review via an independent expert who would provide a binding decision.
- **Special circumstances review:** Homeowners who had unique and special circumstances could seek a variance from the scheme terms, however financial hardship or the resetting of policy decisions were excluded.
- **Uninsured individual circumstances:** Homeowners that were not insured at the time of the storms and were required to pay a 20 per cent homeowner contribution could apply to have this reduced to 5 per cent.
- **Valuation dispute:** Homeowners who were unhappy with their valuation had one month from receiving the market valuation to dispute it.

Video case study:

This Newshub report captures both the human impact and the practical realities of Auckland Council's buyout scheme following the 2023 storms. It meets a red-stickered homeowner who was waiting to learn of the Governing Body's decision on the buyouts.

Watch now or scan the QR code

Other policy decisions

Not all policy decisions could be made in the early months of recovery. As the programme progressed, new challenges emerged that required their own policy responses.

Storm-affected land use

With more than 1100 Category 3 properties expected to move into council ownership, a clear policy was needed for what would happen to that land. In April 2025, the Policy and Planning Committee approved the Storm-Affected Land Use Policy, setting out how acquired properties would be repurposed in a way that accounted for the identified risk. Some land will be retained for public use where a service need is identified, other land will made available for private use or redevelopment (where it's safe to do so) to return value to the council and ratepayers.

Road reserves grants scheme

A separate challenge emerged for property owners whose private access to their property had been damaged by slips on road reserves during the 2023 storms. It was a situation that fell awkwardly between systems as the repairs needed to happen on council-owned road reserve land, but because the affected assets (e.g. vehicle crossings or retaining walls) were private, the cost fell to the homeowners themselves.

It was challenging for homeowners to secure lending for repairs on land they didn't own, and in many cases the engineering costs were substantial. This wasn't covered by the property categorisation programme – which was focussed on risk to life for people living in the dwelling – so there was no existing mechanism to help.

Following advocacy by affected residents, Auckland Council's Transport, Resilience and Infrastructure Committee approved a one-off grants scheme of up to $5 million in November 2024 to contribute toward the cost of these repairs.

Collectively, these policy decisions represent a significant exercise in public decision-making, which has long-lasting impacts for our region. The pace of decision making required under emergency circumstances meant that some policies were refined as the programme progressed, but taken as a whole, the policies provided a workable framework for the recovery programme.

Chapter 6
The cost and funding of Auckland's recovery

The cost of recovery from the 2023 severe weather events has been significant, and the scale of damage to homes, infrastructure, communities and the natural environment meant that no single organisation could carry the funding burden alone.

Based on the best available information at the time of publishing, the total cost of delivering Auckland's recovery programme will exceed $2.5 billion. Buying Category 3 homes has been the largest single cost of the recovery, accounting for around half of the overall recovery spend.

The 2023 recovery drew on funding from Auckland Council, central government, and NGOs such as the New Zealand Red Cross. Decisions about where money went were guided by clear principles, that support should reach those most affected, and investment should not just repair what was damaged but reduce the risk of it happening again.

Overall, Auckland Council funded 56% of the total recovery costs, with 44% coming from Crown and 0.1% from other sources.

The Auckland Funding Agreement between the New Zealand Government (Crown) and Auckland Council significantly shifted the scope of recovery for Tāmaki Makaurau – diverting council funding to private residential property but also enabling significantly faster infrastructure repair and resilience building.

This chapter sets out the cost of delivering the actions in the *Tāmaki Makaurau Recovery Plan* and how it has been funded. It does not capture every cost associated with the storms. Some impacts, such as the long-term wellbeing effects on individuals, and the unpaid work of those who supported the recovery, cannot be measured in financial terms.

Some costs have been estimated where Auckland specific figures are not available.

The cost of recovery

Estimating the total cost is complex because recovery has been delivered across multiple organisations. Many programmes, including flood resilience projects, home removals, and decisions about storm affected land, are still underway.

Recovery costs have been allocated across five areas:

1. Repairing and strengthening public infrastructure
2. Removing intolerable risk to life at residential properties
3. Supporting impacted Aucklanders, communities and businesses
4. Safe management and future use of storm affected land
5. Coordinating the recovery

Repairing and strengthening infrastructure, and removing people from intolerable risk to life, will account for around 93% of total recovery spending.

While the cost of recovery is significant, choosing not to invest in repairing infrastructure, reducing risk to life, and supporting people to recover, was not a realistic option for our region.

Mayor Wayne Brown and Auckland Council Chief Executive Phil Wilson signing the storm recovery co-funding agreement in October 2023

Recovery activity	Cost $M		Funding $M		
	Estimated total at 30 June 2026	Forecast total at 30 June 2034	Crown	Council	External
1. Repairing and strengthening public infrastructure	608.8	984.9	431.0	555.8	0.0
2. Removing intolerable risk at residential properties	1333.6	1409.3	655.9	753.4	0.0
3. Supporting impacted Aucklanders, communities and businesses	77.9	79.5	54.3	22.5	2.7
4. Safe management and future use of storm affected land	11.3	76.2	0.0	76.2	0.0
5. Coordinating the recovery	23.6	24.4	0.0	24.4	0.0
Total estimated cost of recovery efforts	**2055.3**	**2574.2**	**1141.2**	**1432.2**	**2.7**
Share of cost			**44.3%**	**55.6%**	**0.1%**

Notes:

- Costs are estimated based on information available at June 2026.
- Costs do not include any sales proceeds from the safe divestment of storm affected land or interest costs.
- Civil Defence Payments are not included, but are estimated to be around $25.7 million (central government) after the events.
- Temporary accommodation costs ($39 million) are based on estimates for Auckland provided by MBIE and MSD. TAS includes an adjustment for part payments made by families staying in temporary accommodation.
- 32 properties where intolerable risk will be addressed through community flood resilience projects are accounted for within the infrastructure cost.
- Where people costs can be directly attributed to a recovery activity they are included within the cost to deliver the activity.

Repairing infrastructure and building resilience

Repairing infrastructure, and strengthening it where possible, has been the largest area of spend after property buy-outs, costing $608.8 million to date (around 38 per cent of total recovery spend). This covers 797 road network projects, 222 water supply repairs, repairs to parks and community facilities, and making natural hazard risk information more accessible for people.

Crown funding has covered 44% of this, and the Crown's contribution has enabled the work to progress faster and at a scale that would not otherwise have been possible.

The total infrastructure spend is expected to reach $984.9 million by June 2034 when projects are complete. This includes a further approximately $370 million to deliver Making Space for Water initiatives, including four major flood resilience infrastructure projects, increased maintenance, improved flood intelligence and overland flow path management.

Removing intolerable risk to life

Removing intolerable risk to life includes a range of activities including undertaking risk assessments, buying and removing dwellings where risk cannot be mitigated (Category 3) and providing grants to reduce risk at properties (Category 2P).

Costs include:

- risk assessments for over 3,500 properties ($25.7 million)
- the Category 3 buyout scheme ($1.256 billion) – the largest single cost of the recovery
- removal of Category 3 dwellings ($76 milion)
- the Category 2P grants scheme ($39.5 million).

Permanently removing intolerable risk for 1164 households has cost $1.333 billion, with the total expected to reach $1.409 billion by December 2027. This is around 55 per cent of total recovery costs.

The ability to remove people from high risk homes at the scale that has been achieved in Auckland depended on a partnership approach, where both local and central government shared the cost. Overall, Crown funding covered 47 per cent of the cost of removing intolerable risk to life. The council was responsible for coordinating the delivery of the programme.

Supporting people through recovery

The investment in direct support for people is relatively small in financial terms, when compared to infrastructure and property purchase costs, but it was a critical part of recovery. Total community support costs are estimated at around $79.5 million, with the Crown funding 68 per cent of these costs.

Approximately $52.4 million was direct financial assistance, including business grants, accommodation support and rates relief. The remainder funded services such as the Navigation Service, community liaison roles, and community led recovery initiatives. This extended the reach of recovery into communities and supported people navigating complex and often difficult situations.

Managing storm affected land

By the end of the buyout programme, Auckland Council will own over 1100 residential properties across the region.

Managing this land is expected to cost Auckland Council $76 million through to June 2034. Costs include maintaining sites, resolving shared ownership arrangements, and determining future use.

This work is ongoing; land use decisions will take many years. The land represents both a responsibility and an opportunity to shape future resilience. Where land can be divested safely, it will provide some financial return to Auckland Council.

Coordinating Auckland's recovery

Excluding the people costs associated with delivering major programmes (included above), the cost to coordinate and manage the recovery is around $24.4 million and has been funded by Auckland Council.

These costs include programme management, governance, communications, customer experience, support from council functions outside the Recovery Office such as legal and finance, and the implementation and ongoing costs of a Customer Relationship Management platform for case management.

Funding the recovery

The partnership approach to funding enabled recovery to proceed at a pace and scale that would not otherwise have been possible.

The primary funding mechanism for the recovery was the Auckland Funding Agreement which provides $1.593 billion for Auckland's recovery through a cost-share arrangement between Crown and Auckland Council. At the time Auckland Council agreed to match government funding for the buyouts, nobody yet knew how many properties would ultimately be assessed as Category 3.

Auckland Funding Agreement	Initial agreement (Oct 2023)			June 2026		
$M	**Total**	**Crown**	**Council**	**Total**	**Crown**	**Council**
Category 3 buyouts	774	387	387	1252	626	626
Category 2 risk reduction projects	613	380	233	231	143	88
Regional transport projects	110	110		110	110	
Auckland Funding Agreement	**1497**	**877**	**620**	**1593**	**879**	**714**
Regional transport projects (NZTA)	280	199	81	280	199	81
Total co-funding package	**1777**	**1076**	**701**	**1873**	**1078**	**795**

Notes:

- June 2026 reflects $1.959 million of additional Category 3 funding confirmed by central government in June 2026 and matched by additional council funding.

The agreement includes:

- 50/50 cost share for Category 3 buyouts, up to $1.252 billion. Costs above this are fully funded by council
- 62 per cent (Crown) and 38 per cent (council) cost share for Category 2 risk reduction projects
- $110m funding for regional transport projects

Additional funding of $280 million for regional transport projects was provided by the New Zealand Transport Agency ($199 million) and council ($81 million) to enable delivery of the $390 million transport repair programme, increasing the overall funding package to $1.873 billion.

For homeowners facing the loss of their property, the funding arrangements between the Crown and Auckland Council were transformative and made it possible to offer voluntary buyouts to property owners in the highest-risk categories.

Additional government funding

In addition to the Auckland Funding Agreement, and New Zealand Transport Agency funding, the Crown provided grants to support recovery efforts and directly funded support for impacted businesses and displaced Aucklanders requiring accommodation support.

Grants from government agencies including Te Whatu Ora and the Ministry of Social Development provided a $1.7 million boost to support community wellbeing activities. A further $14.5 million from the Crown provided funding to the council for navigator and community liaison roles, and additional resource to accelerate delivery, including the Category 3 buyouts and Category 2P.

In total, the estimated Crown contribution for delivery of activities in the Tāmaki Makaurau Recovery Plan was $1.14b.

Government contribution to delivery of Tāmaki Makaurau Recovery Plan

	$M
Auckland Funding Agreement	879
Regional transport projects (NZTA)	199
Grant funding to Recovery Office	16
Business grants (estimate)	8
Accommodation support (estimate)	39
Estimated total government contribution	**1141**

Philanthropic funding

Funding for practical recovery support to impacted people, such as replacement furniture, clothing and hardship grants, came from the New Zealand Red Cross ($2 million) and the remaining Mayoral Relief funds ($125,000).

An additional Red Cross contribution of $500,000 supported local preparedness initiatives.

A contribution of $100,000 from the Lotteries Grant Board supported the Adapting Together programme, which was delivered by Leadership New Zealand and jointly funded with Auckland Council.

"Eight months on from the floods, many Aucklanders are still dealing with that devastation. We have agreed to the Government's proposal to give them a helping hand out of it. That is the right thing to do.

On the other hand, we are asking all Auckland ratepayers to pay higher rates to make this happen. They will be paying off the debt associated with this decision for decades. I feel the weight of that responsibility. We are also on a fixed budget and had to make decisions which gave us some confidence we could complete this process within the budget." Auckland Mayor Wayne Brown

Auckland Council funding

Auckland Council's financial contribution to recovery extended beyond the commitments in the Auckland Funding Agreement.

Ratepayers funded the establishment and operation of the Recovery Office itself, the full cost of the home removal programme, rates relief for households unable to return to damaged properties, repairs to parks, community facilities and other infrastructure including the water network.

Additionally, as the number of Category 3 properties grew beyond early projections, Auckland Council's contribution under the co-funding agreement increased to $714 million to maintain the agreed funding split.

The total cost to Auckland Council to implement the Tāmaki Makaurau Recovery Plan is estimated to be $1.43 billion by 2034.

There are limited options for the council when it comes to funding an event of this scale. Recovery costs funded by Auckland Council have been met through a combination of insurance, reprioritisation of existing budgets, increased borrowing, general rates, and expected sale proceeds from the safe divestment of storm-affected land. Insurance claims have not yet been finalised, however above ground claims are estimated to be between $20-24 million for the council group.

Funding Category 3 home removals programme

The physical removal of Category 3 homes is fully funded by Auckland Council. Costs have increased from an initial estimate of $47.7 million to approximately $76 million due to a higher number of Category 3 homes and complexity in the removal programme such as managing asbestos, working on unstable land and in ecologically sensitive locations.

The increased costs are expected to be offset through the future land use programme, which will manage the divestment of appropriate Category 3 land over the coming years.

Funding the rates relief programme

For households unable to return to their storm-damaged homes, rate bills on uninhabitable properties were an added burden during an already overwhelming period. Auckland Council provided rates relief through the Emergency Relief Fund for the second half of the 2022/2023 financial year, crediting relief payments to 792 eligible accounts at a total cost of approximately $1.3 million.

The Governing Body later agreed to extend this emergency measure to a full 100 per cent rates remission for FY24 and FY25. A total of $5.5 million in rates relief was provided by Auckland Council.

Storm response fund

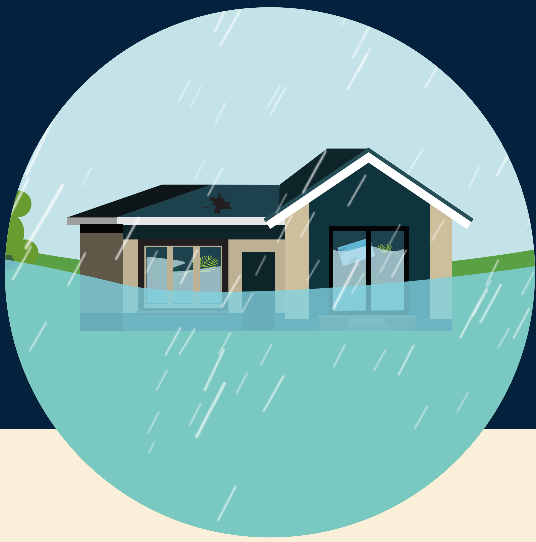
Auckland Council established a Storm Response Fund to invest in response, readiness and resilience for the future. In June 2023, the Governing Body approved a $20 million per annum operational budget for the fund as part of the Annual Budget, funded from general rates, with the commitment running through to at least the end of the 2030/2031 financial year. A small amount of this fund directly supported recovery efforts.

The fund was structured around four packages of work: proactive maintenance and monitoring of stormwater, roading and parks assets; strengthening Auckland Emergency Management's capability and preparedness; providing communities with better information about the risks they face and how to prepare; and coordinating capital works and land use planning to support faster and more financially sustainable decision-making about vulnerable assets.

Across these four packages, 30 programmes were funded, ranging from increased catchpit cleaning and flood hotspot camera monitoring to community resilience planning, shoreline adaptation, and early warning flood forecasting systems.

The Storm Response Fund was focussed on building Auckland's capacity to withstand and respond to future events. Initiatives funded through the programme include:

- Significantly increasing the frequency of catchpit cleaning across the region, delivering 90,000 additional catchpit cleans in the first year alone, to reduce the risk of blockages during storm events
- Installing hotspot cameras and stream monitoring equipment, with an initial 20 high-risk locations identified across the stormwater network and further sites investigated
- Recruiting, training and equipping a dedicated stormwater compliance team to identify and resolve flooding issues proactively across the region
- Strengthening Auckland Emergency Management's volunteer response teams, recruiting and equipping 40 new volunteers across two response teams, and improving Civil Defence Centre readiness
- Developing an integrated early warning flood forecasting system to give communities more time to prepare
- Working with local boards and communities to develop local readiness and response plans, starting with a pilot in the Devonport-Takapuna area
- Supporting Māori-led adaptation and resilience planning across affected communities
- Developing landslide susceptibility maps and updating hazard information on LIM documents to inform property owners of risk
- Accelerating shoreline adaptation plans for coastal communities facing increased risk from climate change
- Developing new resilient infrastructure standards to guide how assets are designed and rebuilt in future storm events



The challenge of budgeting for recovery

The Auckland Funding Agreement was negotiated in 2023, before the property risk assessment programme had begun. Then, the best available information was that around 700 properties would qualify for buyout. At the time of publication the number is 1164, 66 per cent more than was initially expected.

That increase had a knock-on effect across several cost lines. The home removal programme, funded entirely by Auckland Council, grew significantly as a result.

Operational costs also increased, for example the ongoing maintenance of a larger portfolio of Category 3 land and increased security costs for vacant homes.

A higher number of Category 3 homeowners meant navigation services and other enabling functions, like customer experience, communications, and legal services were needed for longer than anticipated.

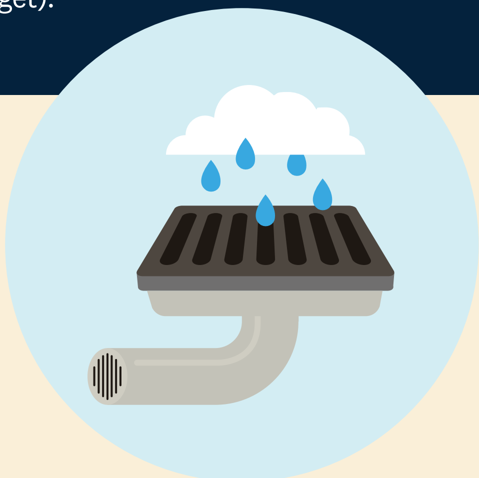
These are real costs that weren't fully foreseeable and they reflect the challenge of making financial commitments in the early stages of a recovery, before the full picture is known.

Funding Making Space for Water initiatives

Making Space for Water is Auckland Council's long-term programme to reduce flood risk. It was established in response to the 2023 events and will deliver a range of regional initiatives including resilient infrastructure investment, improved maintenance and flood intelligence, and increased community resilience. The initiatives within the Making Space for Water programme are explained in more detail in the stormwater chapter.

An allocation of $192 million in the co-funding agreement enabled four blue-green stormwater projects to be accelerated in Māngere (Te Ararata and Harania), Milford (Ngā Wairau) and Rānui (Manawa aa Whenua). A blue-green network uses waterways (blue) and parks (green) to give stormwater space to move, reducing the risk of it overwhelming homes and businesses.

When complete, these projects will significantly reduce flood risk for homes and businesses in these areas. Further blue-green projects are planned for other flood-prone parts of Auckland, subject to funding through the Long-term Plan (10-year Budget).



Mayor Wayne Brown and Hon Mark Mitchell, Minister for Emergency Management and Recovery at Opanuku Stream, Henderson

The way the recovery was funded shaped what could be achieved in Tāmaki Makaurau.

Large scale recovery requires sustained financial commitments to be made, often before the full scope of the work is known. As the Auckland programme developed, costs increased and timelines extended, reflecting the complexity of the task.

The funding partnership between the Crown and Auckland Council was critical to remove people from high risk properties and invest in infrastructure quickly and at scale. Without that partnership, the recovery would have been smaller in scope and slower to deliver.

At the same time, wider investment by the council ensured that recovery reached beyond the scope of the co-funded programmes.

Funding from philanthropic and community organisations provided a critical boost to support Auckland's social recovery. It extended support into communities and helped people deal with the difficult impacts of the events.

The scale of the recovery also highlights a broader challenge. Most public spending on natural hazards occurs after damage has happened. This recovery shows what that costs a region and its residents, and points to the benefits of earlier investment to reduce the scale and financial pressure of future events.

Chapter 7
Flood assessment

Categorisation of flood-affected homes placed a significant new obligation on Auckland Council and required property-by property investigations to determine whether each home met the threshold for intolerable risk to life. There was no established process, no dedicated team, and no playbook to follow.

In response, a 90-strong project team from 24 different organisations was mobilised, and completed flood assessments for over 2000 properties in 18 months. Building that capability from scratch, under sustained pressure and with far-reaching consequences for homeowners and ratepayers, was a significant undertaking.

> **"Due to the nature of flood risk in Auckland, and it being so variable property to property, we had to individually assess each property as their risk could be quite different," says Auckland Council's Healthy Waters Flood Risk Manager, Fiona Macdonald.**

"This is a huge amount of work to do for the number of registered properties and quite different from other regions who categorised, as they had more large fluvial river floodplains with more uniform flood risk across whole areas."

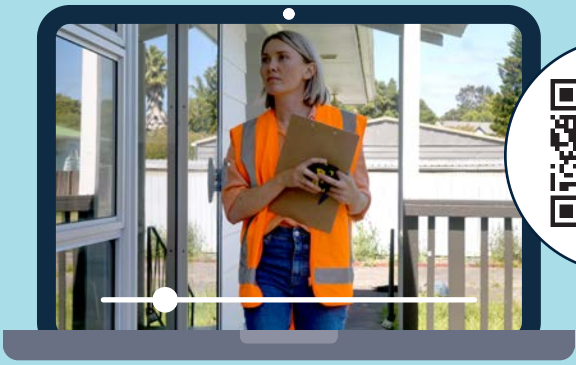
That variability is important context. Auckland's flood risk can differ, and it shifts significantly from one property to the next depending on the form of the built environment, drainage, proximity to waterways, and a range of other factors. That meant every assessment had to stand on its own evidence base.

Flooding in Woodbridge Lane, Milford

Video Case study: Step-by-step guide to a flood risk assessment

The flood assessment process followed a step-by-step process to gather the information needed to determine a property's flood risk, and ultimately it's property category.

Watch now or scan the QR code



How flood assessments worked

For most registered properties, assessors completed both a detailed desktop investigation and a site visit before making a category recommendation.

The homeowner submission registration was the backbone of the desktop assessment. Photos, videos and detailed accounts of what had happened at the property gave assessors a clear picture of the flooding that had been experienced before they arrived on site. This was particularly valuable where site visits took place some time after the event and physical evidence like debris lines and watermarks had already been cleared or faded. The homeowner information was supplemented by data held by the council prior to the events including flood models, hazard maps, rainfall records, rapid building assessments and property files.

Site visits

Site visits focused on gathering direct evidence of flooding at the property – flood depth, velocity, and the physical traces left behind. Assessors documented debris lines, took measurements, and interviewed homeowners about their experience.

Understanding how occupants responded during the events gave valuable insights into human behaviour. When did they evacuate? What triggered the decision? What route did they take? The answers helped assessors understand the flood mechanism and the actual risk experienced at the property. But people's behaviour and perception of risk varied enormously and was shaped by their circumstances, their dependents, their past experiences, and their individual thresholds for danger. That variability made the assessor's job more complex. There was no single template for how people experienced or responded to the same flood event.

For many homeowners, the site visit was also the first time anyone from the council had sat with them and listened to what they had been through. Assessors heard many difficult stories of fear, loss, and ongoing distress. That was an important part of understanding the human reality of each property, but it also placed a significant emotional burden on the assessment teams.

Flood risk assessment and reporting

Once desktop and site evidence had been gathered, assessors translated that information into a formal flood risk assessment using the Framework for Assessing Flood Risk at Property-level.

> **" The framework that has been created in Auckland is world-leading for urban pluvial flooding, and provided a science-based and consistent methodology that allowed the team to reach robust and comparable decisions across thousands of individual properties.**
> **– Nick Brown, Healthy Waters and Flood Resilience Head of Intelligence**

Flooding in Rānui

Maintaining quality across the flood assessment programme

With decisions of this consequence, quality assurance was fundamental. The assessments were determinations that would directly affect homeowners and whether ratepayer funding could be provided to them.

That started with who was doing the work. Assessors were required to hold relevant qualifications and at least five years of experience in flood risk assessment, including understanding flood mechanisms, interpreting flooding data, and identifying mitigation solutions. All assessors were drawn from a pre-qualified, approved group where demonstrated experience and judgement were prerequisites.

Decisions then moved through a defined chain of review. Each assessment was self-reviewed by the flood assessor before passing to a verifier who checked for technical errors, material omissions or deficiencies. Catchment managers reviewed whether technical findings had been communicated appropriately. An endorser checked that the correct category had been assigned and that the recommendation was consistent with scheme terms. Administrative support completed final grammar checks before an approver gave final sign-off, confirming that both the categorisation and quality assurance objectives had been met.

An independent Expert Panel of national industry specialists provided an additional layer of oversight. The panel contributed to the development of the Property-level Flood Risk Assessment Framework, endorsed the framework and process, and conducted independent reviews of issued reports on a random sample basis. Complex or edge cases were referred to the panel specifically to ensure approved recommendations were consistent with the framework.

To maintain shared understanding across the team, weekly meetings were held throughout the programme to provide updates on process, allowing the framework to be refined as new situations arose, and creating space for assessors to work through difficult cases together.

Further listening

The human and technical dimensions of the flood assessment programme are explored in depth in a Water NZ podcast: **Balancing technical expertise with human impact: reflections from the flood frontline.**

What the programme revealed: challenges and lessons

Delivering flood assessments at this scale, under this kind of pressure, produced a set of hard-won observations.

The most fundamental observation was that responding after a risk has been realised is a poor use of resource, and it introduces significant trauma for communities and for the kaimahi (staff) doing the work.

The 2023 programme was necessarily reactive, built in response to events that had already happened. A framework that allowed action on predicted risk with clear trigger levels at which intervention becomes mandatory would be both more efficient and less harmful. This is one of the clearest lessons from the flood assessments.

Observational data gathered during and immediately after the weather events proved to be a critical input to the assessments. In some cases, this real-world evidence of actual flooding under known rainfall conditions differed markedly from what modelled predictions had suggested. That gap between modelled and observed flood behaviour is significant and points to the value of capturing high-quality event data in real time to confirm risk and to use this data to improve and adjust predictive models.

The assessments carried serious consequences for both landowners and Auckland Council, and uncertainty was present throughout. Despite the wealth of data available, integrating multiple sources of evidence into a single robust decision required consistent methodology, strong judgement, and sustained rigour. The systematic approach with a documented framework, the QA process, and weekly team sessions was what made it possible for a large, multi-organisational team to deliver consistent outcomes under continued time pressure.

Finally, communicating assessment findings to non-technical audiences including the homeowners whose futures depended on them, required a different kind of skill than producing the assessments themselves. Technical findings needed to be translated into plain language that people could understand and act on, at a time when many were already overwhelmed.


Mahurangi River

Chapter 8
Landslide risk assessments

The scale of landsliding triggered by the 2023 weather events was extraordinary, with tens of thousands of landslides recorded across the entire region of Tāmaki Makaurau, from Wellsford in the north to Ramarama in the south. Cyclone Gabrielle was later identified as one of the largest landslide-triggering events recorded nationally. Three Aucklanders lost their lives in landslide related events.

Auckland's rainfall in 2023 was extreme, far exceeding previous records and following a very wet end to 2022 that had already left groundwater levels much higher than usual. That combination of saturated ground, then intense rainfall, created optimum conditions for slope failures across the region.

The assessment task was immense, as unlike some other affected regions where risk could be assessed across whole areas with relative consistency, Auckland's landslide risk varied significantly from one property to the next. Each property had to be assessed on its own merits depending on slope, geology, drainage, and the specific nature of the landslides that had occurred.

Fortunately, the council's geotechnical team was able to use existing Australian Geomechanics Society guidelines which are internationally recognised best practice for landslide risk assessment. This provided a basis to develop a framework suited to Auckland's conditions.

How landslide assessments worked

Auckland Council desktop assessment

A qualified geo-professional began by reviewing information provided by the homeowner alongside some data held by the council including property ownership, open landslide database and aerial photographs. The desktop assessment determined whether there was a likelihood of intolerable risk to life from a landslide/s noted or future regression or additional landsliding.

Where the overall risk was low, the property could be confirmed as Category 1. Where further investigation was needed, a landslide risk assessment process was initiated where a site visit was arranged with contractors assigned.

Site visit

On-site assessments were carried out by qualified geotechnical professionals who inspected the property in detail, visually assessed slope stability and geomorphology, and identified likely failure mechanisms and debris paths.

In Muriwai the approach was slightly different because of the large-scale source of hazard (one long escarpment) that could threaten tens or hundreds of properties at the same time. In this case, below ground investigations and monitoring were undertaken to better understand the hazard, and four-dimensional debris flow modelling was used to calculate risk under future rainfall scenarios.

Following a site visit, the assessor produced a detailed risk report. That report then went through both internal and external peer review before being shared in draft form with the property owner. This gave them the opportunity to review the findings and provide any further information they felt should be considered. The report was then finalised.

The geotechnical reports were technically complex documents. Recognising that many homeowners would struggle to interpret them, the Recovery Office published a plain-language guide to reading geotechnical reports and sent it alongside every report issued. It was a practical response to a real problem in that the findings in these reports had life-changing implications, and homeowners needed to be able to understand them.

From risk to category

Once the risk assessment was complete, the findings were used to determine a property category. If the overall risk to life was acceptable or tolerable, the property was confirmed as Category 1.

Where intolerable risk was identified, the question then became whether it could be reduced through mitigations. If it was possible for the risk to life for the property to be reduced to a tolerable level with feasible measures, the property was given a Category 2P. Where no feasible mitigation existed, the property was assessed as Category 3 and the homeowner became eligible for a voluntary buyout.

“Feasible” mitigations was defined consistently across the categorisation scheme for both landslides and flooding as having a cost below 25 per cent of the 2021 CV, and able to be delivered within about two years. Further information about the scheme is available in the 2P chapter.

Maintaining quality across the programme

With decisions of this consequence, quality assurance was non-negotiable.

All assessors were required to hold relevant qualifications and experience in landslide risk assessment. Reports then moved through a robust peer review process, both internally within council and externally, before being finalised.

For additional oversight, Auckland Council engaged a separate independent Geotechnical Advisory Panel comprising five of the most respected specialists in the country; two engineering geologists, a hydrologist and two geotechnical engineers. The panel reviewed methodology and end results as needed, providing assurance that decisions were sound. In addition to reviewing the methodology, the panel reviewed a sample of reports (some randomly selected, others chosen because of their complexity) to check that the approach was working and that decisions were being made consistently by different assessors. This reduced the risk of outcomes being challenged or overturned which would have added significantly to delays and distress for residents.

