



If calling, please ask for Democratic Services

Environment and Climate Committee

Thursday 20 August 2026, 10:00am

Taumata Kōrero – Council Chamber, Greater Wellington Regional Council
100 Cuba St, Te Aro, Wellington

Quorum: Eight Members

Members

Councillors

Quentin Duthie (Chair)

Ros Connelly

Sarah Free

Tom James

Shamia Makarini

Phil Rhodes

Simon Woolf

Gabriel Tupou (Deputy Chair)

Nigel Elder

Penny Gaylor

Claire Johnstone

Daran Ponter

Yadana Saw

Appointee

Barbie Barton

Recommendations in reports are not to be construed as Council policy until adopted by Council

Environment and Climate Committee (A Committee of the Whole)

1 Purpose

- 1.1 Oversee the development, implementation and delivery, and review of Council's:
- a Environmental strategies, policies, plans ¹, programmes, and initiatives to improve environmental outcomes for the Wellington Region's land, water, air, biodiversity, natural resources, parks and reserves, and coastal marine area;
 - b Climate change mitigation and adaptation strategies, policies, plans, programmes, and initiatives;
 - c Regional resilience priorities in the delivery of plans, programmes, initiatives and activities for flood protection, erosion control, and regional parks and forests;
 - d Regulatory systems, processes, and tools to meet Council's related legislative responsibilities; and
 - e Plans, programmes, and efforts to increase volunteer uptake, community involvement and mahi tahi with others seeking to improve environmental outcomes in the Wellington Region.
- 1.2 Recommend changes to these matters to Council for adoption or variation (as appropriate).

2 Specific responsibilities

- 2.1 The Committee's responsibilities for:
- a Environment include the areas of land use management, air quality, water health and quality, regional natural resources, river control, flood protection, regional parks and reserves, coastal marine environment, maritime navigation and safety, biosecurity, and biodiversity; and
 - b Climate include the areas of climate change mitigation and adaptation.
- 2.2 Apply Council's Te Tiriti o Waitangi principles when conducting the Committee's business and making decisions:
- a **Pātuitanga | Relationships and Partnerships** – ensure decisions are based on shared knowledge, expertise and values maintained and sustained through active relationships and meaningful partnerships with mana whenua. These relationships and partnerships will contribute to Greater Wellington's core business services, functions, and systems to develop and deliver our shared aspirations across our Greater Wellington rohe;

¹ Including floodplain management plans.

- b **Kōwhiringa | Options** – actively partner with mana whenua to enable effective governance decision making that is informed by kaupapa Māori and mātauranga Māori analytical frameworks and knowledge systems in identifying feasible and meaningful options and solutions;
- c **Tino rangatiratanga | Self Determination** – position Greater Wellington to give effect to Te Tiriti o Waitangi and uphold the interests of mana whenua in exercising their tino rangatiratanga in planning and promoting quality services that enable self-determination for whānau and community;
- d **Whakamaru | Active protection** – assess how decisions work towards protecting mana Motuhake (rights and interests of mana whenua) through relevant mutually beneficial strategies, policies, plans, programmes, and initiatives; and
- e **Oritetanga | Equity** - uphold the principle of fairness in the design and distribution of Greater Wellington's resources and services through the Long Term Plan to meet the needs and aspirations of whānau within our Greater Wellington rohe.

2.3 Ensure the Committee's decision making:

- a Considers climate change-related risks (mitigation and adaptation); and
- b Is consistent with Council's plans and initiatives to give effect to Council's declaration of a climate emergency on 21 August 2019, including agreed emissions reduction targets.

2.4 Oversee the development and review of Council's:

- a Environmental strategies, policies, plans, programmes, and initiatives²;
- b Regional resilience priorities; and
- c Climate change strategies, policies, plans, programmes, and initiatives and recommend to Council for adoption these matters (and any variations).

2.5 Review:

- a The effectiveness of implementing and delivering Council's:
 - i Environmental strategies, policies, plans, programmes, and initiatives (including whaitua implementation programmes and mana whenua documents, and the work of whaitua committees),
 - ii Regional resilience priorities, and
 - iii Climate change mitigation and adaptation strategies, policies, plans, programmes, and initiatives; and

² Noting that Council retains specific responsibility to make decisions on, and review the effectiveness of implementation, of the RiverLink project.

- b Monitoring of, and reporting on, the state of the environment of the Wellington Region

and recommend to Council any changes to improve the effectiveness of these matters.

- 2.6 Consider regional, national, and international developments; emerging issues and impacts; and changes in the legislative frameworks for their implications for Council's:

- a Environmental strategies, policies, plans, programmes, and initiatives; and
- b Related regulatory systems, processes, and tools

and recommend to Council any changes to improve the effectiveness of these matters.

- 2.7 Consider local, regional, and international best practice approaches to climate change mitigation and adaptation; and recommend to Council how best to incorporate these matters into other strategies, policies, plans, programmes, and initiatives.

- 2.8 Review, after each Farming Reference Group meeting, a written report of the business conducted at that meeting.

3 Delegations

- 3.1 Subject to sections 3.2 to 3.6, Council delegates to the Committee all the powers, functions, and duties necessary to perform the Committee's responsibilities (except those that must not be delegated, have been retained by Council, have been delegated to another committee, or have been delegated to the Chief Executive).