Two well-respected local experts were also engaged as mentors to the field assessment suppliers, helping ensure consistent and well-informed reporting across the full team.

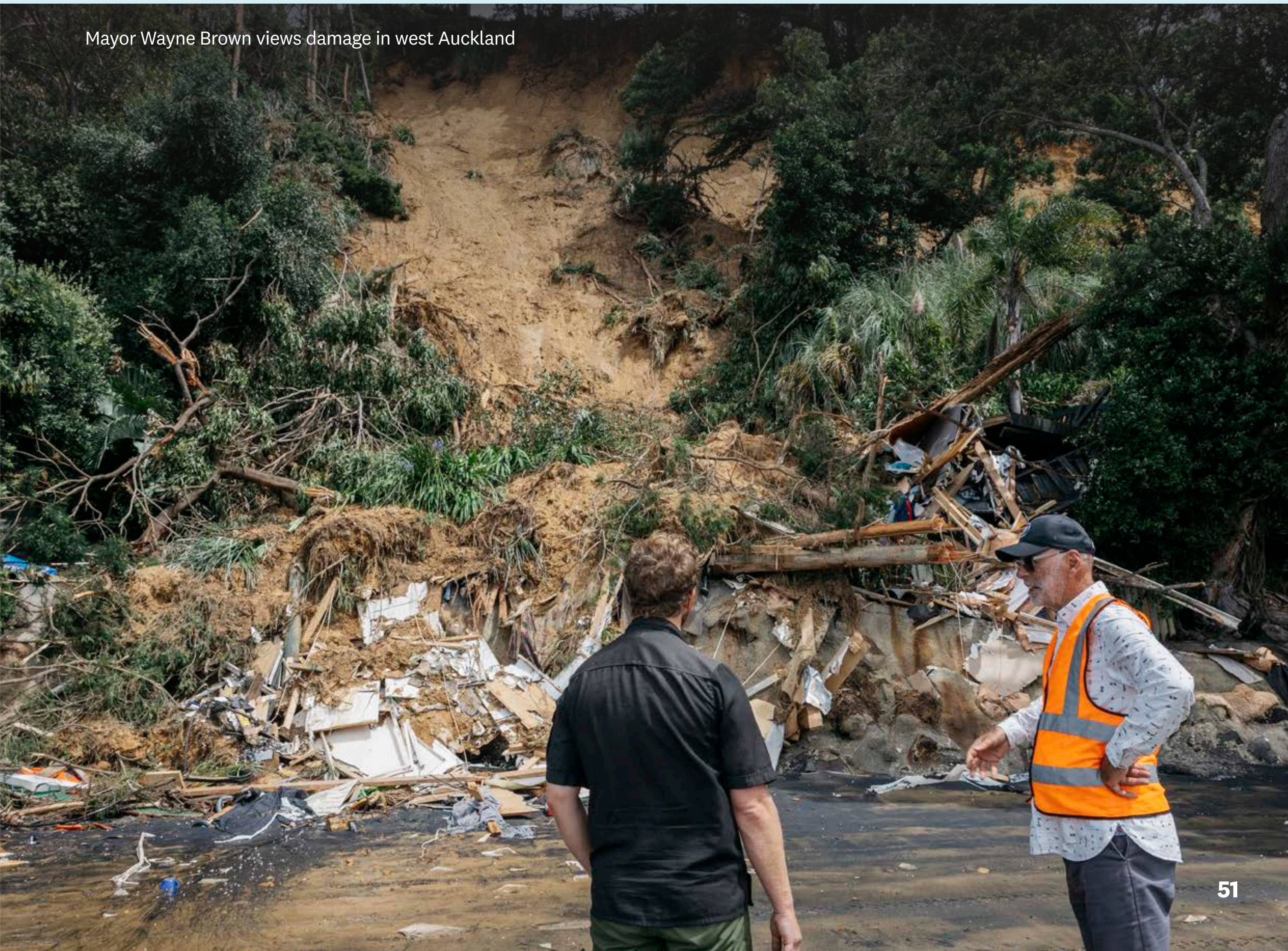
A national shortage of expertise

The 2023 storms didn't just affect Auckland. The widespread damage across the North Island created simultaneous demand for geotechnical expertise across local and regional councils and the insurance sector.

The Natural Hazards Commission (formerly Earthquake Commission – or EQC) was assessing damage to insured property, often in parallel with the Recovery Office's work across the same communities. While EQC was assessing what had been damaged, the Recovery Office was assessing long-term future risk to life. They were different programmes for different purposes but relied on the same scarce pool of qualified professionals. New Zealand simply didn't have enough geotechnical engineers to meet that demand all at once.

Auckland Council drew on eleven organisations across New Zealand and Australia, including using engineers from overseas for desk-based remote work, freeing up local engineers for field-based activities. In total, more than 100 specialist engineers and consultants were involved in the landslide assessment programme. Desktop assessments alone could take up to three weeks per property and a significant number of properties required both desktop and on-site assessment.

In total, the programme completed detailed landslide assessments for more than 500 landslide-affected properties.



Mayor Wayne Brown views damage in west Auckland

Assessing landslide risk at Muriwai

Muriwai was one of the communities most severely affected by Cyclone Gabrielle. Properties perched along steep coastal cliffs and dune systems experienced multiple slope failures during the storm. Fears of further movement meant access to parts of the community remained restricted for extended periods, leaving many families unable to return home and deeply uncertain about their futures.

Auckland Council had commissioned a comprehensive area-wide geotechnical study of the most affected parts of Muriwai even before the government's categorisation framework had been fully established. GHD, one of the council's contracted geotechnical suppliers, led the study, which included desktop analysis, historical data review, LiDAR surveys, drone surveys, on-the-ground inspections, below-ground investigations, slope monitoring, and independent peer review. Teams assessed slope stability, likely failure mechanisms, debris paths, and the probability of further landslides under future rainfall scenarios. The problem was similar to the Port Hills rockfall risk after the Canterbury Earthquake Sequence. Lessons from that were incorporated into this assessment, meaning that it could be delivered much faster.

The nature of the landslides at Muriwai were dominated by large-scale escarpment instability rather than the numerous localised slips seen at Piha and Karekare. This meant an area-wide approach was appropriate, allowing consistent decisions to be applied across the community rather than a drawn-out property-by-property process.

The evidence gathered also confirmed that landslides can and do re-occur in places where they have happened previously, and the land in some parts of Muriwai continued to change as monitoring picked up ongoing movement.

When the government announced its categorisation framework and co-funding for buyouts in mid-2023, the council's geotechnical team reoriented the work already underway so it could directly inform categorisation decisions.

A draft area study report was shared with affected property owners before publication, and community meetings and one-on-one sessions with geotechnical experts gave residents the opportunity to understand the findings and ask questions directly.

The draft report presented the risk but not categorisation as the GHD work had proceeded ahead of the government defining it's categorisation parameters. A second stage of the project developed potential mitigation strategies and costs to allow the categorisation to be undertaken by Auckland Council. That meant some homeowners received risk information before they could be given a formal category, adding another layer of uncertainty to an already stressful period.

Despite these challenges, the area-wide approach at Muriwai provided clarity more quickly than the later finalised individual property assessments would have allowed, and the quality of the evidence base meant the resulting categorisation decisions were robust and well-founded. Starting the work ahead of government direction did cause uncertainty, however the alternative would have added months of delays.

Understanding landslide risk

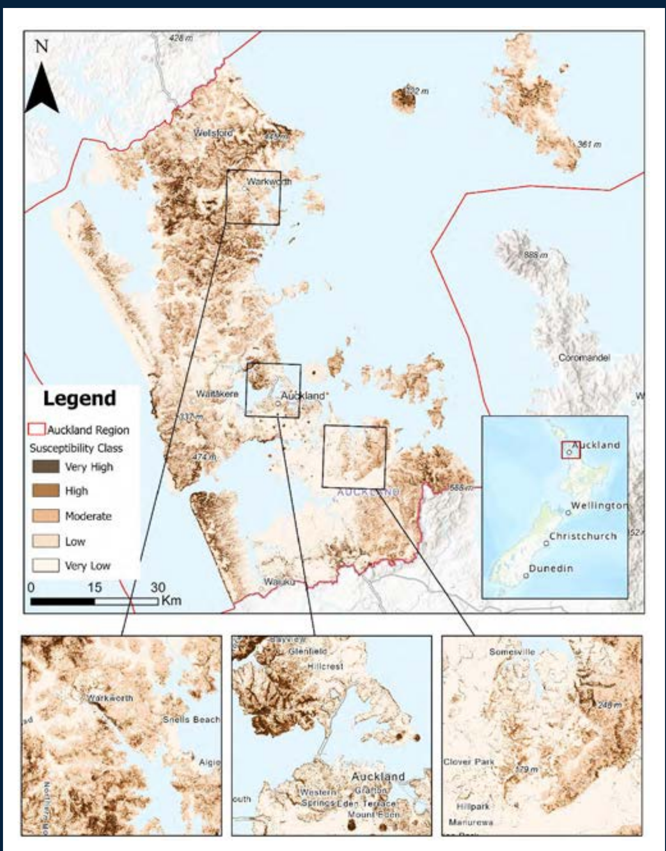
Before the storms, there was limited understanding on how landslides could affect Auckland on a regional level unless they had already occurred.

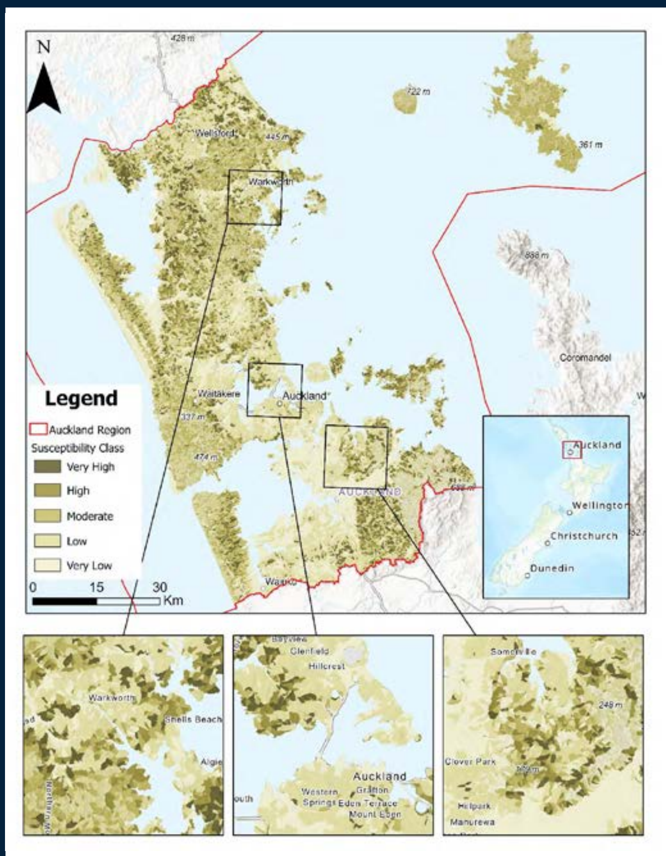
Drawing on the data gathered through thousands of individual property assessments conducted through the recovery programme, and in partnership with GNS Science, Auckland Council completed a region-wide landslide susceptibility study with WSP, mapping which parts of Tāmaki Makaurau are most predisposed to landslides.

Two maps were produced, covering shallow and large-scale landslides respectively, and both appear on LIM documents to ensure future property owners have access to information that didn't exist before 2023.

Published in May 2025, the study helps Aucklanders understand the risks and be better informed on the potential for landslides. A two-page plain-language factsheet with visuals was produced alongside the detailed technical study to make the findings accessible to a general audience. These maps also inform strengthened rules in the Auckland Unitary Plan, helping steer future development away from the highest-risk areas.

> **"These maps provide vital information to planners, infrastructure authorities, owners, developers, and engineers so that they can understand and manage the risks from landslides,"**
> **Ross Roberts, Auckland Council's Chief Engineer.**





To view the maps in detail and learn more about landslide susceptibility in Auckland, visit **Knowledge Auckland**

What the landslide and geotechnical assessment programme revealed: challenges and lessons

The landslide assessment programme was built from scratch, under pressure, and in the face of a national resource shortage.

The most fundamental lesson learned is the same one that emerged from the flood assessment programme: responding after risk has been realised is inefficient, costly and deeply traumatic for communities and for the kaimahi doing the work.

Increasing people's understanding of landslide susceptibility and risk has been a priority action for Auckland Council since the storms.

Future recovery readiness would be helped by having scalable contracts with key suppliers, a maintained preferred supplier list, and ideally a programme of training and engagement with the geotechnical sector developed in advance in partnership with organisations like the New Zealand Geotechnical Society, the Natural Hazards Commission and Ministry Business Innovation and Employment (MBIE).

Another legacy action is work Auckland Council is doing with Building Research Association of New Zealand (BRANZ) and GNS Science to study how homes responded to landslide impacts, with findings expected to inform future improvements to building standards.

Most of the homes affected in 2023 were built decades ago, in an era when landslide risk was less well understood. The work done through the recovery programme means future development in Auckland will be guided by a significantly richer understanding of where that risk exists.

Chapter 9
Category 1

For the majority of homeowners who went through the categorisation process, the outcome was Category 1 meaning that their property did not meet the threshold for intolerable risk to life. It meant no eligibility for a council buyout or mitigation funding support, and for many it came as a genuine relief. After months of uncertainty, a Category 1 result was confirmation that that there was no risk to life identified at the property.

But Category 1 wasn't straightforward for everyone. Some homeowners were close to the risk threshold but didn't cross it, and felt the programme had passed them by. Others found themselves still struggling with ongoing flooding, insurance difficulties, or the unsettling experience of living next door to a Category 3 property, sometimes in the same multi-unit complex. For these homeowners, Category 1 felt less like an all-clear and more like a door closing on support they felt they still needed.

The council's role and its limits

One of the difficulties throughout recovery was the question of where council's responsibility began and ended. Councils are often the first point of contact when things go wrong, and the introduction of a risk categorisation for private property, which has not been a core function of local government, heightened that expectation. But many of the issues some Category 1 homeowners faced such as damage to their home and belongings, and support to future-proof their homes, sat outside council's role.

Conversations with Category 1 homeowners who were still living with the effects of the storms and were told that there was no council support available, were challenging for both parties.

Placards and Category 1

Receiving a Category 1 result didn't necessarily mean a property was immediately safe to occupy. Some Category 1 properties still had red or yellow placards in place, requiring owners to complete repairs and provide evidence to council that storm damage had been remediated before the placard could be removed.

As covered in the categorisation chapter, placards and categories were separate systems addressing different things, but for homeowners managing both simultaneously, the distinction wasn't always easy to navigate. Ongoing issues resolving insurance claims exacerbated this situation for homeowners.

Homeowners who wanted to exit the scheme

A small number of Category 1 homeowners wanted to be removed from the scheme entirely when they received their category as they were concerned that having a category on their property file, even Category 1, might affect future saleability. For others, particularly properties on the west coast that had been included in a group categorisation process without individually registering, the preference was to be recorded as uncategorised rather than Category 1.

Unfortunately, this wasn't an option, as once a category was assigned the government's framework did not recognise 'uncategorised' as valid. While Category 1 information does not appear on a property's Land Information Memorandum (LIM), it is recorded on the property file. There was no "Category 0" or "uncategorised" under the framework. Category 1 was assigned to all properties that had been assessed and did not meet the threshold for intolerable risk to life. For some this was difficult to understand and was a source as frustration.

Slips on public land

Some homeowners affected by slips on council-owned land found themselves in a particularly difficult position. The categorisation programme only provided assistance where there was intolerable risk to life at a dwelling, so slips on public land that only affected access to private property, fell outside it. Insurance and the Natural Hazards Commission (then known as the Earthquakes Commission) didn't cover remediation where the slip occurred on public land, and banks were generally unwilling to provide lending for repairs involving work on council land. Options were limited.

In November 2024, the council's Transport, Resilience and Infrastructure Committee approved a one-off grants scheme to provide targeted assistance.

Road Reserve Grant Scheme

To be eligible, properties needed to meet the following criteria:

- Access to a residential dwelling had been impacted by a landslip
- The damage occurred during the January and February 2023 weather events
- The works needed to be done within the road reserve boundary
- The property had not already been assessed as Category 3 or 2P

For each eligible road reserve site, the council contributed 50 per cent of project costs, up to a cap of either $400,000 per project or 25 per cent of the total capital value of all benefitting properties, whichever was less.

Completed road reserve repair project in Titirangi

Navigating complex needs

A young whānau faced significant upheaval after their property was repeatedly hit by flooding and landslides. While waiting for a category decision, the land developed multiple sinkholes. The combination of escalating environmental hazards and prolonged uncertainty placed immense stress on the household.

In late 2024 they connected with the Recovery Office Navigation Service, which used an individualised assessment to identify both the support they needed and the strengths they could draw on. That support included food parcels, mental health support from a local provider, rates relief, and help navigating a paused EQC claim through the New Zealand Claims Resolution Service.

More than two years after the initial weather event, and after a six-month wait for a categorisation decision, the property was confirmed as Category 1.

There was no intolerable risk to life but that also meant no eligibility for financial support under the government's framework. It was a devastating outcome for the family. The Navigation Service responded with further counselling support, regular phone and in-person check-ins, a technical helpdesk meeting, and connections to local board and community recovery networks.

Their story illustrates something that sits at the heart of the Category 1 experience: for some households, the absence of intolerable risk to life did not mean the absence of real and lasting harm.

Chapter 10
Category 2C — living safe in place

Category 2C emerged from a simple idea: in some places, the right infrastructure can reduce intolerable risk to life enough for people to stay safely in the communities and homes they love.

Under the national property categorisation framework, homes assessed as Category 2C face an intolerable risk to life from future flooding or landslides, but with the construction of a community resilience project the risk could be reduced to a tolerable level.

This approach was enabled through the Crown–Council partnership, which set aside funding for resilience initiatives to mitigate risk, creating a pathway that sat alongside voluntary buyouts. This supported investment in infrastructure solutions that could enable communities to remain in place while improving resilience across wider neighbourhoods. Insurers and lenders supported this approach.

However, outcomes under Category 2C were inherently uncertain for longer. They depended on whether complex public works could be designed, funded, delivered in a feasible timeframe – and ultimately whether those interventions would reduce risk enough for individual properties.

Flooding in Māngere

Identifying Category 2C projects

Once the possibility of a 'Category 2C' existed, the challenge became identifying which projects could genuinely support these outcomes.

While work to assess the feasibility of flood resilience projects would get underway regardless, potential Category 2C outcomes sped up this work. The goal was to identify deliverable resilience projects that could reduce intolerable risk to life for enough homes, represent reasonable value for money compared with buyouts, and determine how quickly they could be delivered for people already living with serious risk.

That last point proved critical. Community resilience projects typically need years to design, approve, consent, and build. For households already assessed as facing intolerable risk to life, having a project that might work at some point in the future eventually was not enough. It needed to be realistic within a reasonable timeframe.

This shaped the council's approach from the start. Rather than undertaking full feasibility assessments everywhere at once, teams first carried out a lighter assessment of more obvious opportunities in areas heavily affected by the 2023 storms. The aim was to identify projects with the strongest chance of helping people live safely in place, while recognising that detailed investigations and updated modelling would still be needed before any property-level outcomes could be confirmed.

Mayor Wayne Brown with the Māngere Community Advisory Group at the launch of flood resilience works

The realities of delivering major infrastructure

Several project possibilities were explored across Auckland. A bridge replacement project in Pukekohe was already in the pipeline and had funding secured by the council. Others, including projects in Māngere, Muriwai, Rānui and Milford, appeared promising enough to investigate further.

Teams from across engineering, planning, and recovery worked quickly to test options across multiple areas. But as that work progressed, the realities of delivering major infrastructure quickly and with available funding became harder to ignore.

Some projects that looked promising would require much more design work, long consenting processes, land acquisition, or complex staging over many years. In Muriwai, four homes were initially assigned Category 2C based on a proposed retaining bund expected to reduce landslip risk. When further work showed the bund was not practically feasible, those homes had to be reclassified to Category 3. It was an early reminder that while mitigations are often possible, they could end up being too complex or costly to deliver.

The same tension played out more significantly in Milford and Rānui where resilience projects were viable and would reduce the intolerable risk for a good number of homes but would involve many stages and take years for even the first stage to be completed.

This created a difficult situation. If households remained exposed to intolerable risk to life for many years, could we in good faith categorise a property as Category 2C? In the end, the council concluded it could not.

This became one of the defining judgements of the Category 2C programme. Although difficult, the decision reflected a clear commitment to prioritising safety and certainty for property owners. Where projects could not reduce intolerable risk within a reasonable timeframe, the safer course was to confirm Category 3, and offer them a buyout to move people out of harm's way sooner.

For Milford and Rānui, that decision would eventually move an estimated 139 properties into Category 3, though it was not an easy or budget-neutral change to make. With approval from the Crown and the council's Governing Body, funding was reallocated within the co-funding agreement from resilience initiatives to buyouts, and council had to find some additional funding.

While the result was less funding available for other potential community resilience projects, it allowed homeowners in this position to move forward sooner and out of harm's way.

Although there were no Category 2C properties in Rānui and the Wairau catchments as expected, this did not affect momentum for the projects. Work to confirm feasibility went full steam ahead as intended. Funding under the co-funding agreement has been secured, and the projects are on their way to deliver significant flood resilience benefits for the surrounding communities.

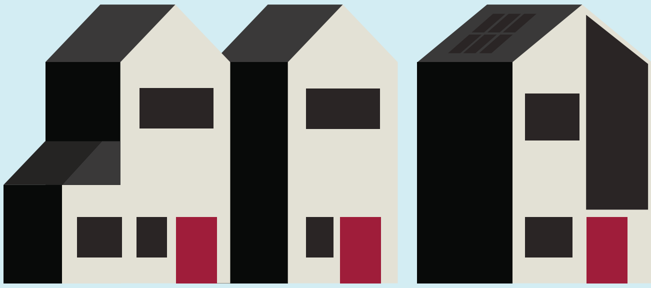
Māngere: When acceleration was possible

In Māngere, the project conditions aligned in a way that brought the Category 2C concept to life.

Here, two solutions stood out because they had a clearer and faster pathway to delivery. In Māngere East, the Harania Creek Flood Resilience Project would remove an embankment and replace a section of wastewater pipe that was restricting water flow to the harbour, and flooding nearby neighbourhoods. In Māngere Central, the Te Ararata Creek Flood Resilience project would address a major blockage risk by replacing small culverts beneath a busy arterial road with a bigger bridge, allowing floodwater to pass more freely underneath during heavy rainfall.

These projects did not require additional land acquisition, or extensive additional design work, and were already supported by some earlier feasibility work, removing many of the barriers being experienced in other project areas. Critically, there was a way to accelerate delivery through a government endorsed Order in Council to streamline the consent that could ordinarily take over a year to obtain.

"The support from the Māngere community has been fantastic. It's helped us move faster and deliver this project in record time. That means less disruption overall and, most importantly, it means people are safer sooner." Māngere Project Manager Leighton Gillespie.



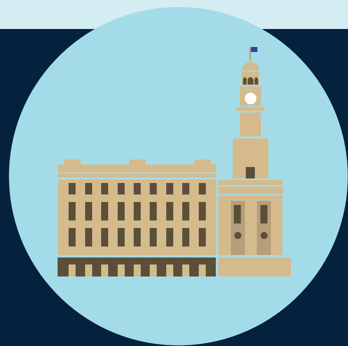
Before homes could be confirmed as Category 2C, the council still needed to work through a series of critical steps. The projects had to be tested further for feasibility, resilience funding needed to be agreed with Government, council approvals secured, the Order in Council process completed, and finally updated modelling applied for each property.

This final step was significant because conditions vary from property to property, and not every home in the surrounding area would have its risk reduced enough to reach a tolerable level. Some households that had hoped the project would allow them to stay safely, were instead confirmed as Category 3 when modelling showed the risk to life at their property would remain intolerable, even after the project was successfully delivered.

For residents, this was far more than a technical process. It meant months of waiting. Some put their lives on hold, choosing to delay repairs until they had a category outcome or nervously waiting to hear if they would need to move. In communities already carrying the trauma of the storms, the prolonged uncertainty added another layer of strain.

In Māngere an Order in Council (OIC) was used to accelerate the consenting and planning for the resilience projects. There was exceptionally strong community engagement in the OIC process with a high volume of submissions in support of the orders, reflecting strong local backing for projects that could reduce risk and allow people to remain in place.

While the order allows an accelerated path to delivery, there is still upfront and genuine engagement and communication with locals and affected parties.



Projects that informed Category 2C decisions

Te Ararata Creek Flood Resilience Project

The Te Ararata Creek Flood Resilience Project addresses a major bottleneck in Māngere Central's stormwater network.

Culverts under a bridge on high traffic Walmsley Road, restricted how much water could pass through the creek. This created a serious blockage risk during intense rainfall, with water flowing into the surrounding neighbourhood.

The flood resilience project replaces this structure with a bridge with much more space underneath, allowing floodwater to move more freely along the stream and out of the neighbourhood during heavy rainfall.

Additional works include installing debris traps to prevent blockages and creating improved access for emergency maintenance crews so the creek can be cleared quickly before heavy rainfall.

A full closure of the road to replace the bridge was difficult given high traffic flows, but it allowed quicker delivery of the upgrades to reduce flood risk for over 1000 surrounding homes.

Harania Creek Flood Resilience Project

In Māngere East, floodwater used to get trapped behind a large embankment and a major wastewater pipe, effectively acting like a barrier, slowing the flow of water out to the Manukau Harbour – and increasing the risk of flooding for nearby homes.

That wastewater pipe is hugely important, carrying about 70 percent of Auckland's wastewater, so any changes had to be handled with real care.

The embankment was removed, and part of the pipe was replaced in a way that creates much more room for floodwater to pass underneath and flow out of the neighbourhood. A new pedestrian walkway has improved walking connections for the community.

The difference is practical and immediate. Flood levels in the neighbourhood will be reduced, and eleven households that had been classified as Category 2C can now stay safely where they are. For the wider community, it also means a safer, more resilient neighbourhood when heavy rain hits.

Living safely with Category 2C

When 32 Category 2C decisions in Māngere were confirmed, these households finally had clarity about the future of their homes. For many, that brought relief. After months of waiting while projects were tested and modelling updated, there was a pathway that meant they could remain in the communities they cared about.

But Category 2C came with its own uncertainty. The projects still needed to be built, and until then households were living in an in-between period. They knew they could stay, but the risk remained in the short-term. Some found that difficult to accept and wanted the certainty of a buyout.

For those who stayed, council's focus shifted to helping them better understand the risk and how they could reduce their risk in the interim.

This included clearer guidance on emergency preparedness, practical steps households could take to reduce risk on their property, and information designed for people already under stress. This information was included in the Category 2C handbook, and landlords were expected to share information about risk and preparedness with tenants.

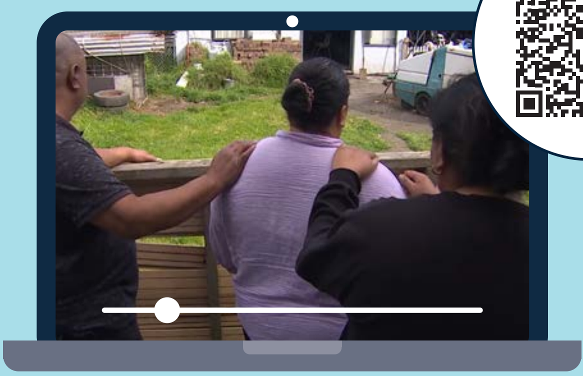
Insurance was also a practical concern during this period. Auckland Council worked with insurers to explain how risk was being managed and reduced, and the sector indicated it intended to maintain cover across affected areas. Even so, homeowners were advised they might still need to shop around if they ran into difficulties while projects were underway.

In areas like Māngere, visible progress on resilience projects also had unexpected consequences shaping how nearby residents thought about other categories. For some Category 3 homeowners who did not want to proceed with a buyout, the projects became a source of hope, even though they had been advised the works would not reduce risk at their property to a tolerable level.

Video: Auckland floods: Hard-hit Mangere struggling to recover

In 2024, 1News featured the story of a family in Māngere waiting for their property category to be confirmed. The story captures the human impact of the Category 2C process while trying to balance clarity, accuracy, and speed.

Watch now or scan the QR code



Learning how to deliver resilience efficiently

Category 2C tested something Auckland had not done before: how quickly major infrastructure could move from idea to delivery after a disaster, and whether that could meaningfully shape decisions about people's homes and futures.

Delivering these Category 2C outcomes required the council, network utility providers like power and wastewater, and Government to work closely together in real time, aligning funding, approvals and delivery decisions in ways that are not typical for standard infrastructure programmes. It also meant trying new ways of working, from accelerated consenting pathways through Orders in Council, to more coordinated feasibility and funding decisions.

What was tested under pressure is now becoming part of how Auckland approaches resilience. Since the storms, significant progress has been made in developing a pipeline of potential projects, with more feasibility work completed and a clearer understanding of what can be delivered, where, and how quickly.

This matters because the shape of future recovery is likely to change. Where large-scale buyouts are less available or less desirable, communities may remain in place while infrastructure solutions are developed and delivered. That places greater importance on being ready, with well-understood projects, faster delivery tools, and communities supported to live safely in the interim.

Category 2C showed that this approach is possible, but complex. It requires careful judgement, strong partnerships, and a clear understanding of both the technical and human realities involved.

Chapter 11
Category 2P

Category 2P offered a pathway for homeowners to reduce the risk to life at their property through physical mitigations, allowing them to stay rather than sell to the council. It was one of the most complex aspects of the recovery programme to design and deliver, and navigating it proved to be a significant undertaking for homeowners and for the council.

Category 2P applied to properties where flood or landslide risk could be reduced to a tolerable level through physical mitigations like retaining walls, drainage improvements, or lifting a house.

The council provided grants to cover the cost of design, consenting and construction, and homeowners managed the process themselves, finding engineers and tradespeople, securing consents, and overseeing the work.

For some, this was manageable. For others, particularly older Aucklanders, those with language barriers, or those without the capacity to manage a significant project, it was an overwhelming responsibility on top of everything else they were already carrying because of the storms.

How feasibility was determined

When a property was assessed as having intolerable risk to life, the first question was whether that risk could be mitigated or not. Determining that was done in two stages.

The first happened at the point of categorisation. Using estimated costs for the likely mitigation works, the council assessed whether a solution appeared technically feasible, asking could an engineering solution be built on the property to reduce the risk, could it be completed within two years, and were the estimated costs expected to below 25 per cent of the property's 2021 capital value. If the tests were met, the property was assessed as Category 2P. If they weren't, it became Category 3.

For homeowners assessed as Category 2P, the second feasibility test began once they engaged engineers and obtained detailed designs and real quotes. These were submitted to the council for a detailed feasibility assessment using the same two tests (technical viability and costs), but with actual figures and site-specific designs rather than estimates.

Progress of a house being lifted

Progress of a retaining wall being built

At this stage the council had some discretion to support homeowners whose costs came in above the cap, particularly where the works were otherwise sound and the homeowner was committed to completing them. If detailed feasibility confirmed the works were not achievable within the scheme's terms, the property moved to Category 3.

This two-stage process was necessary but added time. Homeowners had to invest in detailed design work before knowing with certainty whether their mitigation was viable and it was a source of frustration for some, particularly those who suspected early on that their costs might exceed the threshold. Where a solution was found to be not feasible and the property was moved to Category 3, the council absorbed the full cost of that design work. Crown funding rules meant a property could only receive support through one pathway, so any design costs already incurred had to be paid by council. To date, that has cost Auckland Council around $1 million.

What the scheme meant in practice

A 2P outcome meant people could stay in their homes, which for many was exactly what they wanted. But staying came with conditions and ongoing uncertainty that didn't end when the mitigation work was finished.

Some homes, even after successful mitigation, will remain in areas where there are natural hazards.

Some homeowners who received a 2P decision wanted to leave. This was particularly prevalent in areas where neighbours had already gone and the character of their street or community had changed around them. For these homeowners, the 2P process felt less like a solution and more like an obstacle between them and a buyout. Some challenged their category in the hope of receiving a Category 3 decision instead.

Some homeowners began mitigation work before receiving their formal category to make their homes safe and return to them as quickly as possible. This was the reality of a lengthy categorisation process, and the council recognised this by supporting 23 property owners with retrospective grants. Processing these grants required careful verification of every expense, invoice and proof of payment. Where homeowners had paid in cash or used their own company to supply goods and services, the checking process was more complex still. In some cases, a pragmatic approach was taken where works broadly met the risk reduction criteria.

Category 2P case study – staying in the home they love

"We were affected by a large landslip from a neighbouring property on a different street, that slipped into our home in Chatswood during the 2023 Auckland Anniversary Weekend storm. This material from the neighbouring property destroyed our back garden and pushed up against our home.

During the event and the slips (which we witnessed from our dining room table) our initial thoughts were of safety and the evacuation of the property, which we did. From that Friday evening, we spent over ten weeks with our house red-stickered due to the slip from the property above ours. Over this time, we stayed in more than 10 separate short-term accommodation options, all with a grandmother and our two and a half year-old in tow.

After the initial disruption, the major realisation and frustrations were the lack of preparedness on behalf of Auckland Council in terms of having a plan to manage such an incident. This came as a surprise when you consider that we live in a city with so many hazards.

We entered the categorisation programme in January 2024 and in October 2024 our property was assessed as having an intolerable risk to life that could be mitigated and thus, we were categorised as 2P. The neighbouring property where the landslip originated was later assessed as Category 3 and purchased and removed by the council.

Category 2P offered a much-valued way for us to stay in the home that we love.

View of the backyard after the landslide from the neighbouring property

Completed retaining wall to protect the home from future landslips

We had already begun navigating the consenting process for the mitigation work before our category was confirmed. With the uncertainty of building and resource consents and significant delays in these approvals, we carried both considerable financial burden and emotional distress for almost two years, from the night of the event in January 2023 until permits were granted for construction in December 2024.

In addition to funds from EQC and insurance, the $80,000 2P grant helped contribute to our design, consent and finally the build and construction costs of a geotech-designed retaining wall along the property boundary, to prevent debris from a future landslip reaching our house.

We spent almost two years in a limbo situation awaiting permits and consents for building our wall. All while we incurred exceptionally high costs for the removal of debris, geotechnical engineering reports, fees to both Building and Resource Consent departments at Council, seemingly without an end in sight.

The process of applying for the 2P grant to help with repair costs and consents, the helpfulness of the staff and assistance from the 2P team we received was second to none. We cannot speak highly enough of this process, that assisted us in completing the necessary works and financially assisted us. Without the grant, I doubt we would be finished today."

There was a possibility at one stage of us having to leave our home. We didn't want to, as we have invested a huge amount of time and energy renovating this house since purchase, and love it here. The thought of having to sell, and find somewhere else, with all of the attributes we have in this house, was something that thankfully never came to fruition."

"We are delighted that we stayed in our home. Although the process took almost three years and there were times that it was extremely stressful and worrying, now with our wall built, our back garden finished and finally landscaped, we love our home more than ever."
– Anonymous, Chatswood

Building the programme while delivering it

The Category 2P programme was designed and delivered simultaneously, which created challenges that weren't foreseeable at the outset.

The programme was co-funded, based on a 62 per cent Crown contribution and 38 per cent Auckland Council contribution, with $39 million set aside to fund Category 2P. As with the other co-funded recovery programmes, this budget was set before categorisation was complete and without certainty of how many properties would be eligible for a Category 2P grant.

With 138 properties ultimately in the programme and grants ranging from $0 to $640,000, the financial picture only became clear over time.

Forecasting was made harder by the nature of the scheme. A categorisation decision provided only a high-level indication of what mitigation might work. The actual design solution wasn't known until the homeowner submitted detailed designs. The scheme allowed homeowners to propose alternatives to the suggested approach, as long as they met the risk to life reduction requirements and stayed within the cost threshold. That flexibility was valuable but made forward planning more difficult.

A timing gap between the 2P programme and the closing of the Category 3 buyout programme created pressure for some homeowners. Where a 2P mitigation proved not feasible, properties moved into Category 3 at a point when the buyout programme was already winding down. Managing that sequencing required careful coordination between two programmes operating on different timeframes.

As the programme matured, approaches were adapted and decisions became faster.

"As the programme progressed, it was important to tweak complex processes and use what we've learned to make faster decisions," says Fiona Wright, Head of Homes and Houses Recovery, Tāmaki Makaurau Recovery Office.

138 properties in Category 2P, including **23 retrospective grants**

Average cost per property: **$285,000**

Available budget: **$39 million**

49 2P projects completed

Demanding programme, meaningful result

The Category 2P programme asked a lot of homeowners and people came to it at different stages of recovery, with different capabilities, different levels of stress, and different expectations of what the council would provide. Many were still processing the trauma of the storms and the long period of uncertainty that followed.

Grants could be used in part to pay for a project manager, and technical support was available throughout, but for some homeowners the process remained more than they felt able to manage alone.

The council chose not to endorse or pre-select construction suppliers or technical consultants, which kept it at arm's length from procurement decisions but sometimes resulted in slower delivery where homeowners struggled to find available consultants or manage contractors through a complex technical process.

"It's rewarding to see people get to stay in the homes and communities they love. For most of them, that's what made all the work worthwhile," – Uche, Category 2P Principal Technical Grants Lead.

Some homeowners had mitigation solutions that went across property boundaries, creating legal and practical complications the scheme was not designed to handle.

Kaimahi (staff) working with Category 2P homeowners also carried a significant load, dealing daily with people in acute distress, navigating complex technical decisions with real consequences, and managing expectations in situations where the scheme's limits didn't always match what homeowners needed.

But for all that complexity, the programme achieved something important. Every completed mitigation meant a household that was able to stay in their home and their community and at a much-reduced cost compared to a Category 3 buyout. Across the programme, this represents around $180 million of ratepayer funds saved and nearly 150 families who did not have to leave. Category 3 buyouts are not a sustainable option at scale, and Category 2P has demonstrated that a support-based mitigation model can work.

Chapter 12
Category 3

For homeowners whose properties were assessed as having an intolerable future risk to life where no feasible mitigation could make them safe, Auckland Council offered a voluntary buyout. It was, at the time, one of the largest programmes of its kind in New Zealand's history, ultimately covering nearly 1200 properties across Tāmaki Makaurau.

The word "voluntary" was important because homeowners were not compelled to sell. However, for many the choice was not straightforward. Staying meant living in a home assessed as having an intolerable risk to life, with insurance increasingly difficult to obtain and property value likely to fall. For most, the buyout was the only realistic path forward.

What it meant in practice, though, varied enormously from one household to the next. For some it brought genuine relief and provided a way out of danger and a financial lifeline at a moment when the alternative was potentially ruinous. For others it meant leaving a home where whānau had been born and raised, a neighbourhood their children had grown up in, a community they had no desire to leave. Both of those experiences were real.

The buyout terms

In October 2023, the council's Governing Body set the terms for the one-off, time limited voluntary buyout scheme. Properties eligible for the scheme were those with a legally established residential dwelling that had been assessed as Category 3. The buyout offer was based on a registered market valuation as at 26 January 2023, being the day before the Auckland Anniversary Weekend floods. There was no price cap set.

The offer was structured around insurance status at the time of the storms:

- Insured homeowners were offered 95 per cent of the market valuation, less any insurance payout (including EQC). The remaining 5 per cent was the homeowner's contribution.
- Uninsured homeowners were offered at least 80 per cent of the market valuation, with the homeowner contributing up to 20 per cent.

Where homeowners had already spent insurance payouts in good faith on property repairs before their category was confirmed, reimbursement was considered on a case-by-case basis. The council also contributed $5000 toward professional services such as legal fees or to pay for an alternative valuation.

How the process worked

Buying out homes is not something councils do as a matter of course. It sits outside the core role of local government, and there was no comparable existing system to draw on, no established process to follow and no expectation that there ever would be again. It was a one-off extraordinary response to an extraordinary event.

The Recovery Office built the programme from scratch using best practice from international schemes and lessons from the 2011 Christchurch earthquake recovery. The council created new workflows, trained new teams, and stood up a system capable of managing thousands of individual property transactions, each with its own valuation, insurance position, legal circumstances and homeowner situation.

To guide homeowners through the process, a Category 3 Voluntary Buy-out Support Scheme Homeowners Handbook was developed to set out each stage of the process clearly, provide the scheme terms and explain the dispute resolution framework. Each homeowner was assigned a property advisor from an external property consultancy who would work directly with them and guide them through the offer and sales process. Homeowners could also get broader support from a Storm Recovery Navigator.

Because assessments took time, many homeowners completed insurance-funded repairs before their category was confirmed, acting in good faith to make their homes liveable while they waited. Managing reimbursement for those costs added complexity to individual settlements and in some cases slowed the process down. Checking that claimed expenses were directly related to approved work and predated the category decision required careful case-by-case assessment. In some cases, homeowners had done 'cash jobs' and didn't have sufficient evidence for how their insurance monies had been spent.

The Recovery Office settled its first Category 3 properties just before Christmas in December 2023, two months after the scheme was formally established. Given the complexity of what had to be built in that time, it was a significant milestone.

"All people that I've come across feel satisfied and content with the offer that has been placed. Everybody considers it fair, no-one's rubbing their hands with glee as if they've won a Lotto ticket.

All we've ever asked for is a realistic price so that we can move on and thus far I'm yet to meet somebody who is disgruntled by the category three buyout valuation from council." Muriwai resident Caroline Bell-Booth

A new start for flood-affected family

During the Auckland Anniversary Weekend floods, a 10-metre-wide river running through the Wilsons' Kaukapakapa property swelled to more than 150 metres, with water powerful enough to damage part of the nearby railway line. At the height of the event, the family were cut off, unable to safely leave as water surrounded the house.

The property was also impacted during Cyclone Gabrielle, and the ground remained saturated with a range of issues.

The home had been perfect for them, and even after the floods they were not thinking of moving. But they signed up to Auckland Council's categorisation process to understand future risk.

"We started to realise there wasn't a way that we wouldn't be digging ourselves out every time this happened," Tanya said. "We couldn't imagine trying to sell it to anyone else, so we started feeling stuck."

Flood assessments later confirmed the property was Category 3, meaning it faced an intolerable risk to life from future storms without a reasonable mitigation option – and was eligible for a council buyout.

"I just remember a huge sense of relief," Tanya said. "We didn't have to keep trying and fighting to make this impossible situation work. We couldn't imagine carrying on there with the land being wet all the time, waiting for the next big storm."

Following settlement, the family relocated to the Wairarapa, to build a new home.

" There's a sense of calm and relief," Richard said. "We're grateful to be able to move on with our lives ."

The complexity of eligibility

The scheme's eligibility criteria were determined by the policy decisions made by Governing Body.

Vacant sections without a completed residential dwelling were not eligible, since the scheme's purpose was to remove people from homes facing intolerable risk to life rather than to compensate for land value alone. Properties that changed hands after 26 January 2023 were only eligible at Auckland Council's discretion and on terms the council agrees to, and this meant some people who had purchased after that date found themselves owning a Category 3 property with no access to the scheme. In some cases, buyers had been aware of the risk prior to purchase, in others they had not undertaken adequate due diligence to understand the extent of the storm damage or ongoing flood or landslide risk.

In some multi-unit complexes, not all owners chose to participate in the categorisation process. This meant that within a single site, some units were designated Category 3 while others were not. This created confusion, tension between neighbours, and practical difficulties for the buyout process.

This was part of a broader pattern observed through 2025 and 2026. As the programme progressed and neighbours received buyout offers, some homeowners who had chosen not to opt-in while registrations were open, began approaching the council requesting a property assessment in the hope of becoming eligible for a buyout. Council initially approved a discretionary period for late opt-ins on a case by case basis, but ultimately had to close registrations to ensure that the council had sufficient time for those registered to work through the process prior to the closure of the scheme. It was always intended to be a one-off, time-limited scheme, but for those who came to the process too late, this has been very difficult to accept.

1205
Category 3
properties

1164
property
buyouts

$1.25 billion
forecast total cost
of buyouts

$1.05 million
average buyout cost
per property

The limits of the scheme

The buyout programme needed to balance the needs of individual homeowners with the funding burden being placed on Auckland's ratepayers.

For some homeowners, the gap between what the scheme could offer them and what they needed in order to move on from their current situation was painful and real. The scheme specifically excluded consideration of an individual's financial position or hardship.

Some of the most acute financial hardship fell on homeowners who had bought property at or near the peak of the real estate market in 2021, or who were heavily leveraged when the storms hit. For these homeowners, a buyout calculated on January 2023 valuations, after values had already softened from their 2021 peak, could leave them owing more to the bank than the buyout proceeds covered, with nothing left for a deposit on a new home.

One west Auckland homeowner described being caught between two impossible options. Accepting the buyout would leave him owing the bank around $100,000 with no deposit for a new home. Rejecting it meant staying in a house officially assessed as having an intolerable risk to life, in a street where the neighbours had gone, knowing that insurance cover was likely to disappear and fearing the bank might recall the loan.

Sadly, his situation was not unique. One of the harder truths of a publicly funded buyout at this scale is that some people will still be left in genuinely difficult circumstances.

Around 40 property owners either did not engage with the council after receiving their category or chose to opt out of the buyout entirely. The council had no power to compel participation and respected the right of homeowners to make their own decisions. But for those who chose to retain their Category 3 property, the long-term consequences may be challenging. Properties assessed as having intolerable risk to life are likely to become increasingly difficult to insure, redevelop or sell.

More than a thousand households in Tāmaki Makaurau will be moved out of homes facing intolerable risk to life. For most, the buyout brought financial certainty at a moment when everything else felt precarious. The programme was built from nothing, under pressure and delivered its first settlements within months of being formally established. Although the programme also left some people in difficult circumstances through negative equity, ineligibility, or the grief of leaving a home and community they loved, it does not diminish what was achieved. It is, however, part of what a buyout programme at this scale looks like.

The land that has been acquired creates a rare opportunity to reshape parts of the city with resilience at the centre. Done well, the regeneration of these areas can leave Tāmaki Makaurau better placed to withstand future events than it was before the 2023 storms.

Chapter 13
Supporting Aucklanders through their recovery

For many people, the storms didn't just damage their homes, they displaced them from the places, communities and routines that made life feel stable. That loss of grounding, alongside financial stress and ongoing uncertainty, made everything harder.

On top of this was the challenge of navigating the systems of recovery, like insurance claims, home repairs, temporary accommodation, categorisation processes, and accessing financial support and wellbeing services. These systems are complex at the best of times but can feel impossible for people already under severe stress and dealing with trauma, language barriers or limited digital confidence.

The Storm Recovery Navigation Service was established in September 2023 to provide holistic support for storm affected Aucklanders.

The free service provided one-on-one support, walking alongside individuals and whānau through their recovery journey. Navigators helped people access information, financial support, connect with specialist services and wellbeing supports. They also supported homeowners through processes that would determine the future of their homes (categorisation and placarding). By the time the service wound down in December 2025, it had supported 2124 whānau across the Auckland region.

Running a wraparound social support service sits well outside what councils normally do, however the 2023 storms had placed Auckland Council in direct contact with thousands of affected whānau through the emergency response, placarding, and then categorisation. This gave the council a picture of who was affected and an existing relationship with many of them.

Siaola Partner Navigator Norma visiting storm affected resident Lupe

Navigators visiting church in Mangere (left) and drop in clinic at the Northcote library (right)

A different kind of service

Auckland's Storm Recovery Navigation Service was distinctive in the way it was set up. A navigation approach was used following the Christchurch and Kaikoura earthquakes, but the service in Auckland was the first integrated disaster recovery navigation service of its kind in Aotearoa.

At its peak, 36 navigators were working in the service, with 16 from council and 20 from iwi and community partner organisations. Partners were not simply contracted to the council but truly integrated into a seamless service, actively collaborating to design, deliver and govern the service alongside Auckland Council. They were part of the team.

The 14 partner organisations brought established trust, pre-existing relationships, cultural knowledge and the ability to reach people within communities who would not have engaged with a council-run service. Partners also had a deep knowledge of available government and non-government support such as accommodation supplements, immediate food supports and other social services.

“ They have experience, mana and well-established connections to help us engage and reach more Aucklanders,”

“They're from iwi partners and organisations such as Te Kawerau Iwi Tiaki Trust, Age Concern Auckland, and MPHS (Mclaren Park Henderson South) – each with strong relationships and understanding of their particular community. Many Aucklanders didn't know about the support that was available, so this was an important stepping stone to greater awareness into more communities,” says Linda Greenalgh, Head of Community and Social Recovery, Tāmaki Makaurau Recovery Office.

Partner navigators helped shape how the service worked by guiding outreach strategies in areas and through events that would reach the most vulnerable. They also ensured services such as counselling and social work were aligned with cultural values and needs.

Partner navigation organisations

- Affirming Works
- Age Concern Auckland
- Aunty Lou's Kitchen
- Global Hope Missions
- Huakina Development Trust
- I am Māngere
- MPHS Community Trust
- New Settlers Family and Community Trust (NFACT)
- Ngāti Tamaterā Treaty Settlement Trust
- South Seas Healthcare Trust
- Te Kawerau Iwi Tiaki Trust
- Te Māhurehure Cultural Society
- Siaola Vahefonua Tonga Methodist Mission Charitable Trust
- Visionwest Waka Whakakitenga Community Trust

How the service worked

The service took a proactive approach to finding those who needed support, initially using building placard information to identify and contact homeowners directly. They then door-knocked more than 1200 homes on affected streets, hosted drop-in sessions at libraries and council facilities, and attended more than 100 community events. People who registered for property categorisation and indicated a need for support were also connected to the service.

Of the 2124 households supported, 1329 were property owners registered for categorisation. A further 795 were homeowners or renters who had been affected by the storms but did not go through the categorisation process.

Navigation support was especially valuable for people who struggled with low digital confidence, had English as a second language, or lived with disabilities. But the service also reached a group that was harder to reach through conventional channels – those communities where trust in government agencies was low or past experiences made people reluctant to engage with official processes. For these residents, a navigator from a local organisation, speaking their language and sharing their cultural background was often the difference between accessing support and going without.

When navigators met with whānau and individuals, they began with an individual strength and needs assessment (He Ara Poutama) which helped to understand their recovery needs as well as the strengths they already had – such as knowledge and relationships – which could support them to move forward. This informed approach helped focus the service's efforts and resources in the right place, and supported people to feel more in control of their own recovery.

This included a framework He Kahu Waiora with principles and practiced based on empowering partners and whānau – a kākahu / cloak of support.

More than 4500 recovery needs were identified through this process, spanning accommodation, insurance, essential needs, categorisation, placards, mental wellbeing, financial, health, and rates relief. Navigators worked with whānau to meet around 75 per cent of those needs, with the remaining needs, such as large financial issues, being beyond what the service could address.

Support navigators provided included:

- Helping with tenancy issues, temporary accommodation and resettlement
- Up to date information on the categorisation process
- Connections to specialist services including insurance, legal support and budgeting assistance
- Access to small discretionary funds through the Red Cross Disaster Relief Fund
- Connections to social and health services including counselling.

"These navigators are the BEST relationship repair people I've seen. For residents who have lost respect for council, and there are many, the navigators are rebuilding this trust through face-to-face conversations... They cop an earful of abuse sometimes! But they are engaging with the most difficult (often very elderly) residents." Melissa Powell, former member of Devonport-Takapuna Local Board

He Kahu Waiora is the overarching framework for the Navigation Service. It encompasses the vision, threads of practice and methodology that informs the work we do, and how we do it.

Our vision aligns to He Ara Waiora, a framework that was developed by Treasury to understand waiora, a concept that relates to Māori perspectives on wellbeing and living standards. The term ‘waiora’ speaks to a broad conception of human wellbeing, grounded in wai (water) as the source of ora (life).

He Kahu Waiora, represents this concept by weaving collective strengths and resources around each impacted whānau and household. The term “kahu” means cloak. In our recovery context – it also reframes our connection to wai, from something that was devastating and destructive in the floods and storms, back to its essence as the source of life.

He Kahu Waiora represents a holistic approach to wellbeing, like a cloak that protects and nurtures the mana of everyone we engage with. The huruhuru (feathers) symbolise the unique qualities of each person, including their whakapapa (genealogy), mātauranga (knowledge), and mana (prestige). This vision guides our approach to working with and supporting each individual.

Total whānau supported: **2124**

Number of navigators: **36** (16 council kaimahi, 20 partners) at peak

Number of partner organisations: **14**

The geographical split of whānau supported as at 1 September 2025

West **743**

Central **472**

North **514**

South **395**

Navigation service governance

Leaders from all 14 organisations formed the Storm Recovery Navigation Service Governance Group that met monthly to provide strategic oversight and support the implementation, evaluation and continuous improvement of the service. This group provided expert advice on service design including approaches and outreach plans, as well as developing and approving transition arrangements.

Partner navigators were given access to council buildings and systems, including a shared customer data system that allowed the whole service to see what was happening across cases. Each organisation retained its own identity while working as part of a unified service.

This governance approach produced practical benefits, including shared systems and ways of working, which meant the service operated consistently across the region.

Navigating recovery with a trusted partner

When the Anniversary floods hit, Tongan Methodist support group, Siaola, didn't wait to be asked. Storm Recovery Navigator Norma Sialetonga was a frontline volunteer with Siaola, assessing the needs of families coming through the Māngere hub at the Assembly of God church.

"We called all the families we had been working with straight away," says Norma. "By Saturday we were out shopping and Sunday morning all hands were on deck at our Mt Wellington food hub." Siaola's church network across the city, the country and internationally helped it move fast, donating spare mattresses and household items and reaching beyond Auckland with care packages."

So, it was a natural step when Siaola, a working arm of the Vahefonua Tonga Methodist Synod, partnered with the Tāmaki Makaurau Recovery Office as an official provider of the Storm Recovery Navigation Service. Siaola was already trusted in the communities it served, already connected to impacted families, and already experienced in the kind of holistic support the Navigation Service needed to deliver.

"These are services we've been offering for a long time now, so it was easy for us to continue a similar approach with people struggling from the storms."

Siaola supported all aspects of wellbeing, with specialist health, financial wellbeing, social and education teams able to jump in where needed. Norma's three languages meant she could support Tongan, Samoan and Mandarin-speaking families directly, a relief for many.

Trust mattered as much as capability. "Our people are reluctant to accept external support, it's in our nature," says Norma. Siaola's standing in the community meant people who would never have approached a council service opened their doors.

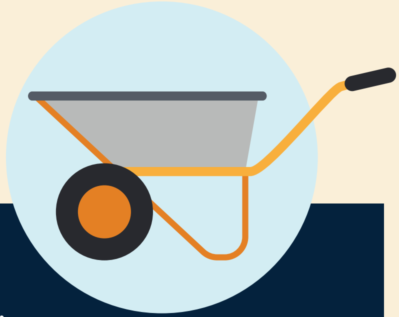
For one mother, displaced from a yellow-stickered multi-generational home and driving back each day to take her children to school, the difference was a recovery plan that looked beyond the material things. "She gave me a massive hug."

Red Cross Disaster Fund

Navigators played a critical role in ensuring that donations to the Red Cross Disaster Relief Fund reached those who needed them most in Tāmaki Makaurau. Through their strengths and needs assessments, they were able to identify and recommend small discretionary funds for:

- Furniture, appliances, and household essentials including beds, bedding, towels, heaters, dehumidifiers and kitchen appliances
- Food support through supermarket vouchers
- Winter essentials including clothing, blankets, school uniforms, baby essentials
- Small home repairs such as door and carpet repairs, and skip bins to remove storm debris and damaged items

The grants not only replaced essential items but restored secure living conditions and human dignity.



One **partner navigator**, Jocelyn, from **Affirming Works**, described what this support meant in practice, saying:

"I have found that many families say that they are doing fine when asked. However, when I respectfully ask a few more questions, this often reveals these families do indeed require support and are often going without essentials."

"The home bundles have proven to be vital for families, offering not just essential items but also a sense of reassurance that it's alright to ask for, and receive, help."

"The families I work with remind me to remain steadfast in our organisation's endeavours to support them."

"Working as a storm recovery navigator is both rewarding and humbling. The satisfaction comes from knowing that we are directly assisting individuals and communities in their time of need... Many of the people we work with are often overwhelmed with everything that needs to be done. Our guidance and support can make a tangible difference." Annabel, Navigator

Mary's story

When a landslide left Mary's* home with a yellow placard, she was suddenly displaced. Living alone with her pets, the loss and uncertainty were overwhelming. For over a year, she relied on others for help, and an injury made things worse. By the time she was referred to the Navigation Service, she was isolated and struggling, and even opening emails from her insurer or the council felt impossible.

Her navigator connected her with mental health support and visited regularly. The biggest issue was the yellow placard. Although the council had classed her home as low risk, it couldn't remove the placard until remedial work was done. Her insurer refused to fund it, saying it wasn't needed. This left Mary stuck.

Her navigator brought together council specialists, insurers and experts for an on-site visit. After weeks of discussion, they confirmed the house was safe and the placard could be removed. For the first time in a year, Mary could breathe again and had a way forward.

Mary's story illustrates how people can be caught between different agencies, each with their own processes, none of whom had a full view of the situation. The navigator's role was to hold that view, to connect the people who could resolve issues and to advocate for the person at the centre of it all.

*Name has been changed for privacy

The legacy of the service

The Storm Recovery Navigation Service closed in December 2025, with only a only a few households being supported through the final stages of their Category 2P and Category 3 processes in early 2026. Over two years, the service has supported over 2000 households, many of whom would have struggled to navigate recovery on their own.

The service highlighted not only the value of supporting residents to navigate complex systems, but also the need for organisations to work more effectively together so that responsibility for coordination does not sit solely with affected households.

The Navigation Service model of partnership, underpinned by Māori models of practice and holistic assessment, and integration of cultural knowledge into service design, is being documented as a replicable framework for future recovery events. A kete (kit) of tools is being developed based on what's been learned from the 2023 experience, and together they will support the rapid establishment of a navigation service in future emergency events. These resources are being shared with response and recovery teams in other parts of New Zealand.

The case for having this kind of service in place before a disaster rather than standing it up in the aftermath is one of the clearest lessons of the recovery. The Storm Recovery Navigation Service worked because the partner organisations already had the trust of their communities. That trust took years to build, and it cannot be created quickly in the middle of a crisis.

A small navigation service team will continue through to June 2027 to embed the 2023 lessons into Auckland Council, strengthen community and social recovery systems and partnerships, and build readiness for future events. That work includes retaining recovery expertise, strengthening partnerships with iwi, communities and service providers, and ensuring the trusted relationships, knowledge and practical tools developed through recovery remain available to support Auckland through future disruption.

Keeping navigation kaimahi safe

Navigator work is emotionally demanding and the toll it takes onkaimahi (staff) can be underestimated. Navigators develop deep, holistic knowledge of the whānau they support – their housing pressures, financial strain, cultural context, and family dynamics alongside their strengths. They work daily with people experiencing grief, trauma and prolonged uncertainty, absorbing the weight of those experiences while trying to remain steady and clear-headed. They are also, often, the human face of organisational decisions that sit entirely outside their control.

Without deliberate support systems in place, that weight accumulates. Vicarious trauma, compassion fatigue and burnout are real risks in this kind of work.

The Navigation Service operated under a Kaimahi Ora framework that provided external supervision, reflective practice and clear escalation pathways for kaimahi working with people with complex needs. The principle behind it is straightforward: kaimahi who are supported to process what they carry are better able to stay present, maintain clear boundaries, and continue walking alongside families without becoming overwhelmed. Strong care for staff creates the conditions for strong care for whānau.

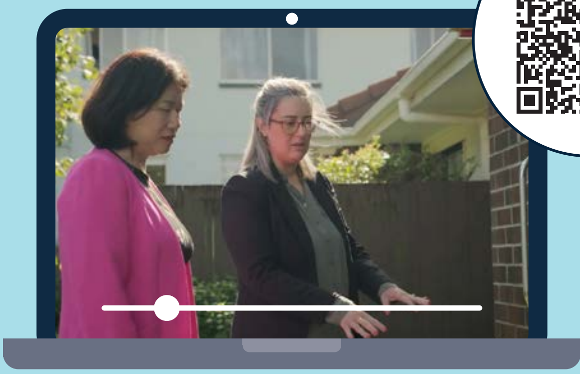
Over time, staffing numbers were reduced in line with whānau moving on from the service. Continuity of care and transitioning whānau well to other navigators was a priority.

> **“Recovery isn’t static, it evolves, and so must the services that support it. In our service, we stayed whānau-centred and committed to kaimahi ora (staff wellbeing), creating a culture of care with thoughtful welcomes and farewells that honoured each Navigator’s contribution.**

“We prioritised warm, consented handovers to maintain continuity of care. We also worked hard to communicate clearly and compassionately, so our team members understood the ‘why’ behind what we do. Most importantly, we approached this as a learning system, by reflecting, adapting, and improving as we went. Managing transitions well is about more than logistics, it’s about upholding dignity, trust and connection at every step. When we manage transitions well, we honour both the people we serve and the people doing the mahi.” – Manu Joyce, Storm Recovery Navigation Service Manager, Tāmaki Makaurau Recovery Office.