- 3.2 The Committee has the authority to:

- a Provide effective leadership on climate change for Greater Wellington and on climate change mitigation and adaptation for the Wellington Region;
- b Advocate (working alongside the Wellington Regional Leadership Committee) for the alignment and advancement of central government's and other organisations' programmes and initiatives in climate change programmes and initiatives;
- c Advise Council's representative on the Wellington Regional Leadership Committee on Greater Wellington's position on regional climate change projects (including the Regional Climate Emissions Reduction Plan and Regional Climate Adaptation Plan);
- d Consider and approve Low Carbon Acceleration Fund matters, including funding applications; and
- e Approve submissions to external organisations for matters pertaining directly to the Committee's purposes.

- 3.3 The Committee may decide on matters with a financial impact only where the related costs are:
- a Budgeted for in the relevant business group's budget; and
 - b Not budgeted for in the relevant business group's budget but can be met from savings within that budget.
- 3.4 Where the Committee considers a decision with a material financial impact is needed³, the Committee must refer the matter to Council for its decision.
- 3.5 The Committee may not make a decision that is materially inconsistent with Council's Annual Plan or Long Term Plan.

4 Members

- 4.1 All fourteen Councillors.
- 4.2 The Chair of the Farming Reference Group.

5 Voting entitlement

The Chair of the Farming Reference Group sits at the table and has full speaking rights but has no voting rights at any Committee meeting.

6 Quorum

Eight members.

7 Remuneration

The Chair of the Farming Reference Group may claim Greater Wellington's standard daily meeting fee and mileage allowances and/or public transport expenses for scheduled meetings of the Committee.

³ That is, where savings are identified from other business groups' budgets to meet the related costs; or no savings are identified across Greater Wellington's overall budget to meet the related costs.

Environment and Climate Committee

Thursday 20 August 2026, 10.00am

Taumata Kōrero - Council Chamber, Greater Wellington Regional Council
100 Cuba St, Te Aro, Wellington

Public Business

No.	Item	Report	Page
1.	Apologies		
2.	Conflict of interest declarations		
3.	Public participation		
4.	Confirmation of the Public minutes of the Environment and Climate Committee Meeting on Thursday 18 June 2026	26.274	7
5.	Climate Change Strategy Implementation Plan	26.338	10
6.	Organisational Climate Adaption Plan	26.352	19
7.	Te Rōpū Taiao Environment Group activity update	26.298	78
8.	Farming Reference Group Chair's Report July 2026	26.354	110
9.	Ruamāhanga Annual River Schemes & Floodplain Management Plans Implementation Report 2026	26.327	122
10.	Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026	26.339	147
11.	Review of Flood Protection in South Wairarapa (Lower Wairarapa Valley Development Scheme and Wairarapa Coast Catchment Schemes)	26.303	248
12.	Highly Pathogenic Avian Influenza (HPAI) Regional Response Update	26.355	298
13.	Te Awarua O Porirua Catchment/Action Plan 2026	26.304	312



Please note these minutes remain unconfirmed until the Environment and Climate Committee meeting on 20 August 2026.

Report 26.274

Public minutes of the Environment and Climate Committee meeting on Thursday 18 June 2026

Taumata Kōrero – Council Chamber, Greater Wellington Regional Council
100 Cuba Street, Te Aro, Wellington, at 10am

Members Present

Councillor Quentin Duthie (Chair)
Councillor Gabriel Tupou (Deputy Chair)
Councillor Ros Connelly
Councillor Nigel Elder (until 11.35am)
Councillor Sarah Free
Councillor Penny Gaylor
Councillor Tom James
Councillor Claire Johnstone
Councillor Shamia Makarini
Councillor Daran Ponter (until 11.22am)
Councillor Phil Rhodes
Councillor Yadana Saw
Councillor Simon Woolf

Councillors Johnstone, Makarini, Ponter, Tupou and Woolf participated at this meeting remotely via Microsoft Teams and counted for the purpose of quorum in accordance with clause 25A of Schedule 7 to the Local Government Act 2002.

Karakia timatanga

The Environment and Climate Committee Chair opened the meeting with a karakia timatanga.

Public Business

1 Apologies

Moved: Cr Duthie / Cr Free

That the Committee accepts the apology for absence from Barbie Barton.

The motion was **carried**.

2 Declarations of conflicts of interest

There were no declarations of conflicts of interest.

3 Public participation

Jo Ledington, General Manager Conservation and Restoration at Zealandia, and Mark Ormsby General Manager Engagement at Zealandia, spoke about the Kia Mouriora te Kaiwharawhara / Sanctuary to Sea collaborative initiative, of which Greater Wellington is a partner.

Tim Booth, from Tāmata Hauhā Limited, presented an afforestation plan for Belmont Park.

Councillors Rachel Clark and Reuben Watson, from South Wairarapa District Council, spoke about item 6 in the agenda – Environmental Insights reporting – Air Quality in the Wellington Region.

Noted: The Committee requested that officers provide a response to queries raised by Councillors Clark and Watson, from South Wairarapa District Council.

4 Confirmation of the Public minutes of the Environment and Climate Committee on 7 May 2026 – Report 26.177

Moved: Cr James / Cr Saw

That the Committee confirm the Public minutes of the Environment and Climate Committee meeting on 7 May 2026 – Report 26.177.

The motion was **carried**.

5 Update on Progress of Action Items from previous Environment and Climate Committee meetings – June 2026 – Report 26.271 [For information]

Fathima Iftikar, Group Manager Environment, spoke to the report.

6 Environmental Insights reporting - Air Quality in the Wellington Region – Report 26.254

Tamsin Mitchell, Senior Environmental Scientist and Megan Oliver, Principal Advisor Knowledge, spoke to the report. A presentation was tabled.

Moved: Cr Duthie / Cr Free

That the Committee receives the first Environmental Insights report Air Quality in the Wellington Region.