Video case study: Supporting vulnerable Aucklanders through recovery

When flooding put their homes at serious risk, several older residents at the Bagley Flats complex in Mt Eden faced something most of us dread: being asked to leave the place they had built their lives around. Storm Recovery Navigators, including Navigation Partner Age Concern, wrapped tailored support around these residents through that process. They showed up as a trusted presence through one of the most unsettling periods of their lives.



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Chapter 14
Communities in recovery

When the storms hit in 2023, communities across Auckland moved quickly to support one another.

Neighbours checked in on each other, shared information, organised support, and helped people make sense of what was happening. That local action continued well beyond the immediate response and in time, became a critical part of the recovery system itself.

Communities stand up

Communities didn't wait for the system to catch up. They began forming and stepping up in different ways, some in direct response to the storms, others building on networks that were already there.

In those early days, people were working with limited and often changing information. While council and other agencies were still setting up the recovery programme, residents were already reaching out to each other, comparing experiences, sharing what they knew, and trying to understand what came next. Questions about insurance, repairs, and what placarding meant for their homes were being worked through together, in real time.

Many of these groups started in simple ways. A social media post asking who else had been affected. Conversations over the fence. But those early connections quickly grew into something more organised.

In Rānui, neighbours talking about flooding became street-level conversations, which then grew into a wider network. That network later became West Auckland is Flooding, representing residents across Swanson, Rānui, Massey, Henderson and Te Atatū.

As these groups grew, so did their role. They became a critical bridge between households and the wider recovery system, helping people make sense of what was happening, sharing updates, and creating spaces where questions could be asked and answered. They also began bringing the right people into community meetings and representative conversations, from elected members to technical experts.

When the categorisation scheme was introduced, these networks were already in place in many places. They supported each other, and others, to navigate what was a complex and often uncertain process. This was especially visible in west coast communities with land stability risks, where many properties were automatically included in the categorisation process due to area-wide geotechnical studies already underway. These communities had begun organising earlier than others, helping people understand what this could mean for them.

East Coast Bays recovery planning

Boosting community activity

Community action took many forms. Alongside resident-led networks and advocacy groups, community organisations, iwi and local leaders were also stepping into recovery roles. Groups were connecting people, sharing information, and responding to immediate challenges, often with limited resources.

As recovery progressed, many of these efforts were supported through targeted funding and formal partnerships. Early funding helped sustain this momentum. Around $280,000 in community grants supported local initiatives that brought people together, helped communities respond to immediate needs, and created space for reflection through anniversary events.

The focus then expanded to include wellbeing. A further $370,000 supported programmes that helped people process their experiences and reconnect with their communities. This included initiatives focused on managing anxiety around extreme weather, creative and cultural activities, and support for groups such as elders, refugees and migrant communities.

Over time, many community and iwi organisations took on increasingly formal roles in the recovery effort. Trusted organisations that were already active in their communities were funded to provide practical support, from clearing debris and mowing lawns through to delivering Storm Recovery Navigation Services.

For some iwi and community organisations, this created new opportunities to support their communities and partner with council in different ways.

Supporting community wellbeing

Community wellbeing funding supported a wide range of locally led initiatives, reflecting the different ways people experienced recovery.

For some, the focus was on mental health and emotional recovery. Anxiety NZ Trust developed an online tool to help people manage anxiety and climate-related stress, while Visionwest delivered trauma-informed workshops that created safe, structured spaces for people to work through their experiences.

For others, recovery meant reconnecting with each other and with place. In Kumeū, children at Matua Ngaru School used a wellbeing grant to create a book sharing their experiences, helping them reconnect with the awa in a positive way after repeated flooding events. Community events and neighbourhood projects also created opportunities for people to come together again in ways that felt supportive and forward-looking.

Culturally grounded approaches were also an important part of this work. The Fatimah Foundation delivered faith-aligned wellbeing programmes for Muslim elders, former refugees and migrant communities. SIAOLA supported Pacific communities through its Langovaka programme, combining recovery support with future readiness.

Together, these initiatives show how wellbeing funding translated into real, local support: restoring connection, confidence and a sense of wellbeing across Auckland's communities.

Norma and Debbie from the Milford Residents Associaton leaders with a Milford community story board

From support to collective voice

Over time, some resident-led recovery groups began to take on a different role. Formed by affected residents to support one another and advocate on shared recovery issues, what started as mutual support grew into collective voice and systems influence.

By coming together, residents were able to identify shared strengths and concerns and speak with a stronger, more unified voice. This began to shape how recovery unfolded.

Groups like the Piha, Karekare and Anawhata Residents Stickered Group and Muriwai Stickered Residents groups contributed to discussions that led to categorisation and buyout support being confirmed. West Auckland is Flooding played a key role in advocating for affected west Aucklanders, both in the media and in council and government decision-making. The Stickered Titirangi Area Residents (STAR) group successfully pushed for bespoke support for homeowners affected by slips on council road reserves.

This influence extended beyond individual communities. Storm-affected residents from 15 geographic areas came together as a regional panel, bringing lived experience of flooding, landslides and coastal erosion directly into discussions on changes to the Auckland Unitary Plan.

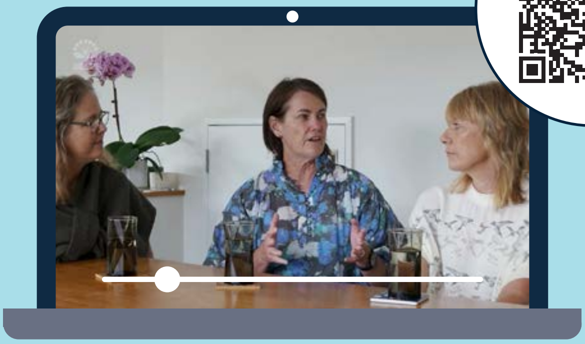
Individuals also stepped into advocacy roles. In Māngere, Farasat Shafi Ullah moved from helping neighbours in the immediate aftermath of the floods, to advocating through the categorisation process, and now contributes as a member of both the Community Advisory Group for the local flood resilience project and the Leadership Rōpū for Māngere Recovery Planning.

Through this shift, communities helped make a complex recovery system more understandable, grounded and responsive at a local level. They reinforced an important lesson: recovery is not only about infrastructure and technical processes, but also about people, relationships, local knowledge and collective voice.

Video case study: Local support and advocacy in action

The Piha, Karekare and Anawhata Residents Stickered group is an example of how local residents can come together to support each other through a difficult time and influence how recovery is shaped.

Watch now or scan the QR code



Piha Karekare Anawhata Red Stickered Group leads Tanya Bidois, Nina Mardell and Tasha Gray

As communities became more organised and engaged in recovery, council also had to adapt the way it worked.

In the early stages, much of the information about recovery was still being worked through, and systems to respond to needs were developing in real time. The focus at this point was to support resident recovery groups to organise, advocate collectively, and participate in the council and government decisions that would affect their communities.

As recovery progressed, the Recovery Office's support of resident recovery groups also expanded. Around 33 resident groups across impacted communities in Auckland were supported to take collective action and participate in recovery decision-making. This included attending meetings, sharing information, connecting affected individuals to community networks, and providing advice on funding or advocacy pathways.

As these relationships grew, community insight became an increasingly important part of recovery decision-making. People were bringing forward issues early, highlighting gaps, and offering solutions grounded in lived experience. This helped shape decisions, including at key moments such as a Governing Body meeting where advocacy from the Milford Residents Association helped progress the Ngā Wairau flood resilience project at a critical time when competing interests could have delayed funding approval.

While the benefits of this way of working were clear, it did not come without challenge. There were times when communities questioned council's direction or pushed for different approaches based on what they were experiencing. Public meetings could be heated, particularly when processes were still being worked through or progress felt slow.

Staff continued to show up in large group meetings, at the street level, and one-on-one with key community representatives, working through issues alongside people. These moments required openness and honesty on both sides, and a willingness to work through differences in a way that maintained trust.

It also meant becoming more comfortable with uncertainty, being upfront when we did not yet have the answers, and being honest when we could not deliver what people were asking for.

Community-led recovery planning

As recovery progressed, and individual situations began to stabilise, communities had more space to look beyond immediate needs and think about what recovery meant for them as a whole.

In some places, communities did not wait. They carried out their own surveys, identified their own priorities, developed plans, and began taking action, often drawing on existing networks and applying for funding to support what mattered most to them. Some of the initiatives supported through wellbeing grants emerged in this way.

In other areas, communities needed more support to get started. Building on what had been learned in the earlier stages of recovery, the Recovery Office secured funding to support a more deliberate, longer-term approach to community-led recovery. This became a multi-year programme across affected communities and included iwi-led recovery planning.

Mana whenua played an important role in shaping this approach. They challenged council to think beyond immediate material recovery needs and consider education, wellbeing, cultural connection and long-term outcomes. This helped shape a more holistic approach to recovery planning, one that focused not only on what communities needed right now, but also on their strengths, aspirations and future resilience.

As immediate recovery needs began to stabilise, this work focused on what communities could lead themselves – strengthening connections, supporting wellbeing, and preparing for the future.

“National and international research shows that communities who have a high degree of self-determination and who contribute actively to the planning and implementation of recovery activities, recover better and become more resilient,” says Linda Greenalgh, Head of Community & Social Recovery, Tāmaki Makaurau Recovery Office.

This marked a shift. Rather than participating in decisions shaped elsewhere, communities were increasingly supported to define what recovery meant in their own context, identify their priorities, and lead action on the things that mattered most to them.

Our role became one of support – enabling communities to shape their own recovery, build on their strengths, and lead the actions needed to support wellbeing now and into the future.

What is community-led recovery?

After a disaster, residents are often the first to understand what their community needs to recover. Community-led recovery recognises this by supporting communities to define what recovery means for them, set their own priorities, and develop plans to move forward.

Communities also identify actions they can lead themselves across all areas of recovery, from social and cultural initiatives to environmental projects and emergency preparedness, drawing on local strengths, skills and relationships. Unlike the more ad hoc activities that can emerge in times like these, this approach involves clear community leadership, shared accountability, and transparent decision-making.

While responsibility for public infrastructure and service delivery remains with council and its partners, community-led recovery can include collective, community-authorised advocacy where these are critical to their shared recovery. The role of council and NGOs is to listen, support, and connect – not to take over.

This approach values local knowledge, relationships and shared effort. It gives people a sense of control at a time when much has been uncertain, and helps build stronger, more confident communities for the future.

> “While many are ready to move forward, others are still healing – and that’s okay. Everyone’s journey is different. But one thing is clear, people want to see something good come from this. – Debbie Dunsford, Milford Residents Association.”

Prioritising community recovery planning

Impacts from the extreme weather events were not experienced evenly across the region. In response, community-led recovery planning was shaped around three types of communities:

- **Mana whenua:** enabling iwi to exercise kaitiakitanga within their rohe to address the impacts of the severe weather events and respond to a changing climate. We partnered with Ngāti Tamaoho, Te Kawerau ā Maki, Ngāti Tamaterā, Ngāti Maru, Ngāti Whātua Ōrākei, Te Ahiwaru, Te Uri o Hau, Ngātiwai, Ngāti Whanaunga, and Ngāti Te Ata;
- **Priority communities:** three-year, community-led recovery projects were established to support priority communities in Māngere, Mount Roskill/Wesley, and Henderson/Rānui. These areas were significantly impacted and faced existing social and economic challenges prior to the events, making them more vulnerable to ongoing recovery impacts. Research indicated they would benefit from a longer-term, community-led approach to recovery.
- **Impacted communities:** around 20 directly affected communities were supported to develop local recovery plans with the help of facilitators.

This approach recognised that a single approach would not work everywhere, and that recovery needed to reflect different starting points, needs and capacities.

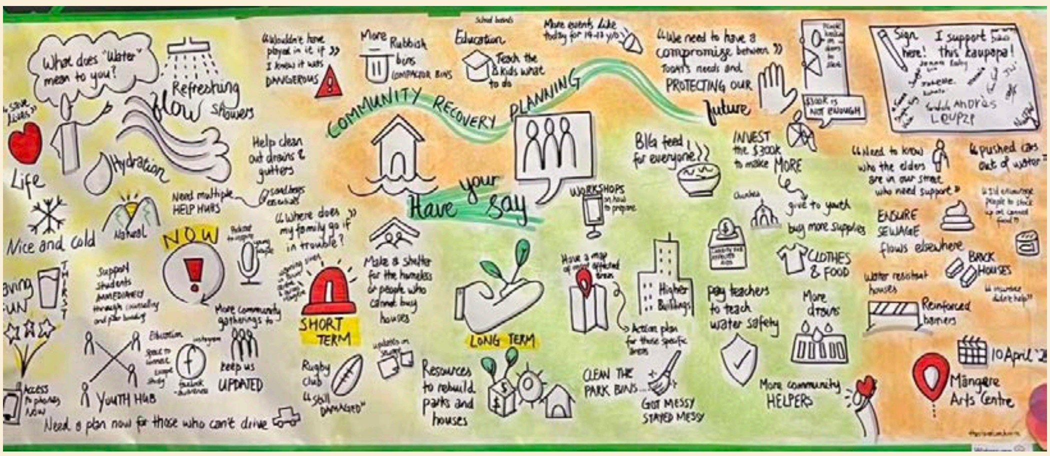
Identifying recovery priorities

A key part of community-led recovery planning was deciding what mattered most, together. This work was supported by a network of community workers, working alongside communities to bring people together, help prioritise ideas, and turn those ideas into action. This could involve accessing recovery funding or connecting groups to other organisations and funding sources for support.

Rather than following a single engagement model, each community shaped its own approach. The focus was on meeting people where they lived, worked and played, in ways that felt familiar, accessible and relevant to them.

In Māngere, engagement included targeted sessions for youth, people with disabilities, and faith communities. In Mt Roskill and Wesley, existing religious and ethnic networks helped reach people who might not typically engage in wider community issues or council processes.

Elsewhere, different approaches opened up different kinds of conversations. In East Coast Bays, a collaborative art session gave people a way to share their experiences and hopes. In Milford, storyboards placed in local spaces invited people to stop, reflect, and add their ideas. Alongside this, online surveys and in-person events created additional ways for people to take part.



Insights from the Māngere youth recovery planning event

Making Space exhibition – East Coast Bays

What emerged from all of this wasn't a single set of priorities, but a clearer, more grounded understanding of what mattered in each place, shaped by lived experience, not assumptions.

Bringing priorities to life

Once communities had worked out what mattered most, the next step was simple in theory, but harder in practice: how do you actually bring those ideas to life?

Dedicated funding through the Community-Led Recovery Planning programme gave communities the ability to do that in ways that reflected what mattered in their place.

Across Auckland, those ideas started to take shape in very different ways.

In some communities, it looked practical and forward-focused. People came together to set up local hubs, build skills, and strengthen their ability to respond when the next event comes. In others, the focus turned outward, towards the environment, restoring waterways, reconnecting with local spaces, and protecting what had been impacted.

In Kaipātiki, it was as simple as bringing people back together. Neighbourhood gatherings created space to reconnect and rebuild the local networks people rely on in times of disruption.

For iwi, the direction was clear early on. Climate adaptation wasn't new, but the storms reinforced its urgency. Recovery funding supported work that aligned with both council priorities and iwi. This has included partnerships such as an adaptation pilot with Te Kawerau ā Maki, focused on resilience beyond the immediate recovery phase.

Not everything sat neatly within a single programme. Some ideas were led and funded by communities themselves, and incorporated into recovery plans. In Muriwai, the community fundraised and co-created an art installation made from materials collected from Category 3 homes being removed, creating a shared space for reflection and remembrance.

Other initiatives were picked up by different parts of council or partner organisations. Often, the role of the recovery team was to help with action – connecting people to the right support, opening doors, and helping navigate funding pathways. In Piha, for example, the Waitākere Local Board supported initiatives focused on strengthening local connections. Some initiatives also aligned with work already underway, such as rural flood resilience and Auckland Emergency Management preparedness programmes.

Communities are continuing to bring their ideas to life at their own pace, work that will carry on well beyond the formal recovery programme. Along the way, many have built confidence in leadership, governance and navigating funding, strengthening the local capability and relationships that will support future recovery, resilience and adaptation efforts.

Turning Roskill recovery ideas into action

Local organisations have played a big part in bringing this to life. The Whānau Community Centre & Hub, alongside others, has supported initiatives like the Ethnic Communities Festival in 2025 and multilingual workshops, creating space for people from all backgrounds to take part in shaping the plan.

That plan was built from the ground up. Through thousands of conversations with residents during 2025, shared priorities began to emerge – not just for recovery, but for the future of the community.

Now, those ideas are being put into action through a participatory budgeting process, giving local people a direct say in how funding is spent.

“This isn’t just about recovering from the past, it’s about shaping our future,” says Nik Naidu, Founder of the Whānau Community Centre & Hub. “Our aim is that people feel recovered and are doing better than they were, we hope, before the flooding.”

Community groups, residents and organisations have put forward proposals aligned with the plan, from projects that strengthen neighbourhood connection and wellbeing, to initiatives that build local leadership and care for the environment.

People who live, work or study in the area were invited to vote on which projects should receive funding through a $300,000 priority community recovery fund. Voting has been available both online and in person, including at Wesley Community Centre, Roskill Library and local pop-up stalls.

Successful projects for the first round of funding include community gardens for food resilience, initiatives to help people reconnect with the awa including a bike race and workshops, flood action advocacy, neighbourhood support networks, wellbeing pop ups and housing advocacy support.

This approach puts decision-making directly in the hands of the community, linking local priorities with real, visible outcomes.

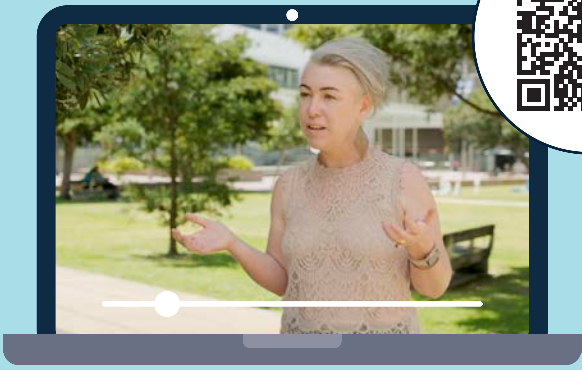
Learn more about community led recovery planning in Mt Roskill

The Trauma of the 2023 Floods

Video case study: Nurturing community leadership

Delivered in partnership with Leadership New Zealand, the seven-month Adapting Together programme brought together almost 30 local leaders from across storm-affected communities, including residents' group members, marae-based leaders, volunteers and community organisers.

The programme highlighted just one way we can support communities outside of crisis times, by investing in the people who will lead them through future challenges.



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Looking ahead

Recovery doesn't move in a straight line.

Some communities are already delivering initiatives and seeing change on the ground. Others are still working out what comes next, rebuilding connections, organising, and deciding where to focus. In practice, recovery has unfolded at each community's own pace.

That has brought a clearer understanding of what recovery really requires. While council systems are often built around fixed timeframes, funding cycles and deliverables, communities need time to process what's happened, rebuild trust, and work out what matters most.

Supporting this has meant council has had to work differently. It's required more flexibility in how time, funding and expectations are managed, and a shift in role – from delivering services and information, to enabling communities to lead their own recovery.

It has also reinforced a broader lesson. Community capability can't be built in the middle of a crisis alone.

Where strong networks and leadership already existed, communities were able to respond quickly, advocate effectively, and take an active role in shaping recovery. Where those foundations were less established, more time and support were needed to build them.

"Investing in community leadership, local networks and "trusted organisations isn't separate from infrastructure — it is part of it. These are the systems that help people navigate disruption, access support, and take part in decisions that affect them." – Leanne Roche, Community Recovery Manager, Tāmaki Makaurau Recovery Office

As recovery continues, communities are no longer seen as recipients of support alone. They are partners in decision-making, leaders of local action and an essential part of the recovery system itself. The experience has reinforced that investing in community leadership, trusted relationships and local capability is critical not only for recovery, but for Auckland's ability to navigate future disruption.

Chapter 15
Leading with kaitiakitanga – Māori in recovery

When the storms hit in early 2023, mana whenua did what was in their nature.

Across Tāmaki Makaurau, iwi drew on deep knowledge of their rohe (home territories), longstanding relationships with whānau, and a responsibility to people and place (kaitiakitanga). They quickly got to work supporting many Aucklanders in the aftermath and continued offering support through recovery.

The recovery showed the strength of Māori-led action, and the importance of recovery systems that recognise and resource it. Where council was able to work in flexible, relational and locally grounded ways, Māori-led approaches helped reach whānau, support wellbeing, inform decisions and strengthen recovery. The experience also highlighted where council needs to improve how it works with mana whenua before, during and after emergencies.

Open doors for those in need

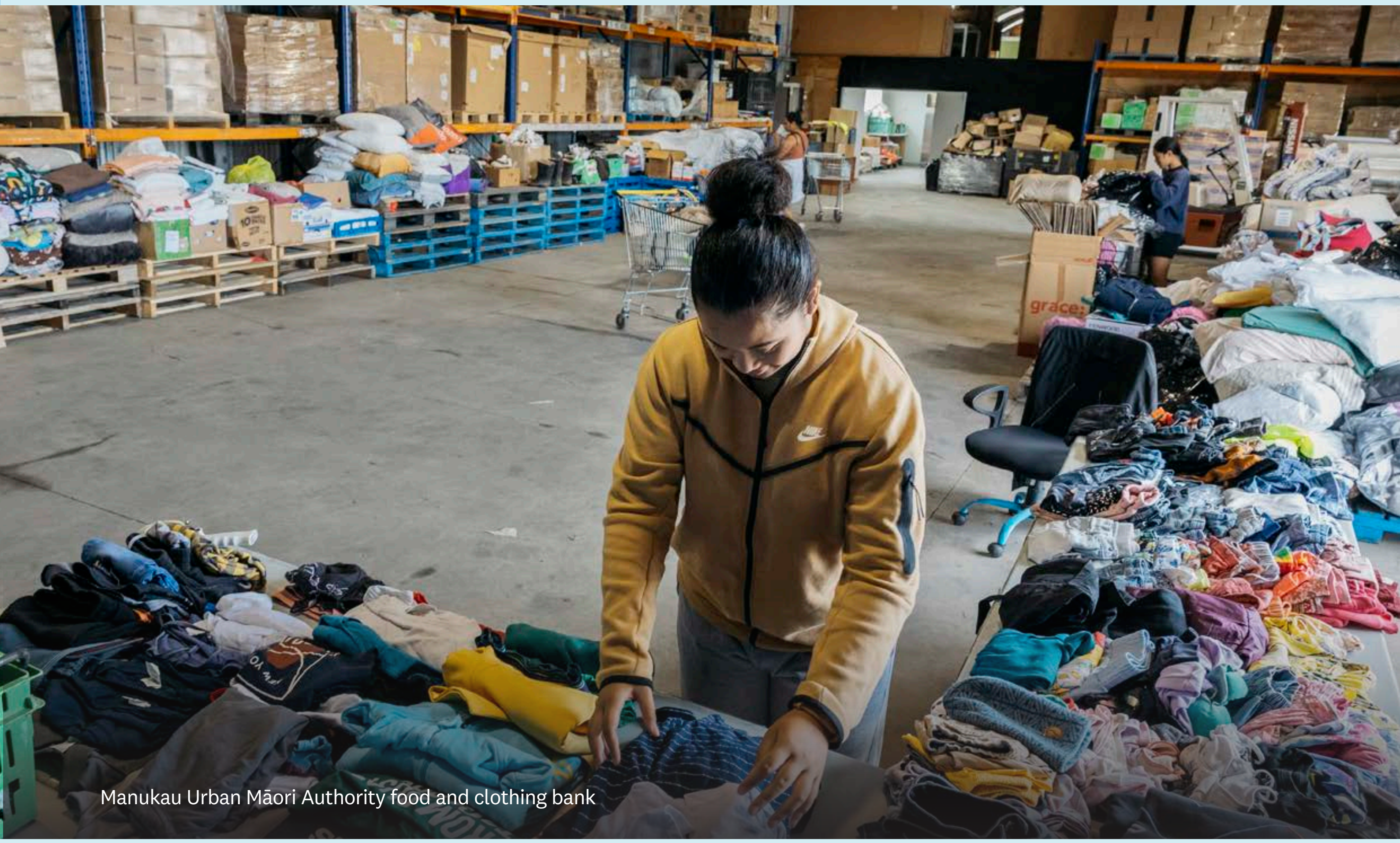
In the immediate aftermath of the floods and Cyclone Gabrielle, mana whenua and marae were already in action, often before formal systems had caught up.

Ruapōtaka Marae in Glen Innes was ready to go on the night of the flooding itself, offering accommodation, food parcels and clothing to anyone in need. In south Auckland, Manurewa Marae reached out directly to around 1500 families and 170 elderly residents, checking on health needs and food essentials, and helping people make sense of what a state of emergency actually meant – something many in their community had never encountered before.

In Māngere, Ngā Whare Waatea became a hub for matching donations including clothes and equipment to clear out flooded homes, before formal systems had found their feet. Te Whānau o Waipareira in west Auckland stood up food support lines and Ngāti Tamaoho mobilised their call centre providing emergency accommodation advice and general flood support.

For many of these organisations, this wasn't new. They simply activated existing community infrastructure, which many had strengthened through COVID-19. The trust, the networks, and the knowledge of who needed help were already there.

Manurewa Marae provided essential support to those affected by the weather events


Manukau Urban Māori Authority food and clothing bank

Advocacy and influence

For mana whenua, supporting their communities through adversity didn't stop after the immediate response. As recovery progresses, iwi brought priorities and perspectives shaped by whakapapa, kaitiakitanga and responsibilities to their rohe.

Iwi contributed to the Tāmaki Makaurau Recovery Plan, bringing priorities and perspectives that helped shape where it focused. They also provided input and helped shape the council's policy guiding the future use of Category 3 land and other council decisions, ensuring those with deep connections to the land had a say in what happened to it.

Engagement with mana whenua was uneven, for a range of reasons. Some iwi chose not to engage in particular parts of the recovery, or engaged only where the work aligned with their rohe, priorities, capacity or existing relationships. At times, council also did not engage early enough, clearly enough, or in ways that enabled mana whenua to participate as fully as they may have wanted.

The recovery reinforced that there is no single approach to working with mana whenua. Effective partnership requires flexibility, adequate resourcing, clear entry points, and relationships that are maintained before, during and after emergencies.

To strengthen engagement as recovery progressed, the Recovery Office brought a dedicated Principal Māori Lead onto the leadership team. This deepened relationships, streamlined input opportunities, and over time these perspectives became more visible across the general recovery programme.

Iwi also played an important advocacy role outside of formal processes. They raised issues that weren't showing up in council's own data, challenged approaches that didn't reflect what people were experiencing on the ground, and flagged emerging needs that helped make recovery more responsive. That kind of knowledge, coming from people with deep roots in their communities, was something no council system could replicate.

Partnering to deliver

Several iwi and Māori organisations were contracted through the Storm Recovery Navigation Service, employing navigators from within their own communities to deliver wellbeing support across their rohe. These navigators supported whānau through one of the most complex and stressful periods of their lives. Partner organisations included Te Kawerau Iwi Tiaki Trust, Huakina Development Trust, Ngāti Tamaterā Treaty Settlement Trust, and Te Mahurehure Cultural Society Incorporated.

Under this model, iwi Partner Navigators were people with direct connections to the communities they served, bringing enduring community cultural knowledge, trusted relationships, and ways of working that made the service more accessible and relevant.

As official service partners, these organisations also sat on the Storm Recovery Navigation Service Governance Group alongside other community organisations, the Recovery Office, Auckland Emergency Management and the Regional Public Service Commission. This gave them a direct role in shaping how the service evolved over time.

Te Kawerau ā Maki helped the Clover Drive community advocate for neighbourhood beautification activities

In particular, their feedback highlighted the importance of a more holistic approach, one drawing on existing models. This informed the Navigation Service Practice Framework *He Kahu Waiora* and the strengths and needs assessments framework *He Ara Poutama* – now fundamental pillars of how we supported every whānau.

The assessments undertaken for each whānau to understand their strengths and needs, and the resulting plans, incorporated dimensions such as te taiao (their environment), cultural wellbeing, whānau resilience, and whakapapa.

> **“Frameworks like Te Whare Tapa Whā recognise whānau as complete individuals with interconnected strengths and needs rather than addressing isolated issues,”**
> **– Navigator reflection.**

The Navigation Service also enabled iwi to deliver beyond the usual restrictive approach where Māori providers are typically funded to work within Māori communities and alongside other Māori organisations. They welcomed the ability to build new relationships and deeper expertise across a range of sectors, from new migrants to religious networks, demonstrating the breadth of what they can offer.

Supporting local recovery planning

Having deep connections to the environment and people of west Auckland, Te Kawerau ā Maki were engaged to lead community-led recovery planning in Henderson and Rānui, one of the most significantly impacted areas in the region. Through a dedicated convenor role, they supported key community groups and residents to identify local recovery priorities and are working to turn those into practical actions, backed by dedicated recovery funding.

A key element of this process is that decisions about how funding is spent are directed by locals, not by council, putting real choice in the hands of the people most affected. Te Kawerau ā Maki's involvement is helping ground this process in local relationships, drawing on existing networks and knowledge to support residents to organise, advocate, and plan for the future. This work continues moving at the community's own pace.

Cultural induction day

When deconstruction work began in Piha, Te Kawerau ā Maki hosted a cultural induction day for the team from Nikau Group that were doing the work on behalf of Auckland Council. This was an important step to ensure those working on the whenua understood its significance and the rich history of the spaces they were operating in. From a mana whenua perspective, knowing the cultural and environmental context is essential, especially when the mahi directly impacts the whenua and its people.

The session explained who Te Kawerau ā Maki are and about their deep connection to place. The iwi shared their guiding values, with practical examples of these values in action. These conversations helped the Nikau team appreciate the cultural depth and responsibilities involved in the project.

The response from Nikau was overwhelmingly positive. The team expressed their appreciation through a mihi, acknowledging the importance of understanding history and the cultural enhancement this brings to their work.

Supporting iwi resilience

The community-led recovery planning programme included support for mana whenua-focused activities, funded by the Recovery Office alongside the wider community-led recovery funding. This enabled ten iwi to lead recovery and resilience planning within their own rohe: Te Kawerau ā Maki, Ngāti Tamaoho, Ngāti Tamaterā, Ngāti Whātua Ōrākei, Te Uri o Hau, Ngātiwai, Ngāti Te Ata, Ngāti Maru, Te Ahiwaru, and Ngāti Whanaunga.