The motion was **carried**.

7 Te Awarua-o-Porirua Accord Update – Report 26.240 [For information]

Jimmy Young, Catchment manager, spoke to the report.

Councillor Ponter left the meeting at 11.22am during discussion of the item above and did not return.

8 Refreshing the Greater Wellington Climate Change Strategy – Report 26.262

Jake Roos, Manager Climate Change, and Angela Sutherland, Senior Advisor Climate Change Adaption, spoke to the report.

Moved: Cr Duthie / Cr Saw

That the Committee:

- 1 Recommends to Council that the refreshed Climate Change Strategy is adopted.
- 2 Requests that officers, in consultation with the Chair and the Chair of Te Tiriti Komiti, add a fourth objective to “recognise and work in partnership to further mana whenua climate objectives and policies” and associated text explaining this objective and Council’s role.

The motion was **carried**.

Councillor Elder left the meeting at 11.35am during the discussion of the item above and did not return.

9 Te Rōpū Taiao Activity Report – Report 26.217 [For information]

Fathima Iftikar, Acting Group Manager Environment, spoke to the report.

Noted: The Committee requested an item to a future meeting on Greater Wellington’s flood resilience, including information on the recent flooding event in Stokes Valley, and respective responsibilities for the management of the smaller streams and waterways in the Wellington Region.

Karakia whakamutunga

The Committee Chair closed the meeting with a karakia whakamutunga.

The meeting closed at 11.52am.

Councillor Q Duthie

Chair

Date:

Environment and Climate Committee
20 August 2026
Report 26.338



For Decision

CLIMATE CHANGE STRATEGY IMPLEMENTATION PLAN

Te take mō te pūrongo

Purpose

1. The purpose of this paper is to present Greater Wellington's proposed Climate Change Strategy Implementation Plan.

Whakarāpopototanga Matua

Executive Summary

2. The Environment and Climate Committee has recommended Greater Wellington's refreshed Climate Change Strategy for adoption by Council.
3. To support delivery of the refreshed Strategy, a Climate Change Strategy Implementation Plan has been developed to identify the high-priority, high-impact climate actions that require sustained organisational focus, leadership or intervention over the 2027-2030 period.
4. The proposed Climate Change Strategy Implementation Plan consolidates and replaces the original 2015 Climate Change Strategy Implementation Plan and the two ten-point Climate Emergency Action Plans. It recognises that many climate actions are now embedded within existing programmes and business planning processes and provides a single framework focused on Greater Wellington's highest-priority climate actions.

He tūtohu

Recommendations

5. That the Committee **recommends** to Council that the Climate Change Strategy Implementation Plan is adopted.

Te tāhū kōrero

Background

6. The refreshed Climate Change Strategy was presented to the Environment and Climate Committee (the Committee) on 18 June 2026 (Report 26.262)¹ and is an update to Greater Wellington's original Climate Change Strategy adopted in 2015.

¹ <https://www.gw.govt.nz/assets/Documents/Documents/2026/06/Environment-and-Climate-Committee-18-June-2026-Order-Paper.pdf> - see pages 87-96

The refreshed Climate Change Strategy is designed to provide a foundation to guide Greater Wellington's decision making, investment, advocacy, and partnership over time, while being adaptable to changes in policy settings, climate projections, technologies, or national and international targets as required.

7. The Committee has recommended to Council that the refreshed Strategy is adopted, subject to two amendments:
 - a Clarification that Greater Wellington will use the most up-to-date and locally relevant climate change projections to guide risk management and resilience planning; and
 - b The addition of a fourth objective around working in partnership with mana whenua.

The refreshed Strategy is expected to be considered by Council on 3 September 2026.

8. The original 2015 Climate Change Strategy included an implementation plan, which was then superseded in 2019 by two ten-point Climate Emergency Action Plans (regional and organisational). These evolved into a summary of actions that were included in the Long Terms Plans (LTPs) adopted in 2021 and 2024. A progress update on the Climate Emergency Action Plans was presented to the Climate Committee on 16 September 2025 (Report 25.386)². This update was also included in Report 26.35 to the Environment and Climate Committee on 26 February 2026.
9. As signalled at the 18 June 2026 Committee meeting (Report 26.262), Greater Wellington's Climate Emergency Action plans have now been reviewed and are proposed to be combined into a single Climate Change Strategy Implementation Plan. It is proposed that this Plan replaces the original 2015 implementation plan (which was not officially revoked in 2019) and existing two ten-point Climate Emergency Action Plans to inform the 2027-37 Long Term Plan. The proposed Implementation Plan is included as [Attachment 1](#).

Te tātaritanga Analysis

10. The Climate Change Strategy Implementation Plan ([Attachment 1](#)) translates the strategic direction set out in the refreshed Climate Change Strategy into a focused set of priority actions for 2027-2030. The purpose of the Implementation Plan is not to introduce new climate programmes or commitments, but to provide a clearer and more integrated framework for how Greater Wellington will deliver on the Strategy and the climate change focus area of the Council's Long Term Plan.
11. While the original 2015 Climate Change Strategy Implementation Plan and two ten-point Climate Emergency Action Plans have helped drive significant climate

² <https://www.gw.govt.nz/assets/Documents/Documents/2025/09/Climate-Committee-16-September-2025-Order-Paper.pdf> - see pages 9-25

action across the organisation, many of the actions have now become embedded within business-as-usual activities, programme delivery, asset management, planning processes and Long Term Plan commitments. A single summary document (the new Implementation Plan – [Attachment 1](#)) will better reflect current organisational priorities and responsibilities.