Funding and activity came in two phases. The first supported iwi to develop their own recovery plans in response to the 2023 storms. The second took a longer view, with some iwi supported through multi-year agreements and others through shorter-term arrangements, depending on their priorities and where they were at. Because community-led recovery is shaped by their priorities and delivered at a community's own pace, agreements gave iwi the flexibility to focus on what mattered most to them.

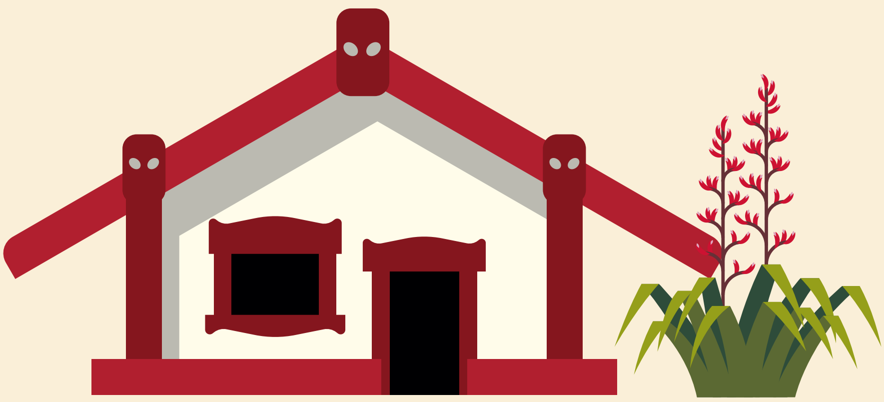
For iwi, recovery planning naturally led toward climate adaptation. The storms had reinforced what many already knew: the relationship between their communities, their land, and a changing climate demands long-term attention.

As a result, funding was used in ways that often reflected existing iwi priorities and strategies, from reconnecting with and monitoring affected whenua (land) and awa (waterways), to building local capability and planning for long-term climate resilience, extending beyond the formal recovery timeframe.

Ngāti Tamaterā partnered with Pou Take Āhuarangi and neighbouring councils to host the Hauraki Climate Change Symposium. This brought together national and local voices to think collectively about what a resilient future looks like for their communities. It strengthened connections between whānau, hapū, and councils, opened up practical conversations about adaptation, and helped marae, papakāinga, and communities feel more prepared for what's coming. It also embedded Ngāti Tamaterā's leadership in local and regional resilience planning.

In west Auckland Te Kawerau ā Maki, with council support, established the Te Henga Adaptation Pilot: a place-based programme testing how mana whenua-led governance, community engagement, and council planning can work together to address long-term climate risk and adaptation.

To support meaningful outcomes, we had to recognise that recovery programmes and funding are generally time-limited, which creates real tension for work that is inherently long-term. The council's recovery scope and timelines didn't always match the way mana whenua think about recovery, which tends to be longer, broader, and more deeply connected to te taiao (the environment) and the wellbeing of future generations. That gap narrowed over time, with flexible agreements and the incorporation of Māori wellbeing frameworks reflecting a genuine shift in approach.



More than a moment

The 2023 recovery showed that Māori-led recovery is not a temporary activity that begins after an event and ends when formal recovery programmes close. It is grounded in enduring relationships, responsibilities to whenua and people, and ways of working that support wellbeing across generations. For council, the lesson is clear. Supporting Māori-led recovery requires more than engagement during a crisis. It requires relationships, agreements, resourcing and decision-making pathways to be in place before disruption occurs. It also requires council systems to recognise that what mana whenua bring extends well beyond kaupapa that are specifically Māori in focus. Their leadership, knowledge and responsibilities are central to recovery, adaptation and resilience for Tāmaki Makaurau as a whole.

Chapter 16
Communicating the recovery programme

From the outset, communication played a central role in shaping what people understood about Auckland's recovery and how they experienced it, including what it meant for them, and what to expect next.

Communication needed to support individuals and communities through uncertainty, explain complex and unfamiliar processes, and provide reassurance that progress was being made, even when the outcomes could not yet be confirmed.

This work took place in a dynamic and uncertain environment where information was constantly evolving and policy settings, technical assessment processes and funding arrangements were developed in real-time. The council's recovery decisions were receiving significant public, media and political attention, which added more pressure to the importance of clear, consistent and empathetic communication.

Communicating regularly while the programme was still forming

When the property categorisation programme was announced by the government in May 2023, impacted homeowners understandably expected regular, personalised updates. For people whose homes and futures were affected and were trying to make decisions about the best course of action for their personal circumstances, staying informed was critical.

Parallel workstreams were working as fast as possible to have policy settings approved by the council's Governing Body, create risk assessment frameworks and processes, and complete negotiations with the Crown on the funding arrangements. However, there were extended periods when significant work was underway, but little could be conveyed publicly with a high degree of certainty. This created an inherent tension because remaining visible and engaged was essential for trust, but frequent updates sometimes meant explaining that there was no new information to share, which frustrated property owners.

Through this period the recovery communications focussed more deliberately on describing what was happening behind the scenes and explaining why some steps took time and what would trigger the next point of contact. While this did not remove frustration, it helped many people better understand why certainty could not always be provided when they wanted it, and why silence did not mean that progress had stalled.

The key focus in this early phase, and right through recovery, was to help people understand all the elements they had to navigate – regardless of whether they were renters or homeowners. This included resolving placard issues, which for those with red and yellow placards had immediate and significant effects on their daily lives. It also meant raising awareness of the support available, from rates rebates, to temporary accommodation assistance, wellbeing and mental health services, and insurance advice through third parties.

How the team operated

The communications and engagement function was established in April 2023, almost at the same time as the Recovery Office itself, starting with just two people. The introduction of the categorisation programme was a turning point, signalling the scale of what lay ahead, and the team grew rapidly from there. At its peak in early 2024, it had 24 people working across communications, stakeholder engagement and customer experience. Like the recovery itself, the focus and nature of the team's mahi shifted throughout the programme.

The team delivered proactive and reactive communications including media engagement, inbound and outbound customer services, stakeholder engagement, coordination of the technical helpdesk, and from early 2025 coordinated the disputes function. This integrated approach allowed issues raised through one channel to inform responses across the rest of the system more quickly and consistently.

The team adapted and pivoted repeatedly as the programme evolved from communicating about the region's repair programme in the early months, to delivering bespoke direct communications to thousands of individual homeowners as categorisation progressed.

The Recovery Office implemented a Customer Relationship Management (CRM) system after recovery was already underway. While designing and introducing the system required significant time and effort from teams, it became a critical tool for managing recovery at scale.

The CRM improved visibility of an individual's journeys through recovery processes, helped coordinate responses across teams, and reduced duplication in interactions with homeowners. Importantly, it also reduced the burden on affected people, who no longer needed to repeat their situation multiple times as they moved through different recovery processes.

Explaining complexity without creating confusion

Auckland's recovery brought unfamiliar concepts to much of the recovery audience – the idea of property categorisation, intolerable risk to life, managed retreat, eligibility thresholds and discretionary decisions were new for most people.

The newness, and magnitude of what they meant for a household's future, meant messages needed to be clear, consistent and accessible across letters, digital channels, media coverage and community meetings, while also remaining accurate as policy and funding decisions evolved.

Messages and the channels they appeared in also needed to consider how trauma, stress and displacement affect people's ability to process complex information. The Recovery Office leaned heavily on bite-sized information repeated frequently, along with fact sheets, guides, video explainers and visual process diagrams for homeowners. Complex policy information was deliberately simplified to make it accessible for all those that needed it, and this was delivered through multiple channels, recognising the different ways resident groups and community partners told us they wanted to receive information. Webinars with senior leaders and external experts (such as the NZ Claims Resolution Service) where categorisation and support schemes were explained had strong uptake and provided a real-time channel for people to ask questions and seek clarification. Webinars were recorded and made available on-demand for people to watch at a time that best suited them, further extending the reach of the information.

When impacted people are anxious and facing major decisions, conflicting information can do real harm. With so many people in front-facing roles, from Navigators working one-on-one with homeowners, and local elected members, to staff presenting at public meetings, and external stakeholders like insurers, NGOs and real estate agents all having their own conversations with affected residents, the need for consistency was critical. A live internal messaging guide gave staff a shared foundation to work from, while fact sheets and updates were shared with external stakeholders.

Informal community conversations played an important role in helping people understand the programme, but they could also amplify confusion when partial or incorrect information spread more quickly than official updates. This reinforced the need not just to publish information, but to actively test whether it was being understood as intended.

58
Storm recovery newsletters

over 25,000
Customer enquiries to recovery inbox

250+
Media queries

41
Community meetings

496
Requests for decision reviews and Special Circumstances applications

Listening and adapting communication in real time

Resident and community groups played an important role in shaping how recovery communications were developed. Beyond acting as a channel to share information, the groups provided rapid, practical feedback on clarity, tone and assumptions. This meant the Recovery Office could quickly tell when something had not made sense, carried too much technical detail, or relied on knowledge that residents did not yet have.

That feedback loop mattered because the environment was moving quickly. Policy settings and technical processes were evolving, and the risk of misunderstanding was high. When issues were picked up early, the Recovery Office could clarify information, adjust language, or expand on emerging topics in future communications.

A storm recovery newsletter became one of the most important tools for doing this. Distributed fortnightly throughout 2023 and 2024 to more than 2500 subscribers, it provided a predictable place where homeowners knew they could find updates, even when there was limited new information to share. The regular timing helped reduce uncertainty, as people did not need to search across multiple channels or worry they had missed something.

The newsletter was designed to be practical so content was broken into short sections and used simple language. Links directed readers back to a small number of trusted sources, including the Auckland Council website and recovery microsite within OurAuckland.

Clear, useful communication depends on involving the people it is meant to serve. The Recovery Office used that approach with the Muriwai Stickered Group, sharing a draft of the fortnightly newsletter with group members and inviting feedback before it was sent out to all subscribers. Their input led to revisions and resulted in a better final version. It showed how listening closely to affected communities lifts both the quality and the impact of communications, and it helped shape the approach taken more broadly.

Balancing reach and precision

One of the more complex communications challenges was that people were at very different points on the recovery spectrum at the same time. Some households were at risk from future events but did not engage with council after the emergency response, often due to displacement, fatigue, or uncertainty about whether recovery processes applied to them.

This challenge was compounded by the fact that not everyone affected by flooding or landslips owned the home they lived in. Tenants often experienced displacement, loss of belongings and ongoing uncertainty, but many recovery processes were focussed on property ownership. This meant tenants could be harder to identify (and harder to reach) and more reliant on landlords or third parties for information about next steps.

While property owners were navigating categorisation, consents and support schemes, tenants were often seeking clarity about safety, timeframes and whether they would be able to remain in their homes. Identifying and reaching both groups, often without reliable data, added another layer of complexity to recovery communications.

From a programme perspective, we wanted communications to reach people who might be unaware they were at risk, or unsure whether recovery processes applied to them. Conversely, there was a real risk of creating unnecessary anxiety by drawing people into a process that was not intended for them.

Many people needed additional support to access and understand information, and translated materials, printed information at libraries and community spaces, and local signage helped bridge that gap. Drop-in sessions gave people a chance to work through forms and navigate the process with someone beside them, because for many, that kind of hands-on support was the only way to access what was available.

Trust was important when trying to reach diverse communities, including those that have traditionally had low trust in government institutions. A diverse team of navigators meant there were people who already had that trust, already spoke the language, and already understood the community from the inside and knew the best ways to provide support information to them.

When the Partner Navigators came on board, that reach grew significantly. Churches are a key part of life in some communities and invited us in to talk to their members. Migrant and refugee communities, many of whom weren't homeowners but had been just as deeply affected by the floods, could engage through people they already knew and trusted. The result was that recovery support got to people it might otherwise never have reached.

Registration and reaching people at different points of risk

Voluntary registration via an online form was the gateway into the categorisation programme for storm-affected properties.

A major hurdle for council was that storm-affected property owners could not be defined with perfect precision.

The placards issued through the emergency Rapid Building Assessment process were used as a proxy for identifying storm-affected properties, and this group of around 7000 properties were directly targeted and invited to register for a category, beginning in June 2023. Further properties were identified in 2023 and 2024 through flood modelling and on-the-ground intelligence from assessors while they were doing property visits.

However, many homeowners chose not to report flooding or a landslide at their property and therefore council didn't issue a placard or have a record of them being affected. Anecdotally, some homeowners have said they deliberately chose not to report storm impacts because they didn't want it noted on their property's Land Information Memorandum (LIM).

A broad, Auckland-wide information campaign about registering for a category ran for 15 months, from June 2023 to September 2024. The campaign used paid advertising, media interviews and releases, the Auckland Council website, social media, local media advertising, community meetings and drop-in sessions, information in libraries and community spaces, and sharing of information through council elected members and electorate MPs.

Door knocking and phone calls were used in areas with low engagement. For some households, this direct outreach was the difference between registering or not.

Many homeowners understood registration as the beginning of an assessment journey that would quickly lead to property specific information. In reality, technical assessments, risk modelling and policy sequencing meant there were extended periods before any update was available for individuals. During that time, people sought frequent reassurance that they had not been forgotten and expressed frustration at length of time they waited for a category.

Auckland's experience of the categorisation programme reflects a broader disaster recovery communications challenge – when impacts are uneven and evolving, communications have to be broad to reach diverse communities, while being precise enough not to draw others into a process that isn't designed for them.

Empathy in a highly scrutinised environment

Given the human impacts on people, the recovery unfolded under sustained public, media and political attention. Decisions about funding, buy outs and timeframes were debated openly by politicians and journalists and online in community forums.

Elected members, community and resident groups, storm recovery navigators, and community liaisons played a critical role as both messengers and advocates, helping information reach communities and affected Aucklanders, while also bringing local concerns back into the recovery programme to be considered and resolved. This two-way role was particularly important where the public debate was moving faster than confirmed decisions, and where incomplete information risked being treated as final.

Balancing empathy, transparency, speed and accuracy, remained a constant challenge throughout the recovery.

Supporting homeowners through disputes and reviews

As the work to develop the categorisation approach and support schemes progressed, it became clear that having a credible pathway for homeowners to challenge or seek a review of category and scheme decisions would be critical. For many people, a dispute was not simply about wanting a different outcome, but was often driven by uncertainty, gaps in understanding, or concern that important information about their property had not been fully considered.

The Dispute Resolution Framework, developed in late 2023, provided a structured way for homeowners to request reviews of technical assessments, valuations, or to seek consideration of individual circumstances that were not accommodated through the policy settings. From a homeowner perspective, the existence of the dispute pathways was itself significant. It acknowledged the impact recovery decisions had on individual households and reinforced that council decisions were open to review and scrutiny. Further detail on the disputes framework and how it operated is set out in Chapter 5.

In practice, many interactions with the disputes process were as much about explanation as they were about challenge. Technical assessments, risk thresholds and policy constraints were difficult to interpret in written form, particularly for people already experiencing stress or fatigue. A technical helpdesk played an important role in supporting this process, using phone calls and online meetings to help homeowners understand how risk had been assessed and what options were available. In some cases, these conversations resolved concerns early, with homeowners choosing not to seek a formal review of their category once the rationale for their decision was clearer.

Where disputes did proceed, timeframes and communication became critical. The volume of disputes and the complexity of individual cases were initially underestimated and under resourced, which led to delays in responses and extended decision-making periods in some instances. For homeowners waiting for an outcome, these delays caused frustration and anxiety.

Bringing the disputes function into the communications and customer experience team in early 2025 strengthened coordination and improved the consistency of communication with homeowners. The addition of a dedicated dispute customer support role helped manage correspondence, ensure documentation was complete, and provide a single point of contact across technical, legal and policy teams. This reduced duplication of effort for both homeowners and Recovery Office teams, and improved visibility of case progress.

The disputes experience reinforced several broader recovery lessons. Clear upfront information about what could and could not be reviewed helped manage expectations. Language mattered, with terms such as ‘disputes’ and ‘special circumstances’ often carrying connotations that shaped how people approached the process. Importantly, the experience highlighted that review and dispute processes are not separate from customer experience.

Beyond those directly affected

As directly affected people started to get clarity and move on, the reality of what was happening became more tangible for the neighbours and communities left behind. People watched their neighbours pack up and leave, saw empty homes, and then watched those homes be removed and sites left vacant. Concerns grew about what being next to a high-risk property meant for home values and ongoing access to insurance, and there was a growing demand to understand what was happening with Category 3 sites and when communities would start to feel whole again.

Working with community stakeholders and internal council delivery teams to provide clarity became an increasing focus. Where Navigators were the key channel for directly affected homeowners, community recovery experts became a vital source of both insight and communication. Tailored messaging packs and local recovery webpages helped keep communities informed, bringing together information from across council in what was an example of integrated, place-based communications spanning multiple departments.

With so much still uncertain and more than one thousand storm-affected properties to work through, one of the more complex and ongoing challenges will be supporting direct neighbours and cross-lease and unit title co-owners whose own property is tied to a council-owned Category 3 home. Decisions on these properties will take many years, which creates ongoing uncertainty for neighbours and other property owners on shared sites.

Auckland's recovery highlighted the importance of early, integrated communications. Information needed to be clear, accessible and designed around how people experience trauma and uncertainty. This is an ongoing need as communities continue to rebuild and seek to understand the future of the land.

The work also created a natural platform for broader hazard and risk education. Having lived through it, our audience was primed for information about disaster preparedness, what to look for when buying a home, and what council was doing to plan for long-term resilience, and our channels became a useful vehicle for amplifying those messages to a wider Auckland audience.

Auckland's experience has underscored that clear and considered communications are not an add on to recovery programmes, but a central part of how people make sense of what is happening to them while decisions, policies and funding decisions unfold.

Chapter 17
Transport: reconnecting a damaged network

During the 2023 storms, disruption on Auckland's transport network was one of the ways most people experienced the disasters in daily life. The long recovery that followed prompted a broader rethink of how the network performs under pressure, where it is most vulnerable, and how it needs to be strengthened for the future.

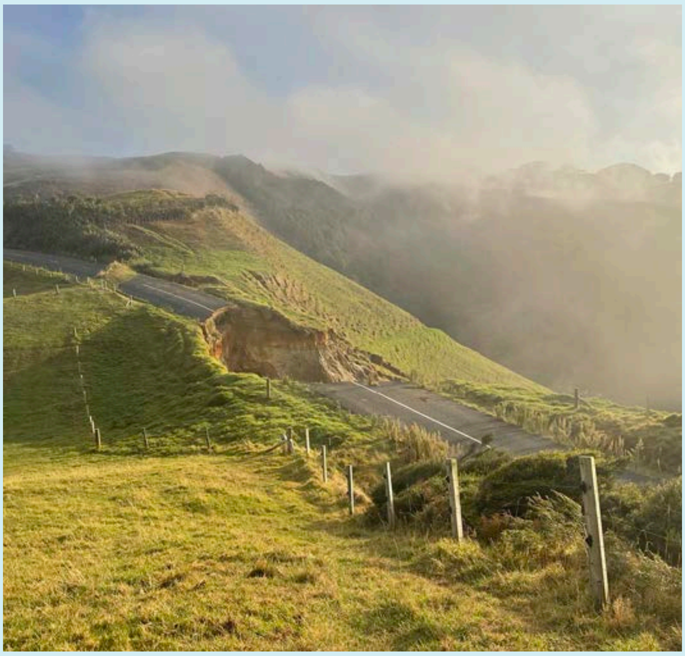
Auckland's transport network is not just physical assets. It's how people get to school, work, medical care, supermarkets, and reach one another.

During and immediately after the storms, highways, arterial routes and suburban roads were affected. It became a common shared experience: trying to get somewhere and having to navigate floodwaters, closures and detours to find a route. But, as many found, it was not always possible, and more than 2000 vehicles were left flooded or stranded across roads and accessways.

The disruption extended beyond private vehicles. Bus services were impacted, rail and ferry services temporarily suspended, and Auckland Airport was closed with flooding. The local road network was affected by over 2000 slips right across the region, around 150 roads were closed, and two bridges were severely damaged.

"It was a surreal experience. We must have taken thousands of calls about flooding and infrastructure damage within the first 48 hours, and they kept on coming." Johan Swanepoel, Stakeholder Manager, Road Maintenance North and West.

Communities in Karekare and parts of the Āwhitu Peninsula, were isolated with slips severing the only road in and out. In places such as Piha and Huia, access was at times severely restricted before temporary routes or existing roads could be restored.



Getting the network moving

The first priority was to reconnect people as quickly and safely as possible. Roads were cleared, debris and abandoned vehicles removed, temporary traffic management put in place, and culverts and floodwater paths opened where needed.

Auckland Transport worked through existing maintenance contracts, meaning crews who already knew their parts of the network could get started quickly while solutions were still being worked through. Decisions were also made closer to the ground, allowing teams to respond faster, avoid delays and adjust as conditions changed. That flexibility, combined with strong working relationships, became a defining feature of the programme.

At its peak, around 500 maintenance crew were working across the network each day in the first month. That enabled around 75 per cent of affected roads to be reopened within the first week, and approximately 1200 slips cleared within three months, even as more complex sites were still being identified.

Auckland Transport used emergency works provisions available under the Resource Management Act and Building Act. In simple terms, this allowed urgent works needed to protect life, property and access to proceed without waiting for the full comprehensive approval process first. Retrospective consents or Certificates of Acceptance could then be completed afterward where required. This helped remove delays at a time when roads needed to be stabilised, communities reconnected, and immediate risks reduced while more detailed investigation and design got under way.

In a few locations, such as the Karekare valley, local contractors or landowners with machinery also helped re-establish basic access in the short term, with longer-term engineered repairs and retrospective approvals following afterward.

Identifying longer-term recovery needs

As crew worked their way through these issues, it became clearer that the task would extend well beyond short-term fixes and into a large, staged programme of engineering, reinstatement and resilience work.

In time, this programme would include 797 complex road recovery projects, of which 216 were classified as major (any project costing more than $250,000).

To support this work, $390 million was allocated specifically for transport network recovery funded by Auckland Council, the Crown and the NZTA National Land Transport Fund.

The programme was made up of hundreds of interconnected projects being delivered at once, often in wet conditions through winter, and on roads people still needed to use.

Before permanent works could begin, sites first had to be made safe enough for experts to access. From there, teams had to understand the hazard, reduce immediate risk, decide how much access could be maintained, design a solution, and then work out how to build it safely on a live network.

In most of these places, the road itself was only one part of the job. Water had to be redirected, slopes stabilised, and the land beneath or beside the road made secure before the road could be rebuilt. So, each of these projects had many elements including retaining structures, soil nailing, shotcrete, scour protection, culvert and drainage upgrades, surface water channel restoration, pavement reconstruction, and hydroseeding and planting.

Recovery on a live transport network

In many places, especially where communities had only one practical route in and out, the works became a complex balancing act. Some roads remained open with one lane, timed access or temporary restrictions because fully closing them would have made daily life harder – even though maintaining partial access often made delivery slower and more difficult.

Communication became a significant part of the recovery task. Local communities, schools, businesses, freight operators and the wider public needed frequent updates in places where traffic management, access times, detours and work sequencing could change quickly with weather, ground conditions or new discoveries on site. It meant helping people understand what was happening, why it was taking time, and what it meant for everyday access.

Different sites revealed different kinds of challenges across the region. At Bush Road in Albany, the work involved retaining structures, stormwater improvements and keeping a busy urban route functioning under restrictions. On Matakana Valley Road, recovery played out across ten separate slip sites, with the final "waterfall site" requiring additional work like box culverts and uphill drainage.

On Manukau Heads Road, the biggest slip on the network severed the only road to the Āwhitu Peninsula. Meanwhile, at Mill Flat Road Bridge in Coatesville, recovery meant first restoring a washed-out connection with a temporary solution, then delivering a permanent replacement. The programme faced a wide range of engineering, access, safety and communication challenges across urban, suburban, rural and coastal Auckland.

Major slip on a key road in the Āwhitu Peninsula

Recovery was also shaped by ongoing weather and what was discovered once works began. Ground conditions remained saturated in many places, winter slowed progress, and work sometimes had to pause while designs were reconsidered or additional damage assessed.

At Mountain Road in Henderson Valley, repairs extended across multiple slips, drainage damage was uncovered, and an 11th slip was later added to the programme. Similarly, on Waitākere Road, works paused while drainage design was refined after further issues were discovered. This reflected a wider pattern: recovery often meant addressing the first visible failure, then uncovering the next layer underneath.

Flood risk remained part of the recovery story too. Many roads could reopen once floodwater receded and debris was cleared. Others required more enduring works to improve how water moved through or around the corridor. These included restoring surface water channels, clearing and upgrading culverts, protecting bridge abutments, improving stormwater capacity and adding details intended to reduce damage if roads overtopped again in future storms.

What prolonged disruption meant for communities

For many Aucklanders, transport recovery was the part they lived with every day. A closed or restricted road could turn a short school run into a long detour, make commuting unpredictable, complicate freight and service access, and in some cases shape whether people stayed where they were.

In places where works continued for years, the sense of recovery being unfinished lingered even after floodwater was gone and homes were repaired. This was especially true in west Auckland, where communities in Piha, Karekare, Te Henga and Huia and surrounding areas lived with extended and shifting road closure arrangements over a long period.

A major slip on Scenic Drive

Scenic Drive and the west coast corridor

The west coast offered one of the clearest examples of why road recovery took so long. Damage was spread across Scenic Drive, Karekare Road, Lone Kauri Road, Mountain Road, Huia Road and related routes, turning what looked like separate sites on paper into one large corridor challenge in practice. Materials had to be managed, access maintained where possible, and works staged across multiple sites without cutting communities off completely.

On Scenic Drive, one of the slips tore away a section of road and carved a path about 60 metres down the hillside. Repairing the route was not a simple matter of resurfacing. It required stabilising the hillside, rebuilding the edge and sequencing works across a corridor that people still needed to use. For communities, this meant long detours, varying closure arrangements and ongoing uncertainty. For delivery teams, it meant constantly balancing speed, safety and access in difficult terrain.

The west coast also showed how recovery generated secondary challenges. At Karekare, material from multiple slips had to be managed and stockpiled, including through the temporary use of the Pohutukawa Glade reserve before the space was reinstated in partnership with parks colleagues. The same corridor also highlighted how new issues could continue to emerge after the first damage was known, adding to timeframes and complexity.

Partnering in recovery

In North Auckland, transport recovery work extended beyond the local road network. A major slip affected both Tahekeroa Road and the main trunk railway north of Helensville, disrupting a strategic road and rail connection between Auckland and Northland. That required Auckland Transport, KiwiRail and delivery partners to plan and build across asset boundaries rather than treating road and rail separately.

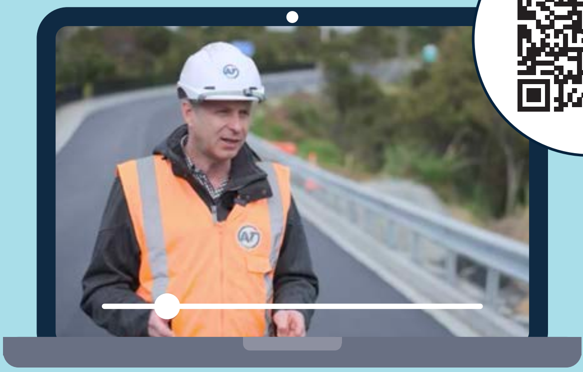
Around 50,000 cubic metres of material needed to be removed, roughly the volume of 20 Olympic swimming pools. Positively, around 95 per cent was reused on site. That reduced heavy truck movements, saved cost, shortened the programme and helped reshape the land to support a more resilient outcome.

The project also included a permanent bund to protect the rail corridor from future events, showing how recovery works were increasingly being used not only to restore service, but also to reduce future risk.

This was not mainly about one-lane access or local detours. It was about coordination, freight resilience, material management, and cross-agency delivery on a strategically important route.

Video case study: Restoring a critical coastal route

Glenvar Road, a key route between Long Bay and Torbay, was severely damaged when land gave way on both sides of the ridge during the 2023 floods, forcing its closure on safety grounds. Through a fast-tracked recovery effort involving complex engineering and close collaboration, the road reopened earlier than expected, with upgrades that improve safety and resilience for the future.



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Mill Flat Road bridge washout (left) and repaired bridge (right)

Improving how Auckland looks at transport resilience

One of the clearest outcomes of the transport recovery was a better understanding of where the network is vulnerable and how resilience can be built in earlier, not just after damage occurs. That shift began within the physical works themselves.

Across the programme, permanent repairs increasingly included stronger retaining structures, improved drainage and culvert capacity, scour protection, replanting, and design changes intended to perform better under future storm conditions. This reflects a shift toward designing for future rainfall intensity rather than historic assumptions.

Climate considerations were built more directly into design decisions, including rainfall intensity, flood behaviour and ground instability. This mattered because the programme was not only restoring service, it was also avoiding rebuilding the same weaknesses back into the network.

Recovery also changed how the network is understood more broadly. Using information Auckland Transport gathered from around 2000 landslides, a road landslide susceptibility framework was developed to identify roads most at risk. This allows future investment to be targeted more intelligently, with a clearer understanding of how drainage, slope, vegetation, geology and other factors combine to create risk. In terms of road management, early flood warning systems were trialed on flood-prone roads, helping give road users advance notice and reduce the chance of people driving into unsafe conditions.

The recovery also reinforced the value of working through existing networks, contracts and relationships rather than building a new delivery system from scratch. Familiarity with the network, the ability to scale quickly, and faster decision-making closer to the ground all helped the programme move at pace despite the complexity.

By the time the programme closed out, the transport recovery story was not only about repairing slips and reopening roads. It was also about learning how to work differently under pressure, how to keep communities moving while complex works were under way, and how to make smarter decisions about where resilience investment is needed next.

Chapter 18
Stormwater: adapting to a wetter future

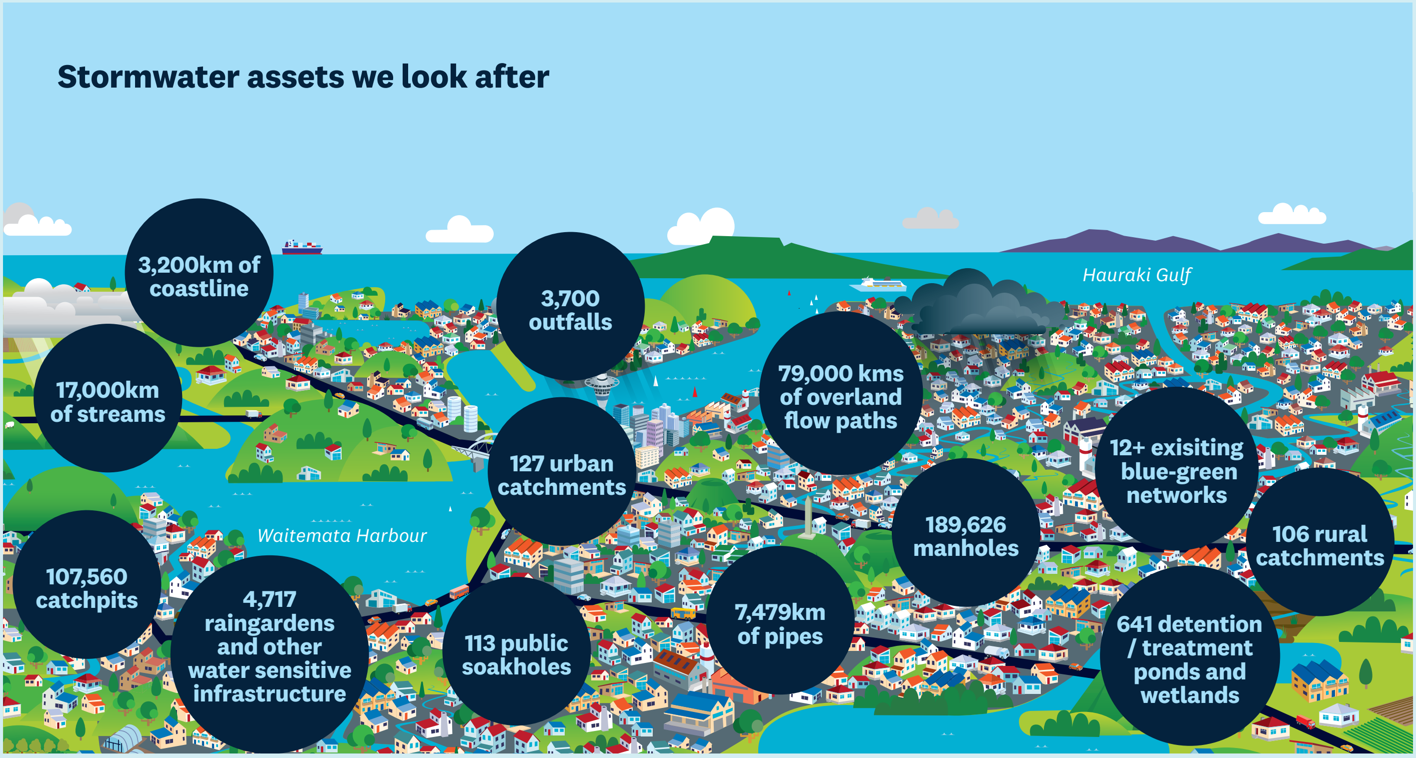
Around half of Auckland's average annual rainfall fell in January 2023 alone – approximately nine times what the region typically gets for the month. While Auckland's stormwater system is arguably the best in the country, it certainly wasn't built to manage extraordinary pressure like this.

As intense rainfall accumulated on 27 January, water moved through the city using every available pathway along man-made infrastructure, natural streams and across land anywhere space allowed. Overland flow paths activated as expected, but under these volumes carried much more water through streets, motorways and properties – and at dangerous speeds. While the impacts were experienced locally, the conditions tested assumptions common to stormwater systems across New Zealand's major cities.

Anything and everything that wasn't secured was swept up and into the system, piece by piece creating critical blockages: from outdoor furniture and trampolines to vehicles, construction materials and even a tiny home in.

Streams expanded into surrounding properties, well beyond their expected corridors. In the north-west, a typically 10-meter-wide Kaukapakapa river expanded to more than 150 meters at peak flow, damaging part of the local railway line and its supporting structures. During peak flows, water volumes dwarfed the narrow concrete channels, such as those running through Wairau on the north shore, spilling over into nearby commercial areas including a supermarket.

This gave us an idea of what we will be dealing with if rainfall continues to exceed what our stormwater system is designed to manage. Together, these conditions framed stormwater recovery not simply as a repair task, but the start of a stormwater adaptation programme.



Auckland's stormwater system is made up of over 20,500km of streams, 79,000km of overland flow paths, 641 detention/treatment ponds and wetlands, 189,626 manholes and 107,560 catchpits (roadside drains with debris traps)

Debris removal at Oakley Creek

Prioritising recovery needs

Across the first part of 2023, including both major storm events, more than 16,000 stormwater issues were reported right across the region including 650 blockages, 100 of which were critical. That's not including the issues that hadn't yet been reported. Identifying and addressing these issues was a huge job, and it was inevitable the cleanup 'response' would continue into the 'recovery'.

This scale required an immediate need to prioritise our attention. The focus was on identifying safety issues, and which blockages, damaged assets and constrained network sections posed the greatest risk of further flooding. Restoring flow was rarely a single action, but a sequence of interventions as pressure points emerged across the system.

This is where timing adds more complexity to recovery. While the most severe flooding occurred on 27 January, continuous heavy rainfall warnings across the year kept the pressure high – including Cyclone Gabrielle less than a month after the initial floods. Teams were balancing ongoing clean-up and inspections with targeted work to strengthen vulnerable parts of the network before each rain warning.

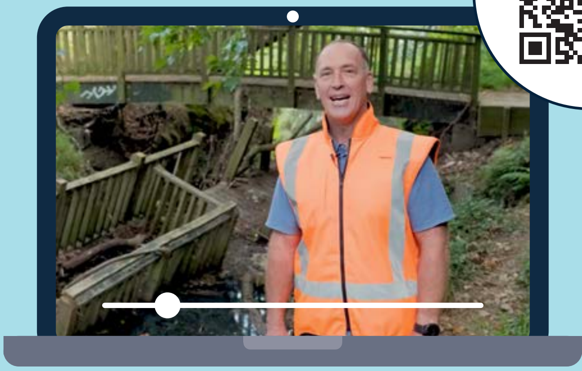
Drains, catchpits, pipes were inspected and cleared where possible to keep water flowing. But, clearing one blockage risk often revealed others, and with ongoing wet weather, loose debris and tree branches continued to find their way into the network. In areas streaked with streams, such as parts of West Auckland, it was a tiring job.

By the end of August 2025, 11,454 tonnes of debris had been removed across the network – the equivalent of around 500 of Auckland's double decker buses. Many of these locations required heavy machinery such as diggers, and in some cases helicopters, and large crews to safely access and clear massive materials from streams and channels.

Given the scale and intensity of this work, debris removal was extremely costly, at a time when budgets were already under pressure. To speed up this work, council set aside $6 million through a dedicated Storm Resilience Fund, including around $1.4 million specifically for debris clearance, with a further $2 million government contribution in 2024 helping to accelerate critical clean-up work ahead of winter.

Case study: Oakley Creek – clearing the way for water

Oakley Creek in Mt Albert is one of Auckland's most heavily modified urban waterways, running through dense neighbourhoods and constrained corridors. During the 2023 storms, high flows combined with debris washed into the stream creating multiple blockages that restricted flow and increased flood risk upstream. Clearing these blockages required careful planning and specialist equipment.



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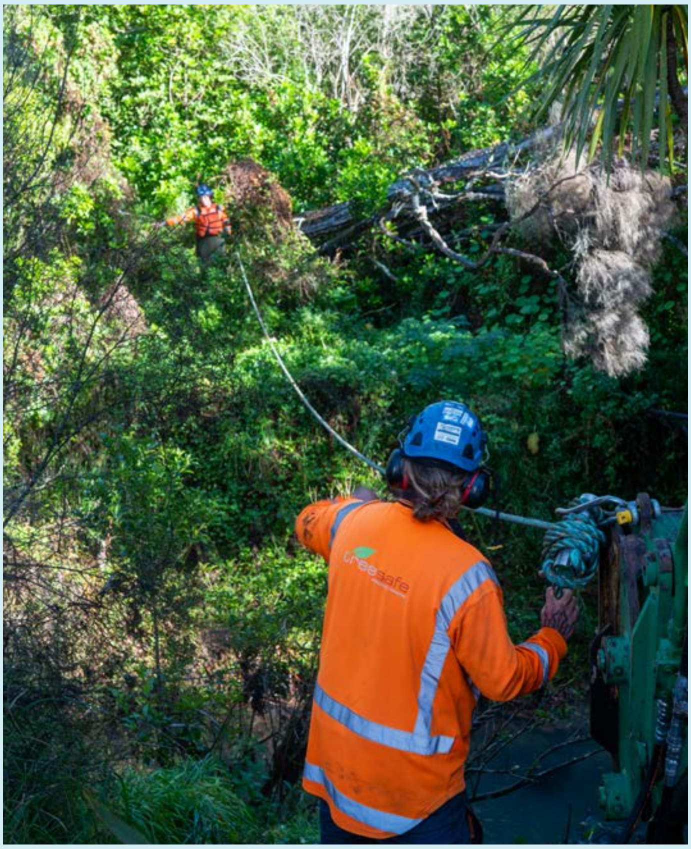
Flood resilience through major infrastructure

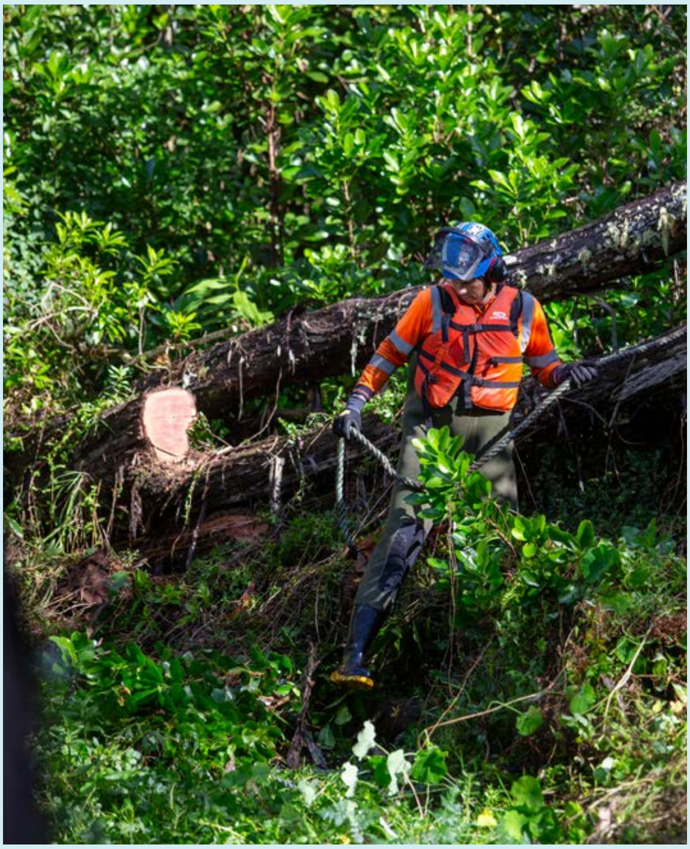
Based on what we learnt about areas and communities that were especially vulnerable, we investigated potential infrastructure solutions and tested the feasibility of 12 projects. The government co-funding agreement enabled around $192 million of work to be brought forward for four major flood resilience projects to protect hundreds of homes.

- In **Māngere central**, Te Ararata Creek Flood Resilience Project is replacing and widening a bridge on a high-traffic road to allow water to flow more freely under it, installing a debris trap and constructing permanent access to culverts for easier maintenance.
- In **Māngere east**, the Harania Creek Flood Resilience Project is replacing an embankment that holds a major wastewater pipe with an open stream and pipe bridge to allow water to flow out to the harbour.
- In **Rānui**, west Auckland, the Manawa aa Whenua project will create space around the Momutu/ Swanson Stream for stormwater to flow safely, install a debris trap, upgrade culverts and replace a bridge with a longer structure to allow more water to flow safely underneath
- In the **Wairau** catchment on the north shore, stage one of a three stage blue green network , Ngā Wairau, will increase AF Thomas Park's stormwater storage capacity to more than nine times its previous level, preventing stormwater from overwhelming Wairau Creek, reducing flooding for several suburbs in the catchment. Design for the second stage is underway, focusing on improving overland flow, widening and daylighting streams, and increasing the capacity of existing stormwater detention ponds.

As noted in the Category 2C chapter, while the Māngere projects were ready to proceed and did not require additional property acquisition, the projects in Wairau and Rānui are more complex and will take years to deliver. When complete, they will form part of a wider programme of work that will require further staged investment.

Debris removal at Opanuku Creek in Henderson image by Bryan Lowe





Improving our approach to managing storm risk

The experience of the 2023 storms made it clear that flood resilience cannot rely on infrastructure alone.

While pipes, drains and channels remain essential, reducing risk increasingly depends on a broader set of tools – combining physical works with intelligence, proactive maintenance, preparedness and community action.

Monitoring, data and modelling now play a much stronger role in day-to-day decision-making.

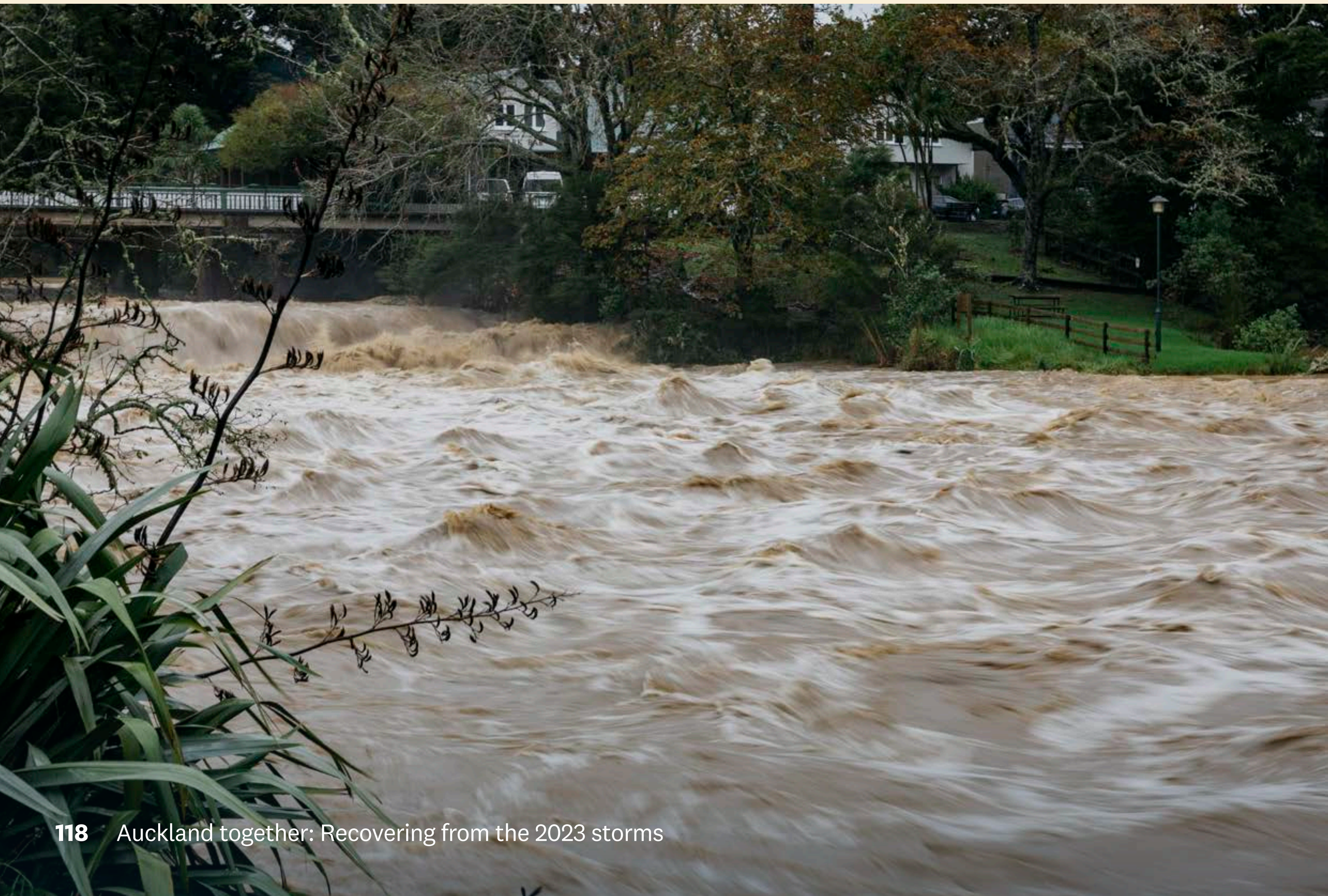
A network of solar-powered hotspot cameras is now in place at known critical locations across the stormwater system. These provide near real-time visibility, helping teams detect blockages early and respond more quickly, particularly in hard-to-access areas.

Established monitoring networks – including rainfall, rain radar and water level sensors – support this work, with coverage continuing to expand over time. Together, they provide us with better evidence on how the network performs during storms.

The resulting data is used for hydraulic and flood modelling, to analyse potential flood effects and guide planning and investment decisions. Modelling capability continues to improve as data quality and coverage increase.

Together, these tools strengthen situational awareness, support faster operational response, and improve how we target long-term investment

Stormwater maintenance ahead of heavy rain is now more proactive. When severe weather is forecast, stormwater teams carry out pre-storm checks, both in person and via remote monitoring, focusing on known hotspots, clearing drains and catchpits, and reviewing pressure points before rainfall peaks. Acting early has proven critical to reducing impacts during subsequent weather events.



Education and information

But the performance of the stormwater network, and resulting impacts, is influenced by more than public assets and maintenance.

Preparing Aucklanders and empowering them to take responsibility for their own safety is an increasingly important part of reducing harm. Improvements to flood risk maps, clearer Land Information Memorandum (LIM) information and stronger planning provisions are giving residents, businesses and developers better tools to understand risk and make informed decisions.

To help people understand where flood risk exists across the city, a new mobile-friendly Flood Viewer map was launched in 2023, supported by practical guidance on how to prepare homes and reduce risk. Public information campaigns, particularly ahead of key weather seasons, promote the tool and practical actions people can take. The webpage has recorded around 2 million views to date, reflecting strong public interest following the storms.

Key preparedness and flood risk reduction information is made available in translated formats and distributed through community hubs, events and partner organisations to ensure it reaches Auckland's diverse communities. This information includes practical steps people can take to reduce flood risk on their own property.

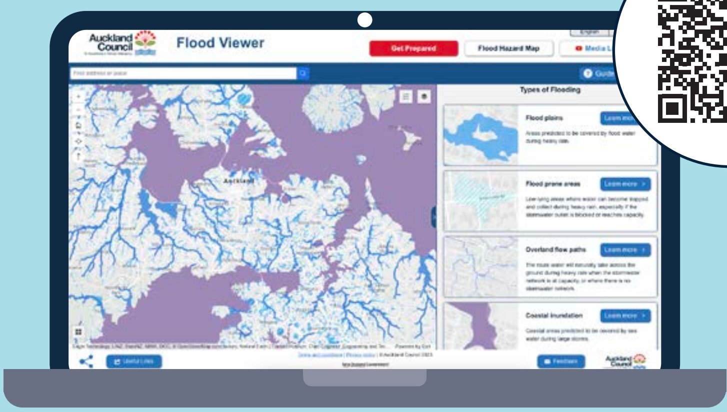
A team of overland flow path assessors has also been helping residents across Auckland identify issues on their properties that could be easily implemented to reduce flood risk and damage.

Partnerships with community groups extend this work further, building on trusted local relationships. In 2025, 72 community flood resilience events were delivered across Auckland through these groups, involving more than 1400 volunteers and participants. And in 2026, fourteen partner organisations were contracted to deliver community flood resilience initiatives.

Many of these initiatives sit within **Making Space for Water**, Auckland Council's comprehensive approach to reducing flood risk and increasing flood resilience. The programme reflects a significant ongoing investment by council, and a recognition that resilience requires coordinated action across many physical, system and people facets.

Auckland Council's Flood Viewer provides free information to help Aucklanders understand flood risk where they live, and in places they may be considering buying or renting. Online resources help people understand what they can do to reduce their risk.

Visit site here



Making Space for Water Initiatives
Blue-Green Network Projects
Developing new blue-green corridors in critical flood risk areas that increase stream capacity and divert more water away from property and infrastructure. This work includes widening streams to improve water flow, enhancing flood storage in parks and stream banks, and upgrading bridges and culverts to handle more water. Buying high-risk properties may be required to enable these projects.
Stream and Waterway Resilience
Collecting catchment-scale data on the condition and sensitivity of natural streams to inform planning, projects, and other Making Space for Water initiatives.
Increased Maintenance
Increasing maintenance of the stormwater system to reduce flooding. This includes clearing blockages, upgrading drainage systems and increasing street sweeping to ensure water can flow away during heavy rain events.
Flood Intelligence
Investing in tools and systems to better predict when and where flooding might occur, enabling improved public warning systems and making data more accessible to the public.
Overland Flow Path Management
Improving stormwater overland flow paths across the region to better manage heavy rain—this includes educating and guiding residents on maintaining flow paths on their properties and fixing issues on public land where water does not flow properly.
Community Flood Resilience
Running public education campaigns to build community flood resilience, working with local organisations on projects to reduce flood risk, and providing targeted advice to those living in high flood-risk areas.
Rural Settlements Infrastructure
Improving stormwater, wastewater, and drinking water infrastructure at key rural sites like marae and community halls and working with Auckland Transport to upgrade road drainage in flood-prone rural areas to help prevent isolation during storms.

Longer-term challenges

The 2023 storms marked a turning point for how stormwater is understood and managed in Auckland. What began as a large-scale recovery effort has evolved into a broader shift, from responding to damage, to actively preparing for how water moves through the city under increasingly demanding conditions. The changes made since 2023, from improved monitoring and modelling to more proactive maintenance and community preparedness, reflect a more connected and practical approach to managing stormwater risk.

At the same time, the pressures on the system have not eased. Periods of heavy rainfall since 2023 have reinforced that these conditions are not isolated, and that infrastructure built to high standards is now being asked to perform more often and in different ways. With decades of urban development behind us, a significant number of Aucklanders live in areas where flood risk will continue to be part of everyday life. This reality shapes not only how the stormwater network is managed, but how planning, investment and preparedness need to evolve over time.

Stormwater systems can reduce impacts, but they cannot eliminate them entirely. Building resilience now depends on a broader, shared effort across infrastructure, land use, communities and individual action. The work underway is an important step forward, but adapting to a wetter future will require ongoing choices about how we live with water, not just how we move it.

Chapter 19
Water and wastewater: from disruption to resilience

Water and wastewater recovery

Auckland's water and wastewater networks underpin public health, environmental protection and daily life. Much of this infrastructure sits out of sight underground, or across valleys and through remote dam catchments – but its reliability is critical to how the city functions.

The major 2023 storms exposed how vulnerable parts of this network could be. Landslips damaged pipelines, pipe bridges and access routes, treatment plants were inundated, and in some areas wastewater and water supply connections were lost altogether.

The storms caused an enormous amount of damage to our networks – particularly to the wastewater network in hilly areas of Auckland in the north and west, and the infrastructure in our western dam catchments.

Prioritising safety and reconnection

Work was carefully prioritised, focusing first on sites where damage posed the greatest immediate concern, particularly where wastewater overflows could affect homes or waterways, or where critical water supply infrastructure was at risk.

Across the region, temporary systems played a critical role in bridging that gap. Wastewater bypasses, pumps and generators were installed to maintain service while more permanent solutions were investigated and designed. On the north shore, nine temporary bypasses supported neighborhoods including Torbay, Castor Bay, Murrays Bay and Bayview after slips damaged local infrastructure. These systems remained in place for extended periods, allowing time to assess ground conditions, confirm alignments and avoid rebuilding in locations that remained vulnerable.

In some areas, restoring normal service was not immediate. In Muriwai, the local water treatment plant was buried by a landslip and surrounding infrastructure damaged. Access routes to the site were not only affected, but unstable and unsafe. While crews worked to make the area safe and restore connection, residents were supplied water delivered by tanker for over 8 months. Given roading damage in the area, this required some complex logistics for the tankers. It was a reminder of the challenges with reaching damaged infrastructure and the practical realities for communities while temporary solutions were in place.

As the emergency response stabilised, the full scale of the recovery task became clearer. More than 200 issues were identified over time, with some damage only emerging months after the storms.

The recovery programme ultimately included more than 222 projects across Auckland, spanning water supply, wastewater networks, treatment plants and dam catchments – with a total investment in the order of $73 million. The work ranged from reconnecting individual properties through to restoring major infrastructure and rebuilding access in remote and difficult terrain.

Building back better

As recovery progressed, the focus shifted from restoring service to improving how the network performs. In some areas, this meant moving infrastructure away from more vulnerable ground or installing it in more stable locations. In others, it involved redesigning parts of the network to better manage flows, reduce maintenance demands or increase capacity.

> **“With our permanent repairs, we’re not just replacing things like-for-like – there’s been a huge amount of planning to ensure our infrastructure is more resilient to extreme weather events in the future.” Construction and delivery manager Johan Gerritsen.**

In central Auckland, for example, damage to a wastewater main beneath the Parnell Rose Gardens led to a different approach at Judges Bay. Rather than rebuilding the pipeline in the same location, a new system was designed to route it around the site. This included a pump station and new pipes, allowing the infrastructure to be installed at more accessible depths while also increasing capacity. The new pump station can process up to 30 litres per second, supporting both current demand and future growth.

A similar shift was seen in the recovery of key water supply assets. At Pukekohe, the treatment plant was not simply rebuilt following flood damage. Instead, critical components were relocated to reduce exposure to flooding, and upgrades were made to strengthen the plant’s overall performance. Once returned to service, it was able to supply up to five million litres of water per day, easing pressure on the wider network and improving system capacity.

Across the programme, these types of changes reflected a broader move away from like-for-like replacement. Recovery created an opportunity to address known constraints, improve operational flexibility and strengthen infrastructure to better withstand future events.

Watercare works in Birkdale

Working in a complex environment

Delivering this work required careful sequencing. Permanent repairs often depended on detailed investigation, design and consenting, particularly in unstable or environmentally sensitive areas. In some cases, work paused until conditions were safe or access could be secured, reflecting the reality that not all sites could be addressed at the same pace.

Even once work began, conditions weren't always on our side. Many sites were prone to landslips or sudden influxes of stormwater, which made them unsafe or difficult to work on, particularly in winter. As a result, construction was often limited to drier summer months, or significantly hampered during wetter periods. To add to this, some sites deteriorated further over time, meaning earlier designs had to be revisited and updated to make sure repairs were still safe and effective.

It's not surprising this work brought together many different skills beyond just engineering. Projects needed to consider the environment, how sites would be restored, and what it meant for local communities.

In places like Penguin Reserve and across Waitākere catchments, work often took place within Significant Ecological Areas. This required additional planning, controls and oversight both before and during construction, to protect sensitive habitats, waterways and vegetation.

Getting long-term solutions in place relied on strong collaboration. This included working with homeowners, as well as council teams across parks, stormwater and transport. These relationships were essential for accessing sites, coordinating timing, and restoring Watercare's infrastructure as efficiently as possible.

Working with property owners took time and care. Access agreements needed to be negotiated, and the process was often supported by contractors on the ground. As conversations progressed, plans sometimes had to change to reflect what was happening on each site. In many cases, homeowners were also dealing with their own repairs, including insurance claims and rebuilding retaining walls. Coordinating their plans alongside public works wasn't always easy, and delays were sometimes unavoidable to make sure everything lined up safely and sustainably.

Moving to permanent fixes

Following the 2023 storms, landslips damaged wastewater infrastructure in Murrays Bay, including areas around Dalmeny Close, Penguin Drive and Bellbird Rise. Temporary bypass systems, pumps and generators were installed to maintain service for affected properties while a permanent solution was developed.

This included a temporary pump and generator behind Dalmeny Close, extensive gravity bypasses behind Penguin Drive, and a temporary connection for a homeowner who had been cut off from the network.

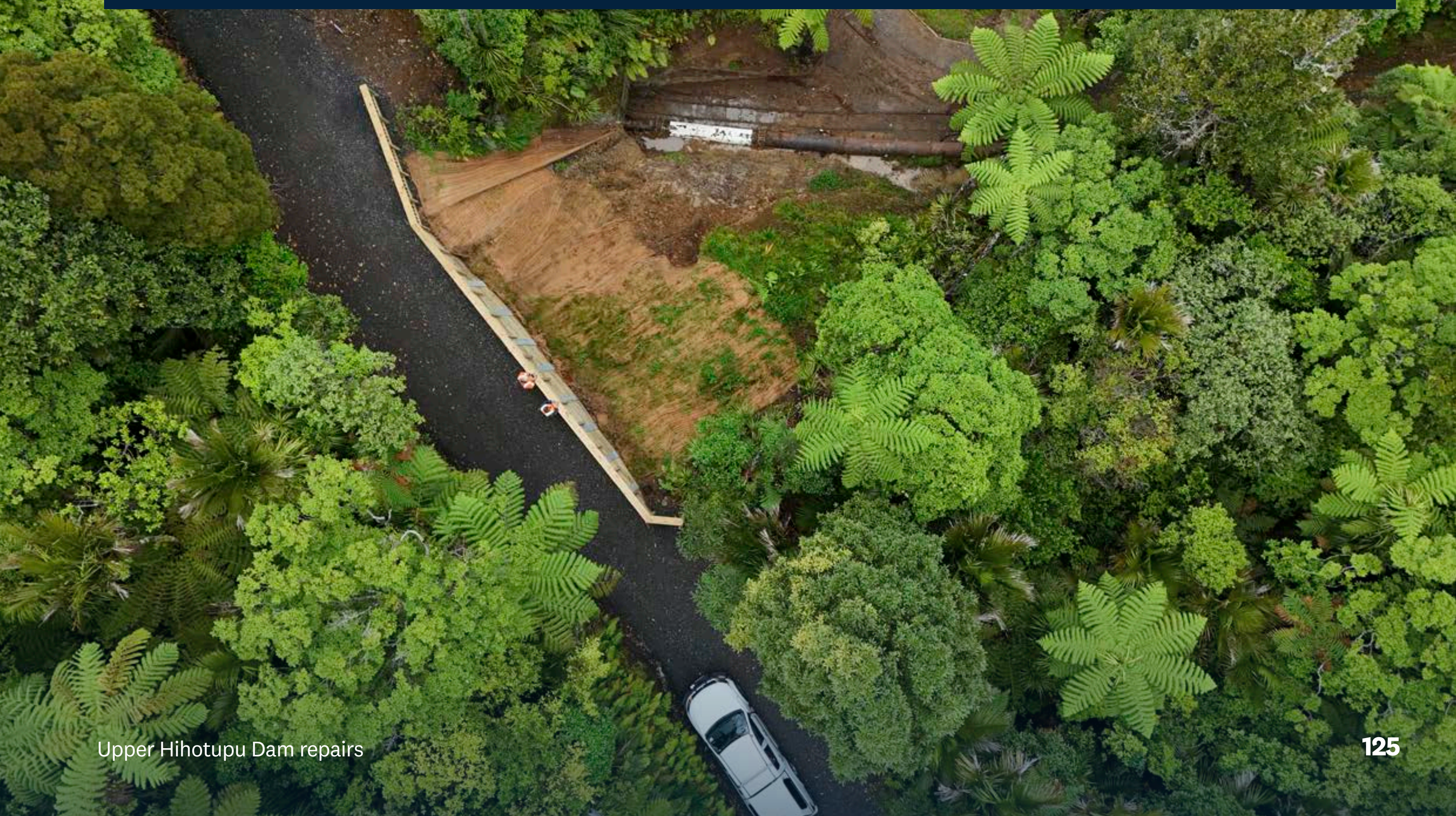
Maintaining these systems was complex. They required ongoing monitoring, power supply and maintenance to ensure wastewater continued to flow safely and to prevent overflows into the surrounding environment. While effective in maintaining service, they were not suitable as a long-term solution and remained in place while ground conditions were assessed and permanent works designed.