12. The proposed actions have been reviewed and rewritten to focus only on the areas where sustained organisational leadership, coordination or intervention is needed to maintain the momentum of the Climate Change Programme.
13. A key change from the previous Climate Emergency Action Plans is the consolidation of organisational and regional climate actions into a single implementation plan. While both emissions reduction and adaptation were reflected in the previous action plans, the proposed plan brings these together in a more integrated way. The proposed plan also more explicitly recognises the co-benefits of climate action, including outcomes for biodiversity, water quality, ecosystem resilience and community wellbeing.
14. The Climate Change Strategy Implementation Plan provides a succinct summary of the ways Greater Wellington is responding to the climate crisis. It does not replace existing delivery plans, programmes or business planning processes. Responsibility for delivery remains with the relevant teams and groups across Greater Wellington, with detailed implementation continuing through existing mechanisms such as the Organisational Emissions Management and Reduction Plan and the Organisational Climate Adaptation Plan. This enables the Implementation Plan to provide a shared direction for climate action across Greater Wellington, while allowing flexibility in how actions are delivered over time.

Ngā hua ahumoni

Financial implications

15. The proposed Climate Change Strategy Implementation Plan does not introduce new activities and has no additional cost implications for Council.

Ngā Take e hāngai ana te iwi Māori

Implications for Māori

16. Given the targeted nature of the proposed Climate Change Strategy Implementation Plan, no specific mana whenua engagement has been undertaken. However, Greater Wellington recognises that its response to climate change remains of particular importance to mana whenua, given the disproportionate impacts of climate change on Māori, including effects on cultural values, natural resources, and community wellbeing. This is also consistent with Greater Wellington's commitments under our Te Tiriti o Waitangi policy and the recognition of Māori rights and interests in decision-making.

Te huritao ki te huringa o te āhuarangi **Consideration of climate change**

17. Climate change is the focus of this paper. The proposed Climate Change Strategy Implementation Plan supports the 2024-34 Strategic Framework Focus Area (and 2027-37 Long Term Plan Strategic Framework Principle) of *Leading action for climate resilience and emissions reduction* and provides detail on how climate change is considered across Council activities.

Ngā tikanga whakatau **Decision-making process**

18. The matter requiring decision in this report was considered by officers against the decision-making requirements of Part 6 of the Local Government Act 2002.

Te hiranga **Significance**

19. Officers considered the significance (as defined by Part 6 of the Local Government Act 2002) of this matter, taking into account Council's *Significance and Engagement Policy* and Greater Wellington's *Decision-making Guidelines*. Officers recommend that this matter is of low significance, as the proposed Climate Change Strategy Implementation Plan does not introduce new activities or have additional cost implications.

Te whakatūtakitaki **Engagement**

20. Given the limited scope of the proposed Implementation Plan and that no new activities are introduced, no community engagement has been undertaken.

Ngā tūāoma e whai ake nei **Next steps**

21. The Committee's recommendation to be considered at a future Council meeting.

Ngā āpitihanga **Attachments**

Number	Title
1	Climate Change Strategy Implementation Plan

Ngā kaiwaitohu **Signatories**

Writer	Angela Sutherland – Kaitohutohu Matua Senior Advisor Climate Change Adaptation
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Approvers	Jake Roos – Kaiwhakahaere Matua Manager Climate Change Zofia Miliszewska – Kaiwhakahaere Matua Head of Strategy and Performance Luke Troy – Kaiwhakahaere Matua Rautaki Group Manager Strategy
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He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council's roles or with Committee's terms of reference</i> The Environment and Climate Committee reviews the effectiveness of implementing and delivering Council's... climate change mitigation and adaptation strategies... and recommends to Council any changes to improve the effectiveness of these matters.
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> The Climate Change Strategy Implementation Plan supports delivery of the Long Term Plan strategic objective of Leading action for climate resilience and emissions reduction.
<i>Internal consultation</i> Officers from across the organisation were consulted on the refreshed Climate Change Strategy Implementation Plan. The Climate Emergency Response Programme Board approved the Implementation Plan to be presented to the Environment and Climate Committee for endorsement.
<i>Risks and impacts - legal / health and safety etc.</i> No legal or health and safety risks have been identified in relation to the matter for decision.

Climate Change Strategy Implementation Plan (2027 – 2030)

This plan identifies the high-priority, high-impact climate actions for Greater Wellington that require its sustained strategic focus, leadership, or deliberate intervention to make progress towards the objectives of its Climate Change Strategy.

1. Reduce organisational emissions: Progress and deliver Greater Wellington's emissions management and reduction plan, including actions across transport, energy, procurement, fleet, land management, investment, and partnerships, to reduce organisational greenhouse gas emissions in line with adopted targets and emissions reduction pathways. In reducing emissions, seek to achieve co-benefits for the environment and community wellbeing as far as possible.

This includes: Metlink bus and train electrification, grazing retirement and environmental restoration on Greater Wellington managed land (including Toitū te Whenua), securing emissions-free electricity supplies and other emissions reduction actions large and small by the Council itself, its suppliers, CentrePort and Hnry Stadium.

2. Operate robust emissions management and reporting systems: Operate robust emissions measurement, reporting, and programme management systems to support delivery of Greater Wellington's emissions reduction pathway and co-benefits, including tracking emissions and sequestration, managing emissions programmes and funds, and ensuring transparency and accountability.

This includes: regularly and consistently measuring and reporting organisational greenhouse gas emissions and co-benefits (e.g. water quality, biodiversity, erosion control), tracking carbon storage on Greater Wellington managed land, monitoring and managing progress against emissions reduction pathways, maintaining oversight of emissions related programmes and funding mechanisms (e.g. Low Carbon Acceleration Fund), and reporting across the organisation and relevant Council Controlled Organisations.