At Penguin Reserve, a $1.5 million permanent project was developed to replace the temporary infrastructure. Rather than reinstating the damaged pipes in the same location, the solution involved installing new wastewater pipelines along a revised alignment through the reserve, moving the network away from slip-affected areas and addressing parts of the system that had previously required frequent maintenance.

The final design included two new pipelines, along with a 40 metre connection to permanently reconnect a property to the network. To protect the new infrastructure and reduce environmental impact, the pipelines were installed using horizontal directional drilling and micro-tunnelling. This allowed them to be placed in more stable ground, while avoiding extensive excavation and minimising disruption to surrounding homes and vegetation.

As Penguin Reserve is a significant ecological area, the work required coordination with environmental specialists and council teams to manage impacts carefully. Once complete, the temporary systems were removed and the area restored, including replanting and reinstating walkways damaged during the storms and construction.

This project illustrates how recovery moved from complex temporary servicing arrangements to a more resilient, lower-maintenance and better-aligned long-term solution.



Safely accessing recovery sites

Work in the Waitākere dam catchments illustrates how complex infrastructure recovery can be. These western dams are a critical part of Auckland's water supply, but the storms damaged not only pipes and structures, but also the access needed to reach and maintain them.

Recovery involved clearing slips, rebuilding pipe bridges and culverts, and constructing retaining walls to stabilise terrain. By mid-2024, around 21 slips had been cleared across key accessways, and the number of crews working in the catchments was increased to accelerate progress ahead of winter.

Progress was heavily shaped by site conditions. Rainfall thresholds, land instability and shorter daylight hours limited when work could safely take place, and in some cases work paused over winter while designs for remaining repairs were advanced.

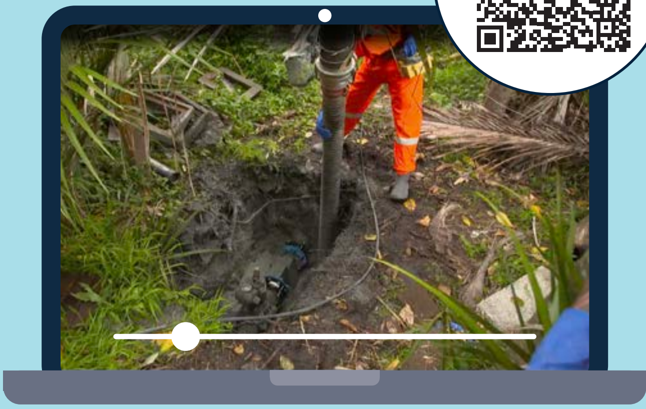
Access constraints also influenced how the work was delivered. Materials and machinery had to be transported into sites by helicopter, including larger aircraft capable of lifting heavier equipment in fewer trips and improving efficiency in remote locations.

By late 2024, most of the major recovery projects in the catchments had been completed, with remaining work focused on restoring access and replacing temporary structural supports.

This work highlights that recovery in these environments is not only about repairing damaged assets. Safe access, stable ground conditions and workable construction windows are just as critical in determining how and when infrastructure can be restored.

Video case study: Restoring water access to Muriwai

Following Cyclone Gabrielle, restoring water supply to Muriwai required rebuilding access to a treatment plant buried by a landslip and repairing damaged pipes and electrical systems. In the meantime, around 200 households relied on water delivered by tanker, highlighting both the challenges of reaching damaged infrastructure and the importance of temporary solutions in supporting communities. The eventual reconnection marked a significant step in restoring reliable service while longer-term solutions continue to be developed.



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A network inseparable from everyday life

The programme restored essential water services across the region, but it also changed how this infrastructure is understood.

Recovery brought into public focus something less visible in day-to-day operations: this network does not sit apart from the city, it runs through it, across private land, alongside transport routes, and within sensitive natural environments.

That reality shaped how the work was delivered. Restoring infrastructure often depended on access to private land, coordination with other recovery works, and navigating environmental and planning requirements. These considerations directly influenced timing, sequencing and design.

Looking ahead, the focus shifts. Resilience will depend not only on the strength of pipes and treatment plants, but on how well the system is set up in advance, to manage land access, align work plans with others, and coordinate between agencies and property owners.

It also means thinking more deliberately about where infrastructure is located, how accessible it is, and how it performs under stress as part of a wider, interdependent system. The recovery programme has already started to reflect this shift. In many locations, infrastructure was relocated, reconfigured or upsized to address storm damage, support future growth, and reduce long-term risk.

When disruption occurs, the ability to respond quickly will depend less on what can be negotiated in the moment, and more on what has already been anticipated, and built into the system over time.

Chapter 20
Parks and facilities recovery

When people think about storm recovery, they tend to picture roads, pipes and floodwalls. But the 2023 storms reached a far wider range of Auckland's assets than most people realise, touching the places where Aucklanders walk, gather, swim, grieve, shelter, borrow books and even launch boats.

Parks and community facilities make up one of the largest and most diverse portfolios in Auckland Council's care – and many of these were affected. That breadth is what made this recovery both quietly significant and complex.

Extent of Damage

Impacts across Auckland included slips and erosion affecting walking tracks, boardwalks, bridges and access roads; flooding of playgrounds, sports fields and halls; and extensive treefall across both urban and regional parkland.

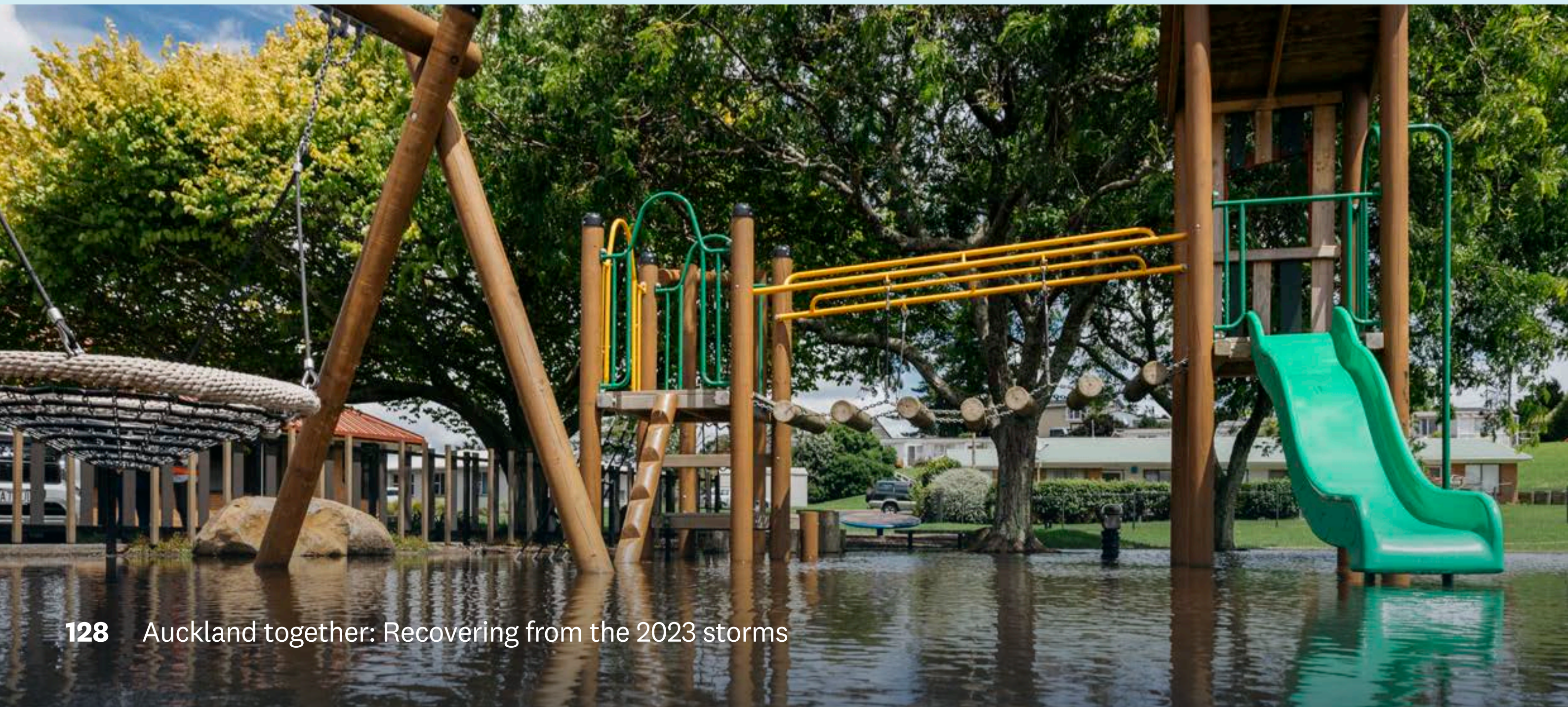
The worst damage occurred where slips and land instability took hold. Across the network, council assessed 476 park track and slip assets, finding damage at many sites including 79 regional park tracks, many with multiple points of damage. The west coast was hardest hit, with steep terrain, exposed coastal environments and saturated soils leading to major slips and prolonged track and park closures.

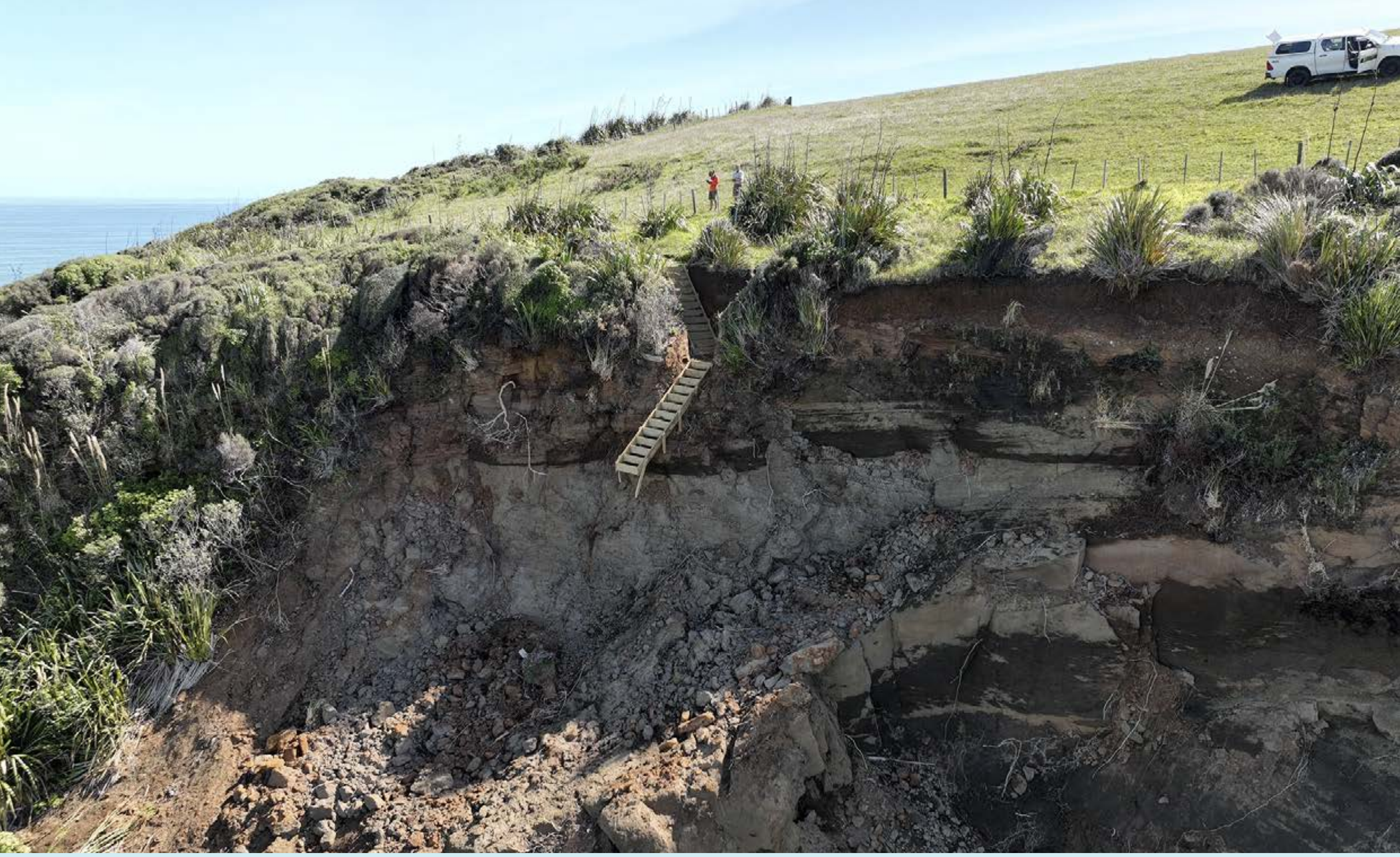
Popular tracks including those through Muriwai Regional Park and the Gannet Colony track faced extended closures due to safety and land instability.

Beyond the parks network, cemetery grounds and structures, retaining walls, access roads and even pontoons also required remediation, alongside rockfall damage at sites including the Parnell Baths.

Libraries, community halls, surf clubs and swimming pools all sustained damage across the region. Roof damage was among the most common issues, affecting buildings from the Blockhouse Bay Library to the Māngere Senior Citizens Hall.

Mechanical equipment including heat pumps, ventilation and air conditioning units were damaged or destroyed at multiple sites, most cases requiring full replacement. Windows, cladding and internal linings were compromised where water ingress occurred. Accessways, paths and car parks were damaged by slips and surface flooding, in some cases cutting off facilities entirely. Electrical systems, including wiring, switchboards and lighting, required fixing at a number of buildings. Even swimming pools weren't immune, with flooding causing extensive damage to equipment that is both critical to operation and costly to replace.





When public parks cross private land

Auckland Council owns and manages thousands of hectares of reserves, parks and public land across the region.

When those slips are close to private properties, the situation can become genuinely hard for the people involved. A slip that starts on public land can affect neighbouring properties, and homeowners in that position often find themselves in uncertain territory. This involves trying to work out what they can do, what their insurance covers, and who is responsible for what. Because the slip didn't originate on their land, standard insurance cover may not extend to protection or resilience work, and the answers aren't always clear or quick in coming.

This is a nationwide challenge for councils, and can be life changing – especially at a time when people are already dealing with the stress of storm damage. The honest reality is that remediating every slip on public land across a region isn't possible, and the cost to ratepayers of trying to do so would be very significant. Like any organisation working with finite resources, council must prioritise, focusing on remediating situations where there are clear public safety risks or where council assets are affected. Where remediation isn't possible in the short term, restricting public access is one way of managing risk in the meantime.

What council will always do is provide information. Where a slip on public land may be affecting a neighbouring property, council will carry out an assessment and share the findings with the owner. Getting independent geotechnical advice is strongly encouraged as a first step for homeowners in this situation, as understanding the specific nature of a slip makes a real difference in knowing what options are available.

The 2023 events made clear how important it is for people to understand landslide risk and what it means for their land. Council has since invested in region-wide landslide susceptibility mapping, so that homeowners, communities and planners have better information about where risks are higher and can make more informed decisions about their land and their future.

Repair and recovery Work

Early recovery focused on restoring safety and managing immediate risks: the clean up of buildings and open spaces, clearing fallen trees, assessing and closing unsafe areas requiring further investigation, and stabilising erosion-prone slopes where possible.

In total, this recovery programme spanned around 500 projects and more than $35 million in expenditure. Urgent make-safe work was funded through day-to-day operating budgets, while the longer recovery programme drew on a combination of council recovery funding and Local Board contributions.

Because parks recovery was not included in the Crown-Council co-funding agreement the entire programme had to be absorbed within existing budgets, with some planned maintenance and renewal projects deferred to make room for urgent storm work.

That constraint eased in 2025 when additional funding approved by the Governing Body enabled geotechnical assessments to be brought forward, accelerating the reopening of tracks that would otherwise have waited considerably longer. However, the spend still had to happen over a number of years.

Where possible, we did not simply repair what had been damaged. Tracks were realigned to safer paths, retaining structures rebuilt and drainage improved with future climate risk in mind, so they would hold up more effectively when the next big weather event hits. At community facilities, planned maintenance and strengthening work was brought forward and done alongside repairs so buildings came back in better shape than they went in. At West Wave, that meant a full electrical rewire, new heating systems and seismic strengthening all done at once, rather than patching the storm damage and leaving everything else for another day.

> **“It’s important to focus on more than just reopening tracks,” says Regional Parks Manager Scott De Silva. “People love getting out and about in these special places and our role is to ensure their experience is a great one. As part of that, we provide tracks that are safe and able to withstand significant weather events.”**

Recovery teams also had to work around the rhythms of how Aucklanders actually use these places. Seasonal demand shaped decision-making throughout, with staff working to restore access where possible, during the busy summer months when parks and tracks see their heaviest use, then pushing through the harder, wetter work of winter when visitor numbers drop. The Muriwai Gannet Colony track is a good example: it was partially reopened during the nesting season so people could still witness one of Auckland’s most spectacular natural events, then closed again once the season ended to allow work to continue. It was a pattern repeated in different ways across the network, a genuine effort to keep access open at the times that mattered most to people, even when full reopening wasn’t yet possible.

Some of Auckland’s community facilities carry a role beyond everyday recreation and services. During major emergencies they become response hubs, places where affected residents can find shelter, information and support – even when they are not owned by council. The Muriwai Surf Club was stood up as a local evacuation centre for over 200 people on 14 February during Cyclone Gabrielle, only to be evacuated after midnight when flooding knocked out power, water and wastewater.

The Mairangi Bay Surf Lifesaving Club was flooded and forced to relocate, yet still rescued 69 people that day. The North Shore Events Centre flooded before officials were even able to open its doors to affected locals. In both cases, the same storms that drove people toward these facilities also made them unable to serve. It is a vulnerability that recovery planning has since taken seriously. The 2023 storms were a reminder of the importance of ensuring these public places are resilient and ready for anything.

West Wave Pool and Leisure Centre

West Wave in Henderson is New Zealand's largest aquatic centre, built for the 1990 Commonwealth Games and woven into the fabric of west Auckland life. On any normal day, around 800 people come through its doors. People manage injuries, illnesses and the general grind of life with a regular lane or a splash in the leisure pool.

On 27 January 2023, floodwater didn't come in through the front doors as people might have imagined. It reversed back through the stormwater drain, pushed in from two directions by the Waikumete and Opanuku streams, which hem the site on both sides – and had never breached their banks before. By the time staff realised what was happening, 250,000 litres of brown river water had poured into the basement plant rooms. It took four days to pump out. Then Cyclone Gabrielle hit, and it happened again.

The next morning, people showed up at the doors wanting to swim. They couldn't see the problem from outside. The damage was entirely underground.

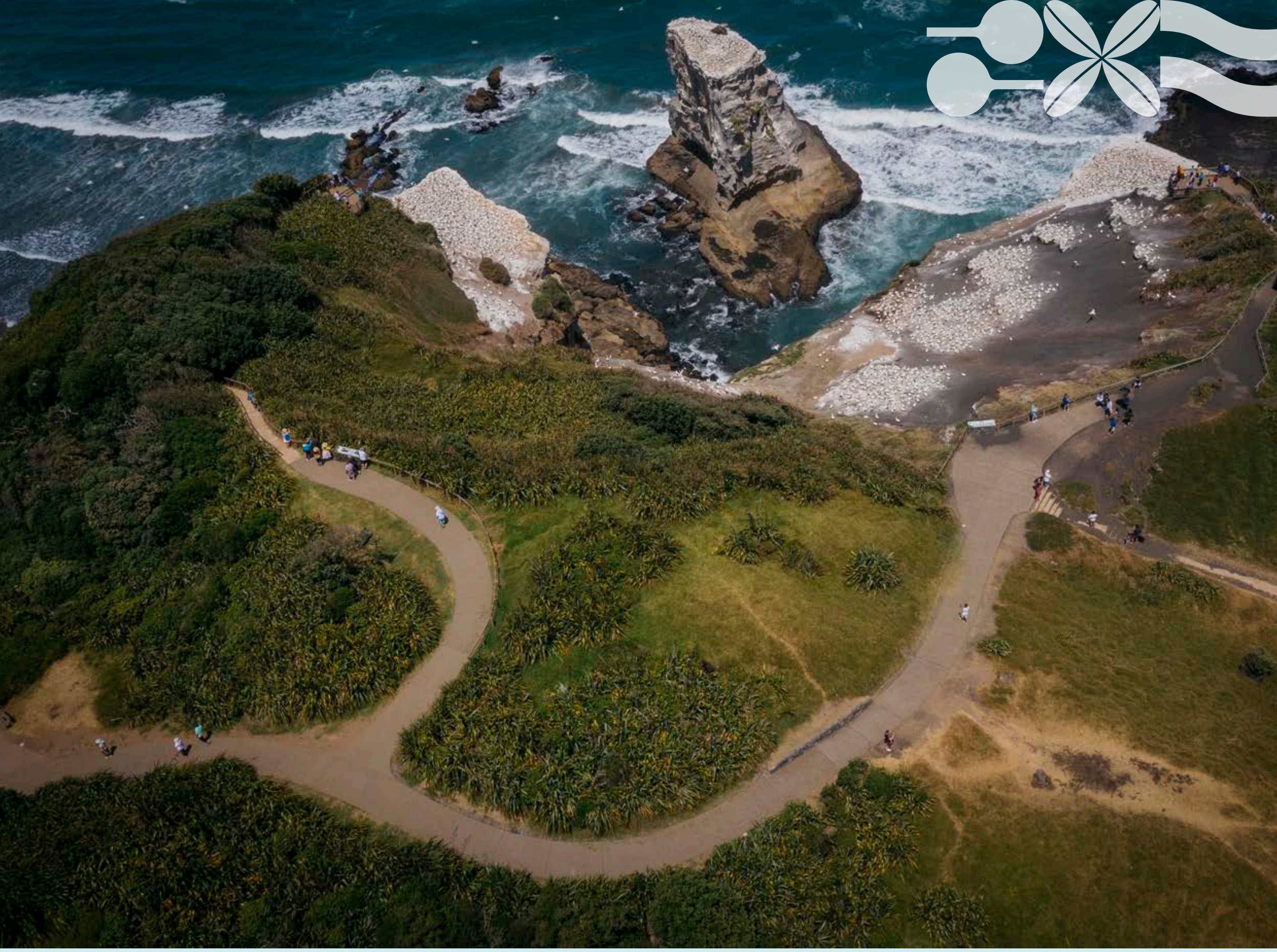
Everything electrical had been destroyed: distribution boards, variable speed drives, pump controls. Much of the equipment was bespoke, some of it decades old, requiring parts sourced from overseas with lead times of months.

The recovery was complex, but the team moved fast and thought ahead. Rather than simply repairing the damage and reopening, they used the enforced closure to bring forward a raft of capital and seismic works that would otherwise have required future closures anyway. Flooring was replaced that was due for attention. Structural columns were strengthened. A $1.2 million seismic programme was rescheduled and completed while the pools were already down. The wastewater system was redesigned so the same reversal could not happen again.

The Henderson-Massey Local Board contributed $750,000 to fast-track the work alongside the insurance settlement. Board Chair Chris Carter said that despite tight budgets, the board prioritised getting West Wave sorted, and was proud of what had been achieved.

West Wave reopened in October 2023, in time for summer. What had been a catastrophic and disorienting closure became, in the end, a facility that came back better than it went in: more resilient, more future-proof, and ready for the next big weather event in a way it simply wasn't before.

Photo by Luke Harvey



Looking ahead

The vast majority of the regional tracks network has been restored, but recovery work continues at the most complex sites. These are places with significant damage, where ongoing instability, difficult terrain or funding requirements mean the work cannot simply be finished and signed off. These sites are being actively monitored, with next steps determined as assessments progress and resources allow. Some may ultimately be decommissioned rather than repaired, with local boards to decide outcomes.

The recovery has also informed a more resilient approach to managing parks and facilities going forward. This includes including embedding climate adaptation into renewals and upgrades, greater use of parks and open spaces as green infrastructure to manage stormwater and reduce flood risk, and adaptive design and maintenance approaches that respond to increasing climate risk.

While recovery across Auckland's parks and facilities has received less public visibility than large infrastructure projects, it has played a critical role in Auckland's recovery. Parks and community facilities are part of how people recover, they are where routines return, connections are rebuilt and wellbeing is supported. Restoring access has required tough decisions across safety, site conditions and constrained budgets, but the focus has always been on bringing people back into safe, resilient spaces.

Chapter 21

House removals programme

Behind every Category 3 buyout is a home that, in most cases, eventually has to go. Over a thousand properties across Tāmaki Makaurau, on land ranging from coastal cliffs to steep bush gullies to suburban streets, are expected to be removed by mid-2027.

Auckland Council made a deliberate choice from the outset of the removals programme to treat these dwellings as a resource, avoiding the wholesale demolition of houses that could go on to be a home for other whānau or could have their materials reused.

A different approach to demolition

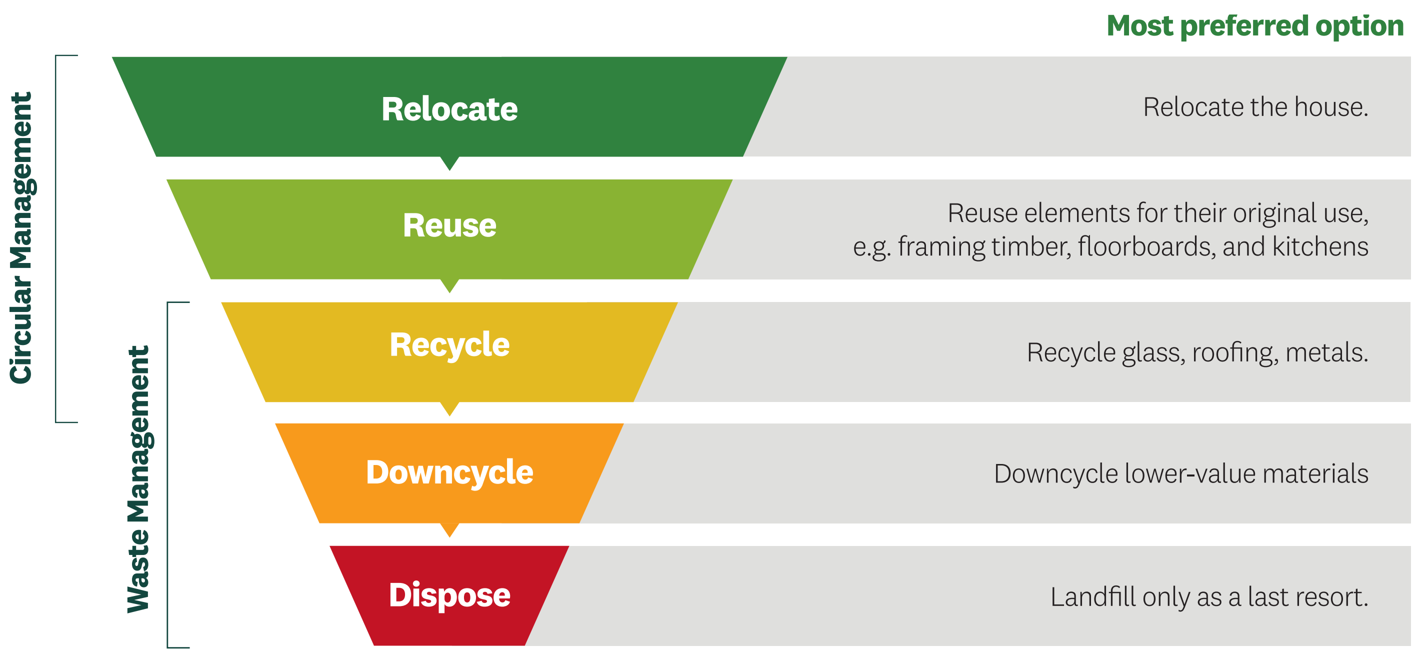
Since 2022, Auckland Council policy has prioritised deconstruction of council-owned buildings as a first option, rather than demolition, in line with the Waste Minimisation and Management Plan and the goal of zero waste to landfill by 2040.

Around 30 to 40 per cent of waste going to Auckland's landfill comes from construction and demolition waste.

Auckland Council's ambition is a circular economy where materials are recovered, reused and recycled rather than discarded. The home removal programme was an opportunity for Auckland Council to put that ambition into practice on a large scale.

Lessons from the Christchurch earthquake recovery informed the approach, and two specialist project managers were appointed to the programme with expertise in the circular economy and sustainability to ensure that the pressures of delivering at pace didn't push contractors to the quickest and cheapest solution of demolition.

A recovery hierarchy was established to guide every removal decision. Wherever possible, the house would be relocated to another location. If that wasn't possible, houses would be deconstructed so materials could be reused for their original purpose, such as window frames, roofing and metals. Only as a last resort would materials from deconstruction or demolition go to landfill.




Karekare home removal

Eleven contractors were selected for a dedicated deconstruction panel, chosen for their experience and their willingness to work within the programme's sustainability framework.

The University of Auckland's architecture department has been working with the programme, using the data and insights gathered to inform how the building industry designs and constructs homes in the future.

Getting the work done

Category 3 homes entered the removal programme when Auckland Council took ownership following settlement.

The programme set ambitious targets to remove 400 homes annually, with 30% of those homes relocated to new sites intact rather than deconstructed. The relocation target in particular was a stretch.

"Typically, if you're achieving 5-10 per cent relocations you're doing well," says Kris Bird, Home Removal Programme Manager.

By September 2025, the programme had exceeded that ambition, seeing more than 30% of homes successfully relocated.

Relocated homes are auctioned online to a panel of more than 30 registered companies specialising in relocating and on-selling houses. Typically offers are received on around half the homes put to auction, and in one case a single lot of 30 houses returned $600,000. Relocated homes have since provided housing for whānau in Northland, the Bay of Plenty and Taranaki.