3. Embed climate considerations into all material decisions and investments made by Greater Wellington: Ensure that climate mitigation and adaptation considerations and actions are systematically embedded into all significant council decisions, investments, business planning and asset planning, including long lived infrastructure, land use, transport, and funding decisions.

This includes: explicit consideration of climate risks and emissions impacts in decision-making; avoiding or minimising increases in emissions and risks of climate-related impacts; supporting choices that reduce long-term exposure and cost.

4. Strengthen governance, leadership, and organisational capability for climate action: Maintain strong governance arrangements and executive leadership for climate

Attachment 1 to Report 26.338

change, including clear key performance indicators and accountability, senior sponsorship, and organisational capability to deliver both mitigation and adaptation outcomes.

This includes: sustained executive and governance ownership of climate priorities; clarity on the organisation's position and approach to adaptation pathway planning; internal capability building and culture change; and alignment across teams and functions.

5. Embed mana whenua priorities and mātauranga Māori into climate planning and action: Partner with mana whenua to ensure that climate mitigation and adaptation planning reflects mana whenua priorities, mātauranga Māori, and long-term aspirations, including through catchment-scale planning and land management.

This includes: supporting mana whenua-led climate adaptation planning; enabling mana whenua authority over the use and application of their mātauranga Māori into spatial, catchment, and ecosystem-based approaches; and resourcing partnership appropriately.

6. Lead development of a coordinated, evidence-based approach to regional climate adaptation planning: Lead development of a coordinated, region-wide approach to climate adaptation, working collaboratively with councils, mana whenua, communities, central government agencies, and key stakeholders.

This includes: shared hazard, exposure, vulnerability, and impact tools, and consistent use across planning and investment decisions; supporting consistent, risk-based adaptation planning through participatory engagement; helping unblock politically and socially complex issues such as managed retreat.

7. Prioritise nature-based solutions for climate resilience and emissions reduction co-benefits: Identify, prioritise, and implement nature-based solutions that contribute to regional emissions reductions and/ or increased resilience to climate impacts such as sea level rise, flooding, storms, drought, and ecosystem stress.

This includes: restoring and protecting indigenous ecosystems; improving catchment, floodplain, and coastal resilience; and integrating biodiversity, carbon, and hazard outcomes.

8. Use pest management to support climate and ecosystem outcomes: Strengthen pest animal and pest plant control across Greater Wellington managed land to support healthy ecosystems, biodiversity resilience, and carbon sequestration.

This includes: recognising and responding to the role of pest animals and plants in exacerbating climate change by degrading ecosystems that store carbon, regulate water, buffer hazards and reduce long term resilience.

9. Drive implementation of Greater Wellington's climate change policy directions:

Actively steward and support the implementation of climate change provisions in the Regional Policy Statement and related planning instruments.

This includes: addressing barriers to delivery and turning policy into practice, in order to reduce greenhouse gas emissions from the region and to make it more resilient to climate change impacts.

10. Advocate for national climate policy that enables local action: Advocate to central government for strong, effective climate mitigation and adaptation settings.

This includes: legislation, policy, and funding frameworks that enable Greater Wellington and its partners to act at pace and scale.

11. Develop and maintain an organisational climate risk assessment and organisational climate adaptation plan: These will identify, prioritise, and mitigate the risks climate change poses to Greater Wellington's people, functions, services, assets, and operations over the short, medium, and long term.

This includes: ensuring that climate-related risks are systematically identified and understood; adaptation priorities are clearly identified and integrated into organisational planning and decision-making; and responsibilities for managing climate risks are clear and coordinated across the organisation.

12. Ensure catchment plans reflect climate goals and initiatives and are coordinated at place: Environment Group catchment and sub-catchment action plans contain climate priorities as identified by councils, agencies, mana whenua and communities. Internal and external collaboration at place enables services delivering on this plan to become increasingly coordinated and better deliver on multiple outcomes in an integrated way.

Environment and Climate Committee
20 August 2026
Report 26.352



For Information

ORGANISATIONAL CLIMATE ADAPTATION PLAN

Te take mō te pūrongo

Purpose

1. To report on the main findings and recommendations of the Organisational Climate Adaptation Plan (OCAP), which has been developed in response to the priority risks identified through the Organisational Climate-related Risk Assessment (OCRA), and to explain how the proposed adaptation measures are being considered in the development of the 2027-37 Long Term Plan.

Whakarāpopototanga Matua

Executive Summary

2. The OCAP is aligned with the Council's strategic direction.
3. The OCAP focuses on the priority risks identified in the OCRA, which identified and evaluated climate-related risks affecting Greater Wellington's assets, services and operations across present, mid-century and end-of-century timeframes.
4. Overall, the OCAP shows that Greater Wellington is well placed to build on existing work, while improving consistency and preparedness over time. It identifies opportunities to strengthen organisational resilience over the long-term and provides useful input into the development of the 2027-37 Long Term Plan, particularly in relation to planning, prioritization, and strategic alignment.

Te tāhū kōrero

Background

5. One of the 2024-34 Long Term Plan focus areas is '*Leading action for climate resilience and emissions reduction*'. The Long Term Plan also includes the following Level of Service: '*Greater Wellington as an organisation and as a Region has planned the steps they will take to adapt to climate change*'. This has a corresponding non-financial performance measure that "*Greater Wellington will deliver an Organisational Climate-related Risk Assessment (OCRA) and an Organisational Adaptation Plan (OCAP) and will have worked with others to deliver a Regional Climate Adaptation Framework*". The 2025/26 target was to deliver the OCAP.

6. The OCRA was developed and approved by the Executive Leadership Team (ELT) on 14 July 2025. It was presented to the Climate Committee on 16 September 2025 (report 25.384¹) and to Finance Audit and Risk Committee on 5 May 2026 (report 26.172²).
7. The OCRA identified 96 climate-related risks and prioritised 19 risks across three planning horizons (present, mid-century and end-of-century). Priority risks identified include transition risks such as organisational funding and revenue pressures, climate adaptation funding constraints, institutional arrangements for adaptation, Treaty obligations, risk of maladaptation, along with physical risks such as public transport network disruption and damage to flood protection assets, regional parks and the natural environment. It included assessment of risks to bulk water supply assets, as the outcome of the water reforms was unknown at the time. The OCAP focuses on these priority risks and identifies existing actions, remaining gaps, and proposed further adaptation responses.
8. The OCAP and its findings were presented and approved by ELT on 22 June 2026. ELT also agreed that the proposed adaptation measures are considered through the development of the 2027-37 Long Term Plan.

Te tātaritanga Analysis

What is the OCAP

9. The OCAP (**Attachment 1**) focuses on the priority risks for Greater Wellington's assets, services and operations identified by the OCRA, with the exception of risks related to bulk water delivery, which sits outside Greater Wellington's remit since the establishment of the new water entity, Tiaki Wai.
10. The purpose of the OCAP is to support strategic planners, asset and infrastructure managers, risk managers, Council and ELT decision-makers to make consistent, proactive and evidence-based decisions as climate impacts grow. It provides a clear view of what Greater Wellington is already doing, where gaps remain, and what further adaptation measures are needed to improve organisational resilience across services, assets and operations.
11. The OCAP focuses on Greater Wellington as an organisation, its responsibilities, operations, asset management, and service delivery. While primarily internal in focus, it recognises that Greater Wellington's decisions can have significant implications for key partners and stakeholders across the region, including territorial authorities, mana whenua, lifelines asset owners, and other agencies. The OCAP therefore commits to engaging on decisions that may affect these parties.

¹ <https://www.gw.govt.nz/assets/Documents/Documents/2025/09/Climate-Committee-16-September-2025-Order-Paper.pdf> - see pages 26-109.

² <https://www.gw.govt.nz/assets/Documents/Documents/2026/04/Finance-Risk-and-Audit-Committee-5-May-2026-Order-Paper-v3.pdf> - see pages 136-223.

12. One of the principles that form a guardrail around how ELT and Council is determining levels of service and budgets for the 2027-37 Long Term Plan is the principle '*Leading action for climate resilience and emissions reduction*'. The OCAP responds to this by providing visibility of both the climate resilience (adaptation) work the organisation already has underway to manage our climate-related risks, and the opportunities that would close known gaps. It will support staff as they prepare levels of service options for consideration, providing data and evidence on the opportunities and trade-offs from a climate adaptation perspective to enable ELT and Council to make informed prioritisation decisions.
13. The document is intended to support consistent, proactive and evidence-based decision making as climate impacts grow, while promoting collaboration and alignment across the region. The OCAP was finalised in June 2026 and reflects action at that time.

OCAP findings and proposed adaptation measures

14. The OCAP shows that Greater Wellington is not starting climate change adaptation from scratch: many relevant actions are already underway across the organisation.
15. The OCAP identifies that the main gaps are less about a lack of action and more about whether current systems are strong enough to support long-term adaptation.
16. Across the organisation, the main gaps fall into three broad themes: financial settings, planning and governance settings, and delivery across some operational areas. In particular, climate adaptation is not yet consistently embedded in long-term planning, prioritisation, performance and governance arrangements; funding and insurance settings do not always support climate resilience; and some services, assets and operations remain dependent on incomplete plans or limited internal capacity.
17. The proposed adaptation measures (outlined under each identified transitional and physical risk in **Attachment 1**) are intended to respond to these gaps by strengthening long-term planning and governance arrangements, funding approaches, insurance and self-insurance settings, and the resilience of critical services, assets and operations. Examples of proposed adaptation measures include:
18. **To address the transition risk of maladaptation:** Strengthen the use of long-term climate scenarios³. This would help Greater Wellington test whether proposed actions remain effective under different futures, avoid shifting risk onto future generations, and reduce the likelihood of investing in solutions that create new vulnerabilities over time.
 - a **To address the transition risk to institutional arrangements:** The OCRA identified institutional arrangements as one of Greater Wellington's most

3 The local government sector has developed its own long term climate change scenarios for the purposes of planning: <https://www.lgfa.co.nz/sustainability/sustainability-lgfa/local-government-sector-scenarios>

significant current climate-related risks. This includes legislative settings, decision-making processes, governance arrangements, coordination mechanisms and funding systems. Several proposed OCAP measures therefore focus on embedding adaptation more systematically into strategic planning, investment and performance frameworks.

- b **To address the physical risk to the natural environment:** Strengthen climate change integration in natural environment planning and operational delivery. This includes updating Key Native Ecosystem Operational Plans to consistently identify relevant climate hazards, and practical adaptation actions such as more explicitly considering climate change impacts in pest control, restoration planting, erosion control, coastal habitat protection, fire risk reduction, and monitoring of vulnerable sites.
19. The proposed adaptation measures will be considered through existing business planning and development of the 2027-37 Long Term Plan. The OCAP also identifies the development of climate adaptation performance measures through the 2027-37 Long Term Plan as an opportunity to strengthen monitoring and reporting of adaptation outcomes.