The industry has proven more innovative than many expected. Companies are now relocating houses on concrete slabs, lifting them off their foundations, building new floors underneath, and locating them elsewhere. In the most complex cases, houses have been cut into multiple sections, including one instance in rural Rodney where a large house was divided into nine pieces and moved down the road in sections. Railway crossings have been created temporarily to allow houses to be moved where narrow driveways and rural roads prevented practical access.

Approximately **25%** houses relocated

Approximately **20%** of recoverable material being reused

Approximately **40%** of recoverable material being recycled

<20% waste ending up in landfill

Data at 10 June 2026

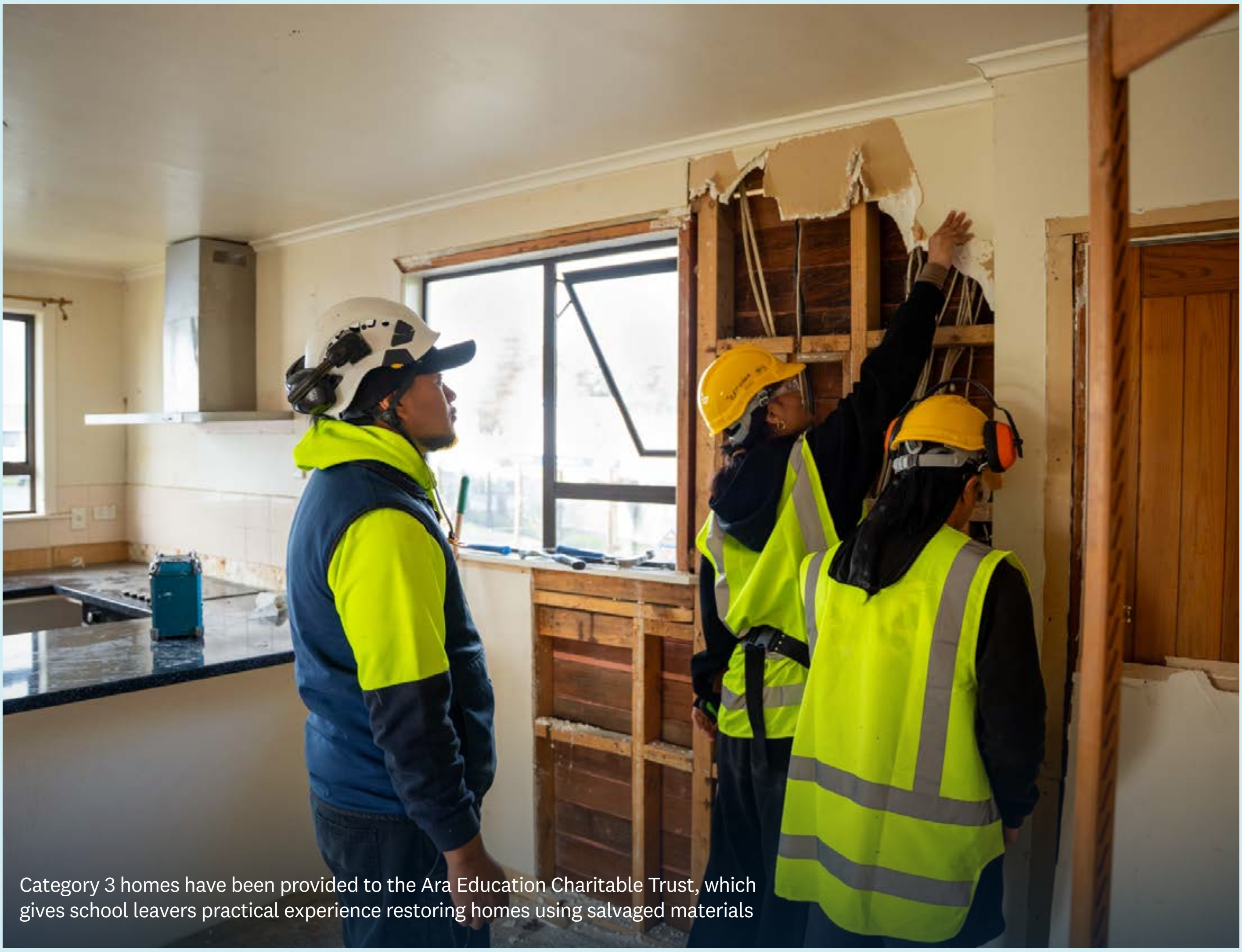
For homes that cannot be relocated, deconstruction followed a Resource Recovery Schedule, which is a detailed plan completed at the start of each property project. It lists every individual house element and estimates what could be reused. The schedule provided a starting point for project managers to negotiate with contractors on what could be recovered and to identify pathways for salvaged materials.

Auckland Council's network of Community Recycling Centres, established before the 2023 storms, provided a ready destination for deconstructed materials such as sinks, windows, timber and more, and through the CRCs these items became available for community reuse.

The centres have since been expanded to absorb the increased volume of materials from the recovery programme. In Helensville, the community recycling centre has been crafting tiny homes from salvaged timber. In other areas, schools and training groups in other areas have been using materials to teach rangitahi (youth) construction skills.

Native timbers recovered from deconstructed homes are treated as a finite and valuable resource. Some contractors working on the programme have established relationships with communities in Tonga and Samoa, and materials have been packed into containers for reuse in the Pacific Islands.

The council's home removal programme was awarded the Excellence in Resource Recovery award at the WasteMINZ + ALGA Awards for Excellence 2026, recognising the outstanding results to divert more than 80 per cent of material from landfill.



Category 3 homes have been provided to the Ara Education Charitable Trust, which gives school leavers practical experience restoring homes using salvaged materials

Supporting Pacific and Māori opportunties

Auckland Council's commitment to supporting diverse Māori-and-Pasifika owned businesses (registered with amotai.nz) is reflected in the Home Removal Deconstruction Panel where 33 per cent are Amotai registered. This panel has meant Amotai suppliers have been able to grow as enterprises and secure direct awards.

For Rocky Haddon, owner of Clear Site, becoming Amotai-registered and joining the Deconstruction Panel opened new doors. "As well as locally where possible, we've started donating deconstructed materials up north, trying to share the benefits with iwi."

Many of these organisations are also connecting recovered materials with skills and training opportunities for rangatahi (youth). Awataha Marae's vision is to develop a Northcote-based initiative where young people learn construction and renovation skills using reclaimed housing materials, while also helping whānau into homes.

Similar partnerships are emerging beyond Auckland, such as in Ōpōtiki, where Māori-owned Amotai-registered businesses like Waiariki Enterprises are already relocating homes and building papakāinga housing on iwi-owned land.

Rocky from Clearsite sees enormous potential for the sector if the council and iwi can partner to create training and employment pathways for rangatahi.

Kris Bird, Home Removal Programme Manager and Saia Latu, Founder of TROW Group

> **"I'm hopeful we can create even more jobs, skills, and homes from what would otherwise go to waste."**

Jamal from OZW notes that sustaining a consistent pipeline of work remains a challenge. "The approach takes time, care, and skilled workers. You can't do this with a digger." However, he remains optimistic. He believes that as awareness grows, so too will the opportunities that prioritise both environmental and social outcomes.

From young people learning trades through Māori-led initiatives, to contractors like OZW and Clear Site creating local jobs and distributing materials to communities, the ripple effects are already being felt.

The human side of removal

Alongside the logistics and the sustainability ambition, the programme had to navigate the grief of homeowners watching their homes taken apart.

Before any work began on a property, liaison managers informed immediate neighbours, consulted relevant stakeholders, and offered former owners the chance to say goodbye to their homes. Requests for sentimental items such as custom-made fittings, stained glass windows or timber door framing where children's heights had been marked over the years have been accommodated wherever possible. In some locations, karakia (prayers) were held to recognise the loss felt by whānau.

Residents at the unveiling of *Pou Hirihiri* in Muriwai. The sculpture was made from materials salvaged from local Category 3 homes.

From loss to memorial: Pou Hirihiri

In Muriwai, where more than 60 homes needed to be removed from severely landslide-affected land, whānau were given a small window of time to safely retrieve special belongings before work began. The community had lost not just houses but neighbours, familiar streets and the shape of a place they had known for years.

“When you’re confronted with your house of, say, 30 years being deconstructed… you’re back there living it all over again,” said one Muriwai resident.

From the materials of those deconstructed Muriwai homes, a memorial emerged. Recycled roofing, tiles, bricks and kitchen sinks were used to create *Pou Hirihiri*, a sculpture commemorating the impact of Cyclone Gabrielle on Muriwai, designed by renowned artist Jeff Thomson in collaboration with the community. Many residents recognised parts of their own homes in the finished work.

“Using material from the deconstructed homes gives it a real connection to the event that led to their destruction,” says Clare Bradley, chair of the Muriwai Community Association. “It serves as a strong reminder that this has happened in our community, so the events of 13 February 2023 will not be forgotten.”

Muriwai unveiling

A home being deconstructed in Milford

The complexity of mass removals

The removals programme was ambitious in its design, and several challenges have made the work harder and more expensive than originally anticipated.

The increased cost of the programme has been significant. Early estimates for the removal programme were based on an assumed 700 properties at an average cost of $53,000 per site for removal and remediation. However, the final picture is considerably different, having around 1100 properties with average costs of around $58,000 per site.

Asbestos was a major contributor to both cost and delay. Found in almost half of all properties assessed, it must be removed and disposed of safely before physical work could begin, with a clearance certificate from a licensed assessor required at each site.

"Asbestos has been a significant issue. But keeping our staff, contractors and community safe from asbestos is paramount," says Kris Bird.

Polystyrene has commonly been found beneath concrete slabs and created similar complications. Polystyrene is a contaminant that had to be removed before concrete could be crushed and reused and in one case, its removal from a 230 square metre house cost $46,000.

Scheduling was complicated by the nature of the programme itself. Category 3 properties were spread across the entire region and came into council ownership at different times as settlements were completed.

"Not having a complete picture of what we were up against, being drip fed even after starting the programme, is a challenge," says Kris Bird. "Long and varied settlement times significantly lessen our ability to combine removals by area, which means we can't get the best cost efficiencies."

Clustering removals geographically to reduce travel time for crews and improve efficiency was an goal that the staggered settlement timeline made difficult to achieve.

Security was a persistent problem as empty properties attracted vandalism, theft of interior fittings and copper wire, and squatting. At the programme's peak, roughly every second house was being broken into. In one case, a group smashed all the windows of a house scheduled for relocation, making the move uneconomic and forcing deconstruction instead.

The impact on surrounding neighbours that were still living in the street and trying to recover was profound. Boarded-up, vandalised homes were a daily reminder of what had happened and an obstacle to the sense of progress that communities needed. Solutions included security patrols, CCTV on high-value properties, neighbourhood watch arrangements and prioritising faster removals in the most affected areas.

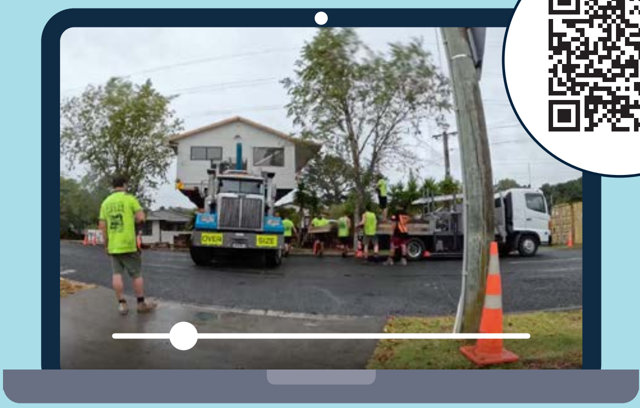
Maintaining vacant properties between settlement and removal also required ongoing attention. Before settlement, owners remained responsible for upkeep, but some left their home following the storms and never returned. After settlement, Auckland Council provides basic maintenance of visible areas like front yards and berms but had to balance the cost of upkeep on ratepayers against the very expectations of remaining neighbours.

Some of the most technically demanding removals were on steep, unstable or ecologically constrained land. On some sites, remote-controlled machinery was required due to difficult terrain. Others involved lifting houses over power lines or, in one case, transporting a house in three sections across a railway line and onto State Highway 16 via a temporary ramp.

Video: Turning devastation into new life

Figuring out what to do with over 1000 homes in high-risk situation was a challenge. The resulting home removal programme is one of a kind, focusing on reuse wherever possible and generating lessons, tools and frameworks that will encourage reuse practice across the wider industry.

Watch now or scan the QR code




Home in Rānui ready for removal

Titirangi presented the greatest concentration of difficulties, combining houses on cliff edges with the requirements of operating in sensitive ecological areas. This meant protected trees could not be trimmed to improve access, and kauri dieback protocols required smaller machinery and hand methods throughout the deconstruction or removal.

Properties in Special Character Areas in central suburbs required additional consents and permissions before work could begin.

Multi-unit and cross-lease properties added another layer of complexity. Where only some units in a complex were Category 3, removals require written permissions from adjoining owners and careful management of shared structures such as retaining walls.

The home removal programme is ongoing, with work expected to continue through 2027. The programme has shown that large-scale removal of storm-damaged homes can be done in a way that recovers value and keeps materials out of landfill, but only if that ambition is set clearly with an understanding of the trade-offs required, such as cost and speed.

“This is just the beginning,” says Cherri Davidson, one of Auckland Council’s deconstruction liaisons. “We’re showing that recovery can be regenerative, for people, for the planet, and for Auckland’s future.”

Chapter 22
The legacy of Auckland's recovery

The 2023 severe weather events tested Auckland in ways that had not been experienced before. The recovery that followed required decisions to be made quickly, often with incomplete information, and at a scale that stretched existing systems. That experience has left a mark on Auckland and will change how many things are done in the future.

This chapter focuses on those changes and looks at how recovery has increased capability within council, how partnerships have been formed and strengthened, and how understanding of risk has improved. It also reflects the lessons about supporting people through recovery, and the role of risk reduction in shaping future outcomes.

Taken together, this knowledge will provide a different and better starting point for Auckland's next recovery.

Capturing the lessons from 2023

The Tāmaki Makaurau Recovery Lessons Programme was established to ensure that people's experiences and insights gained through recovery from the 2023 weather events are applied to future recoveries.

The programme was guided by the purpose of capturing and sharing the lessons of 2023, strengthening the wider recovery system, and building recovery capability within Auckland Council, alongside partners and stakeholders.

It drew on existing practice in recovery lessons management, both nationally[1] and internationally[2], recognising that effective recovery depends on learning systematically from experience. Central to this was the Observations, Insights, Lessons Identified, and

Transitioning from recovery to business as usual

The Tāmaki Makaurau Recovery Plan sets out the requirement for an exit / transition to business-as-usual (BAU) plan so long-term recovery functions continue without losing momentum. The transition plan moves delivery, monitoring and community support into existing council departments and partner agencies, and provide oversight for outstanding 2023 activities until they are complete.

A small, dedicated recovery team has been established within Auckland Emergency Management to provide ongoing recovery capability after the Recovery Office closes at the end of June 2026. This is one of the practical legacies of 2023, and an acknowledgement that events like these are likely to be more frequent in the future.

This is the house before it was relocated to Pipiwai

Lessons Learned (OILL) methodology developed by the Australian Institute for Disaster Resilience. This approach was tailored to provide a structured and credible means of turning a large volume of qualitative information from Auckland's recovery into trusted insights and clear recommendations.

Data collection was undertaken in stages, beginning with scoping the programme of work in February 2025 through to product development and programme delivery in June 2026. Observations were gathered through interviews, workshops, debriefs, and surveys, focusing on what worked, what did not, what occurred, and why it mattered. These observations were validated with participants, coded into themes, and developed into insights by identifying consistent patterns across multiple sources, ensuring findings were grounded in evidence and experience rather than anecdote. Insights were then tested with subject matter experts and business owners before being shaped into lessons and recommendations.

This work was reinforced by deeper, area-specific analysis. Community and social recovery combined internal insights with community and whānau voice and external evidence, while Auckland Transport undertook a structured review that logged and analysed hundreds of insights that informed the programme.

This Category 3 house was relocated home from Auckland and has found a new future with the Daniels family in Pipiwai. Work is underway to bring it back to its former glory.

The programme produced a large evidence base that informed key outputs, including a recovery toolkit and recommendations papers. It captures operational experience and turns it into practical and strategic lessons to strengthen Auckland's preparedness for future recoveries.

[1] Wellington Regional Emergency Management Office (WREMO), National Emergency Management Agency, Strategic Planning for Recovery Director's Guideline [DGL 20/17]

[2] Monash University, Fire to Flourish, Australian Institute for Disaster Resilience, *Lessons Management Handbook* (AIDR, 2019)

Building recovery capability for the future

If another event happened tomorrow and a large recovery was needed, Auckland wouldn't be starting from the same place it was in 2023.

When the 2023 extreme weather hit our region, Auckland Council had limited recovery capability to draw on. The Recovery Office was stood up quickly and built as the work unfolded, and systems, processes and roles were put in place at the same time affected Aucklanders needed them. It was a significant undertaking under pressure and that experience has prompted a deliberate shift in the council.

Auckland Council has made a commitment to building and sustaining recovery capability over time. A permanent recovery team is now established within Auckland Emergency Management (AEM) to prepare for recovery by planning, increasing organisational capability, and ensuring lessons from 2023 are embedded into council systems. This recognises that recovery cannot start from scratch once an event occurs, and that the effectiveness of recovery will depend on work done beforehand.

The new team will lead smaller recovery efforts directly and support larger ones as they arise, and this work is now embedded in AEM's day-to-day programme and the Auckland Civil Defence and Emergency Management Group Plan.

The experience of the last three years also lives on in kaimahi (staff) across different parts of the council, as well as in external organisations that supported the recovery programme. People who worked through the 2023 recovery carry practical knowledge of how decisions were made under pressure, what worked and

Video showcase: Growing new life-saving connections

When floodwaters cut off the rural community of Ahuroa in the early hours of January 2023, local volunteer first responders answered the call, reaching a resident in the middle of a medical emergency when no ambulance could get through. This short film follows what happened next: how that night became a turning point for the community, how two sons joined the volunteer fire brigade inspired by what they witnessed, and how neighbours who barely knew each other began building something more connected and more prepared for whatever comes next.

Watch now or scan the QR code

what could be done better. Many of the council's teams and technical firms now have staff with real experience of working in large scale recovery delivery and with storm-affected communities. Proactive sharing of lessons with the engineering sector through conferences and technical papers has provided further opportunities to share Auckland's experiences.

Auckland's experience will help other regions with their recovery preparation. The size and scale of Auckland's programme meant many tools and resources have been developed, and these are being shared with recovery practitioners from around the country, contributing to an overall lift in New Zealand's recovery capability and capacity.

While every future recovery will be different based on the type and scale of the disaster, the knowledge carried forward from this recovery experience means the council is better prepared to support Aucklanders to recover in the future.

Adapting Together Aotearoa

Adapting Together, the programme delivered by Leadership New Zealand on behalf of the Recovery Office, assembled a cohort of Auckland's local community leaders to strengthen their expertise in recovery and resilience, connection and collective purpose.

The programme has enabled regional recovery capability built on shared experience, genuine relationships and a first-hand understanding of what recovery asks of people.

The cohort members have expressed their commitment to remembering the 2023 events, the people who were affected by them and what's needed in communities when events hit. Leaders have signalled a strong commitment to working together – taking the new name of 'Adapting Together Aotearoa' which focuses on empowering communities impacted by events.

Auckland Council will continue working alongside the cohort, and support them to walk alongside future local leaders in the next event to offer the kind of grounded, human support that council can't provide on its own.

The recovery has opened a genuine conversation with these leaders about how decisions get made and whose needs are visible when they do. The goal is to maintain ongoing, two-way communication through people who understand the constraints on both sides and are committed to working through them.

There is an opportunity to be more intentional about how council supports communities to lead their own recovery, building on the relationships and knowledge built through this recovery.

A stronger understanding of risk

The recovery has left Auckland with a clearer and more detailed understanding of where risk sits across the region.

The categorisation process and technical investigations created a large body of new data. Flood modelling, landslide susceptibility assessments and on the ground observations from the storms have strengthened the evidence base with information that was not available before 2023.

That information is now being used in planning work, including changes to the Auckland Unitary Plan (specifically Plan Change 120) and is shaping how decisions are made about land use, infrastructure and development.

It has also improved how risk is communicated to Aucklanders. The Flood Viewer has been updated to make it easier to use, and landslide susceptibility maps have been developed and made more accessible to the public.

At the same time, public awareness of hazards has improved and the experience of the storms has made risk seem more immediate.

People have seen what happens in their own streets and communities in a disaster, and many are now actively seeking information about hazards. This has been reinforced by wider conversations in the media about insurance, lending and the long term impacts of more frequent and severe weather events. There is also a greater recognition that managing risks from natural hazards is a shared responsibility, with communities more focussed on being prepared for another disaster.

Beyond recovery there will be an ongoing effort to make risk information clearer and more accessible, which is a critical part of how Aucklanders prepare forwhat comes next.

Reducing risk across the region

One of the most visible outcomes of the recovery has been the permanent removal of risk at properties assessed as having intolerable risk to life.

More than 1150 households have been supported to move out of homes where the risk to life could not be reasonably managed and over a hundred more received financial support to mitigate the risk at their properties. In many cases, these were properties that had already flooded or experienced landslips multiple times.

The decision to buyout or mitigate high-risk dwellings has permanently changed the pattern of risk across the city and reduces the likelihood of repeated damage and the number of people exposed to it.

The buyout programme also created opportunity for other risk reduction measures. Two of the blue-green projects prioritised through the recovery programme – Ngā Wairau (Wairau Valley) and Manawa aa Whenua (Rānui) – will repurpose land that held Category 3 homes and allow community regeneration, though this will take time. This will significantly reduce the flood risk for hundreds of households that remain in these areas.

Better preparedness for future events

Auckland Emergency Management has made significant steps to enhance emergency preparedness and response capabilities since 2023. An improvement programme has implemented 51 recommendations that came from the three external reviews into Auckland's response to the severe weather events.

Improvements include an increased level of staffing and training, development of detailed guidance for staff and elected members for use in a response, a schedule of regular exercises to test processes and capability, and increased staff to work directly with communities on their local readiness.

Additional council operated Civil Defence Centres across Auckland have been identified to increase the number and geographical spread of potential centres available during an emergency.

"Since the 2023 floods, Auckland Council has made significant steps towards setting up a well-functioning emergency response system, in line with review recommendations," says Andrew McConnell, Deputy Auditor General

In addition, 21 local emergency readiness and response plans have been developed by Auckland Emergency Management in collaboration with local boards and the community. The plans offer advice and information about local hazards, how to prepare for emergencies and what to do during an emergency.

Building enduring partnerships

The recovery has strengthened how Auckland Council works with communities. It also made it clear that relationships are difficult to build when under pressure. Where trusted partnerships already existed, recovery work moved faster and reached further.

The Recovery Office recognised the value of relationships early and resourced them accordingly. Partners sat alongside council staff in decision making forums and in the day to day work on the ground. This meant many decisions were shaped by both technical expertise and community knowledge.

The Navigation Service provides a practical example of how this worked. Iwi and community organisations were delivering services and were also part of the governance group guiding the service. This created shared accountability and has been recognised as a model to use in future recovery efforts.

Receiving advice from partners demonstrated the value of these relationships. A proposed door knocking approach to reach affected households in Mount Roskill/Wesley was reshaped following advice from New Settlers Family and Community Trust (NFACT). They told us that being approached at home could be intimidating for some migrant and refugee communities, reflecting past experiences in other countries. With that advice, the Recovery Office worked through local leaders and faith groups instead which opened access to the community in ways that formal approaches could not. This meant the recovery effort was able to reach people who would otherwise have not engaged.

There is now a clearer expectation that these relationships continue beyond recovery. They require ongoing investment and support, with opportunities for communities to participate in decision making before a crisis occurs.

Understanding trauma in recovery work

Recovery work often involved engaging with people at some of the most difficult periods of their lives. The recovery brought a clearer understanding of what it means to work alongside Aucklanders who have experienced trauma, and what that requires from those delivering the work.

Over time, trauma informed practice became part of the way the work was done and influenced how conversations were approached and how information was shared. Working in a trauma-informed way meant ensuring kaimahi understood whānau or community context before engaging to minimise the risk of affected people being retraumatised by having to repeat their story, and creating safe and empowered engagement processes and approaches. Working in a trauma-informed way meant ensuring kaimahi understood whānau or community context before engaging, to reduce the risk of retraumatising people by asking them to repeat their story, and to create safe, empowering engagement approaches.

Kaimahi Ora – looking after our people

Kaimahi (staff) were working over long periods, hearing stories of loss, uncertainty and disruption as situations unfolded. Kaimahi carried the weight of that trauma with them.

This wasn't limited to navigators or those in community roles. Assessors, engineers and other technical staff were also working in the field where people that had been deeply affected. They were making decisions about homes and land while hearing what those places meant to people. Many had to adapt how they worked, learning how to hold more difficult conversations alongside their technical responsibilities.

These experiences have changed expectations for future recovery work. It's recognised that wellbeing support for kaimahi, elected members and contractors needs to be in place from the outset, with dedicated training, supervision and space to process what they are dealing with.

The future of storm affected land

The removal of Category 3 homes from storm affected land closed one chapter of recovery and opened another. Once people had moved on, the focus shifted to what these places should become, and how the land could be managed in ways that reduce future risk and deliver value to Auckland.

How this land is treated next matters for nearby communities and the region's resilience in a changing climate. Auckland Council has made a deliberate choice to take time making these decisions. The pressure to repurpose land quickly is understandable but moving too fast risks repeating mistakes of earlier times when development advanced without fully accounting for hazards. The council is pausing to assess options and consider how land use decisions made now will shape outcomes for generations, guided by the council's Future Land Use Policy.

Category 3 land varies in size, location and risk. Some land will not be built on and will provide open space for flood water, so risk is reduced for remaining homes. In some cases, land will be sold as green space to neighbours, while other land may support limited, carefully considered redevelopment and regeneration over time.

Resolving cross-lease and unit title sites, referred to as shared ownership sites, is a priority so certainty can be given to other owners at these properties. Until ownership arrangements are resolved, options for these properties are limited and future planning is constrained.

For communities, storm affected land is a daily reminder of the storms that tore through their streets. In places like Muriwai and Milford, entire neighbourhoods changed almost overnight. The land holds memory, and future use needs to balance technical and financial considerations with the experience of those who remain.

For council, this land is now considered part of a wider system where its use connects to infrastructure planning, stormwater catchment management, emergency response, and climate adaptation. Keeping floodplains and flow paths clear, restoring vegetation, and allowing land to function as part of natural systems can reduce pressure elsewhere. Over time, these approaches will help Tāmaki Makaurau cope with future extreme events, making our region safer and more resilient.

Key lessons for future recovery

Auckland's recovery has highlighted where changes are needed to better prepare for future events and improve how recovery is delivered.

Together, these lessons point to a shift from reacting to events as they happen, toward being better prepared, more coordinated, and more deliberate about how recovery supports long-term resilience. There are several improvements we will be making within the council, to ensure our people, systems and processes are ready to support future recoveries. There are also much wider strategic changes that will help.

Reducing risk before events happen

A consistent theme is the need for more effort and investment into reducing risk ahead of time.

This includes prioritising resilience in infrastructure planning and funding, so assets are maintained and upgraded to better withstand future events. Auckland's experience has shown how costly it is to repair infrastructure after events, with over $600 million spent on repairing transport, stormwater, water and other community infrastructure. Investing in preventative measures for critical and vulnerable assets could significantly reduce this cost in future events.

There is also a need for stronger support for homeowners to reduce risk at a property level, through access to information, technical advice and access to finance.

Improving how hazard information is shared and understood by both property owners and tenants is essential, so people can make more informed decisions about where and how they live. This extends to natural hazard information on a Land Information Memorandum (LIM) such as a Section 74 notice which may impact a homeowners ability to develop or sell their property in the future.

Investment in community resilience, including local leadership, will help communities support each other more effectively when events occur. Advancing place-based adaptation planning for high-risk areas is another key part of this, allowing communities to understand future risks and options in advance.

Providing clearer support during recovery

The recovery highlighted the importance of having well-defined, well-funded support systems in place before an event. Psychosocial and navigation support were critical for people working through their own recovery, but took time to establish, pointing to the need for a nationally agreed model that can be activated early.

Housing support was another major pressure point. Temporary accommodation systems were not designed for the scale or duration of displacement experienced, highlighting the need to review how these systems operate so they better reflect real recovery timeframes. There is also a need for clearer guidance on how people will be supported to remove themselves from situations of intolerable risk to life in the long term, with approaches that are consistent, equitable and financially sustainable.

Clarifying roles and funding responsibilities

The recovery highlighted the need for clearer roles and responsibilities across local and central government, and for a funding model that reflects those roles. A locally led, centrally supported approach worked well, and we think it's the right model for future recoveries too, provided there is clear definition and agreement of roles, underpinned with funding to support delivery.

One thing that's come through clearly from people that have been affected by the 2023 weather events is that they don't feel recovered just because a programme is wrapping up. It will take far longer than that and, in some cases, it will take many more years.

For some people, recovery comes down to whether they feel prepared for another event. Understanding their risks, knowing what to do when an event strikes again, and having confidence in the systems around them is what makes things feel settled.

This insight highlights where the different parts of 'the system' need to connect better. Recovery, readiness, response, and risk reduction overlap and what happens in one part affects another. Better integration of these at a national, regional and local level will make a big difference to people living in New Zealand that are facing the realities of a changing and uncertain climate.

At the start of 2023, we couldn't have imagined what Auckland was about to face, and what would be demanded of everyday Aucklanders, Auckland Council, the government, and our partner organisations.

The recovery structure, the policies, the funding, and the way people collaborated, all came together in real-time and in the most challenging of conditions. Now, in 2026, there's a clearer sense of what recovery from a disaster involves, and what is needed to heal our region.

Where to go for more information

Information about Auckland's 2023 recovery programme can be found on the Auckland Council website (**aucklandcouncil.govt.nz**) and OurAuckland (**ourauckland.nz/recovery**).

The **Storm Recovery Documents Library** on the council website has reference material relating to council decisions about policies and funding, along with information about property assessments, categorisation and the support schemes that were available to property owners.

Videos about Auckland's recovery are available in the *Recovery from the 2023 storms playlist* on **Youtube**.

Two reports – *Unlocking Recovery* and *Delivering Recovery* were published by the Tāmaki Makaurau Recovery Office before its closure in June 2026. These consider the conditions that make disaster recovery effective, based on the observations and lessons from Auckland's recovery. These are publicly available on Knowledge Auckland (**knowledgeauckland.org.nz**)

To learn more about natural hazards including how to protect your home and your whānau, visit the council website for a range of helpful resources.

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