Ngā hua ahumoni Financial implications

20. The OCAP has no direct financial implications. ELT agreed that the proposed adaptation measures would be considered through the development of the 2027-37 Long Term Plan. This consideration does not commit the Council to any expenditure. Most of the proposed measures focus on strengthening existing systems to improve organisational resilience and could therefore be implemented at little or no additional cost. Any financial implications arising from specific measures will be assessed through the Long Term Plan budgeting and prioritisation process with Council.

Ngā Take e hāngai ana te iwi Māori Implications for Māori

21. While the OCAP focuses on organisational climate-related risks, it recognises that Greater Wellington's decisions can have significant implications for the wider region, including mana whenua and Māori. By strengthening Greater Wellington's organisational resilience, the OCAP may also contribute to the region's resilience to climate change and provide benefits for mana whenua and Māori.
22. Te Hunga Whiriwhiri was a key partner in the development of the OCAP.

Te huritao ki te huringa o te āhuarangi Consideration of climate change

23. The OCAP directly contributes to climate change adaptation by addressing the priority organisational risks identified through the OCRA and identifying measures

to address gaps. In doing so, it strengthens Greater Wellington’s resilience to future climate impacts.

Te whakatūtakitaki Engagement

24. During the development of the OCAP, we received inputs from three reference groups as well as some staff members sitting outside of the reference groups:
- a Transition risks reference Group: Finance and Risk, Te Hunga Whiriwhiri, Strategy;
 - b Climate Resilience Working Group;
 - c Asset Management Development Group; and
 - d Wider organisation: Environment Group.

Ngā tūāoma e whai ake nei Next steps

25. The OCAP is currently being socialised across the organisation to build awareness and understanding of its findings. This also ensures that proposed measures are being considered into the development of the 2027-37 Long Term Plan.

Ngā āpitihanga Attachments

Number	Title
1	Organisational Climate Adaptation Plan

Ngā kaiwaitohu Signatories

Writer	Mélanie Barthe, Kaitohutohu Senior Advisor Climate Change
Approvers	Jake Roos, Kaiwhakahaere Matua Manager Climate Change Zofia Miliszewska, Kaiwhakahaere Matua Head of Strategy and Performance Nicky Chilton, Kaiwhakahaere Matua Rautaki Group Manager Strategy (Acting)

He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council’s roles or with Committee’s terms of reference</i> The Environment and Climate Committee oversees the development, implementation and delivery, and review of Council’s climate change mitigation and adaptation strategies, policies, plans, programmes and initiatives.
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> The OCAP is in line with the 2024-34 Long Term Plan focus area ‘<i>Leading action for climate resilience and emissions reduction</i>’. It is also in line with the following Level of Service ‘<i>Greater Wellington as an organisation and as a Region has planned the steps they will take to adapt to climate change</i>’, which has the corresponding non-financial performance measure that “Greater Wellington will deliver an Organisational Climate-related Risk Assessment (OCRA) and an Organisational Adaptation Plan (OCAP) and will have worked with others to deliver a Regional Climate Adaptation Framework”. The 2025/26 performance target for this level of service was to deliver the OCAP.
<i>Internal consultation</i> During the development of the OCAP, we received inputs from three reference groups as well as some staff members sitting outside of the reference groups.
<i>Risks and impacts - legal / health and safety etc.</i> No risks arise from the OCAP itself. The plan aims at addressing climate-related risks, which are expected to reduce over time as the proposed measures are implemented.



ORGANISATIONAL CLIMATE ADAPTATION PLANNING



Organisational Climate Adaptation Plan

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Organisational Climate Adaptation Plan



EXECUTIVE SUMMARY

Greater Wellington already has a strong foundation for responding to the current and future impacts of climate change. The Organisational Climate Adaptation Plan (OCAP) builds on the Organisational Climate-related Risk Assessment (OCRA) and focuses on the priority risks identified for Greater Wellington's assets, services and operations. It shows that climate adaptation is not starting from scratch: many relevant actions are already underway across the organisation.

This preparedness is supported by strategic direction and planning, as well as a wide range of policies, plans, funding decisions, business cases and operational practices that together strengthen infrastructure, environmental and organisational resilience. Emergency management arrangements also help Greater Wellington prepare for and respond to climate-related events. This work is being delivered in partnership with mana whenua, public sector agencies, the private sector and communities.

The OCAP identifies that the main gaps are less about a lack of action and more about whether current systems are strong enough to support long-term adaptation. Across the organisation, the main gaps fall into three broad themes: financial settings, planning and governance settings, and delivery across some operational areas. In particular, adaptation is not yet consistently embedded in long-term planning, prioritisation, performance and governance arrangements; funding and insurance settings do not always support resilience; and some services, assets and operations remain dependent on incomplete plans or limited internal capacity.

The proposed adaptation measures are intended to respond to these gaps by strengthening long-term planning and governance arrangements, funding approaches, insurance and self-insurance settings, and the resilience of critical services, assets and operations.

Overall, the OCAP shows that Greater Wellington is well placed to build on existing work, while improving consistency and preparedness over time. It will also provide a useful input to the development of the Long-Term Plan 2027–37, particularly in relation to prioritisation, alignment and long-term planning.



Organisational Climate Adaptation Plan

INTRODUCTION

Greater Wellington has completed an Organisational Climate-related Risk Assessment (OCRA) to understand how climate change is affecting and will continue to affect the organisation and its assets and services. The OCRA identified ninety-six climate-related risks and prioritised nineteen risks for each of three time horizons: present, mid-century and end-of-century.

The Organisational Climate Adaptation Planning (OCAP) process is the next step. It uses the OCRA to guide how Greater Wellington prepares for, manages and reduces these climate-related risks to its own assets and services. Climate change is expected to intensify most natural hazards already managed by the organisation—such as flooding, landslides, drought and coastal hazards—so the OCAP builds on both climate specific risks and existing business as usual risk management.

The purpose of the OCAP is to support strategic planners, asset and infrastructure managers, risk managers, Council and Executive Leadership Team (ELT) decision-makers to make consistent, proactive decisions as climate impacts grow. It provides a clear view of what Greater Wellington is already doing, where gaps remain, and what further adaptation measures are needed to improve organisational resilience across services, assets and operations.

Reflecting this intent, the report is organised into three main sections:

- identify the adaptation measures Greater Wellington already has in place,
- assess where gaps remain in relation to the priority climate risks, and
- propose new or strengthened adaptation measures to close those gaps.

The OCAP focuses on Greater Wellington as an organisation—its responsibilities, operations, asset management, and service delivery. While primarily internal in focus, it recognises that Greater Wellington's decisions can have significant implications for key partners and stakeholders across the region, including territorial authorities, mana whenua, lifelines asset owners, and other agencies. The OCAP therefore commits to engaging on decisions that may affect these parties. The document is intended to support consistent, proactive decision-making as climate impacts grow, while promoting collaboration and alignment across the region. The OCAP was finalised in June 2026 and reflects action at that time.

The OCAP focuses only on the priority risks identified through the OCRA. For each risk, the OCAP examines current actions, gaps, and potential adaptation measures. It does not assess broader community or regionwide climate risks. That work sits with the Wellington Regional Leadership Committee's Regional Adaptation Project (RAP) and Greater Wellington's Climate Change Adaptation team.

Bulk water was included in the original OCRA and some OCAP analysis has been completed. However, responsibility for bulk water service delivery is being transferred to a new water services entity from 1 July 2026. For this reason, bulk water content is included as an appendix, not in the main body of the OCAP.



Organisational Climate Adaptation Plan

TRANSITION RISKS

1 Budget and revenue

1.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
T09 Impact from climate change to Greater Wellington's budget and revenue (cost of recovery, reduced revenue, etc)	- Infrastructure costs: It is anticipated that Greater Wellington will face increased costs for maintaining and upgrading assets and infrastructure (e.g., flood protection, bulk water supply, public transport assets and infrastructure), to withstand more frequent and severe weather events. - Emergency response and recovery costs: As climate events become more frequent and severe, it is expected that civil defence responses and emergency management will occur more often, leading to higher costs for Greater Wellington. Recovery costs are also expected to increase. - Climate adaptation and mitigation preferences costs: International and national influences from climate change adaptation and greenhouse gas mitigation preferences will impact Greater Wellington's operational landscape. Indeed, changes in the environment, the policies (local, national and international), the communities, the economy, etc, will impact Greater Wellington. - Insurance and banks costs: As the effects of climate change are becoming stronger, insurance companies and banks are increasing their premium prices. Some assets may become too expensive to insure or uninsurable (insurance retreat). This may also create an issue for banks. - Loss of revenue: As climate change exacerbates social inequities (due to inequitable outcomes from climate mitigation and adaptation) and can possibly reduce the level of services provided by Greater Wellington, the organisation could lose some revenue (reduced patronage on public transport, etc). The impacts from climate change on the council's budget and revenue could be further exacerbated by the potential upcoming rate cap from January 2027 (under consultation in February 2026). Analysis suggests a target range of 2 to 4 per cent per capita, per year. Councils will not be able to increase rates beyond the upper end of the range, unless they have permission from a regulator appointed by central government. Permission will only be granted in extreme circumstances, such as a natural disaster, and councils will need to show how they will return to the target range.	✓	✓	✓

Table 1: Priority risks identified by the OCRA – Transition risks, budget and revenue

1.2 Current adaptation measures

As part of the 2024-34 Long-Term Plan (LTP), Greater Wellington's Financial Strategy takes a long-term sustainable approach to service delivery and financial management. This means focusing on ensuring that levels of service for Greater Wellington's activities are financed and funded to generate and protect community outcomes and promote long term community well-being.

The financial strategy identifies the changes that may have significant impact on Greater Wellington's role, services, capability requirements or financial abilities:

Organisational Climate Adaptation Plan

- Partnerships with mana whenua and Māori,
- Population and demographic change,
- Economic challenges,
- Increasing risk from environmental change, climate change and natural hazards,
- Changes to Government and legislation.

As well as a Treasury Risk Management Policy and a Revenue and Financing Policy, Greater Wellington has a set of guiding principles outlined in the Financial Strategy that aims to address the above challenges:

- Using debt to fund projects with intergenerational benefits,
- Who should pay based, where possible, on the distribution of benefits,
- Consider fairness along with the ability of ratepayers to pay,
- Prudent financial management focused on achieving our strategic priorities.

Greater Wellington's financial management was assessed by Standard and Poor's in preparation for the 2024/34 LTP. Greater Wellington was assessed to be very strong in a global context and the AA+ rating is the strongest rating possible for local government.

1.3 Gaps

Rates cap constraint

Proposed rates caps could limit revenue growth, depending on the exceptions and exemptions provided for in future legislation. The financial impacts of climate-related risks are uncertain and potentially significant and may result in expenditure that cannot be fully recovered through rating-funded revenue.

Funding vs cost escalation

Significant increase in infrastructure, recovery, and adaptation costs is identified. However, there is no clear mechanism showing how these will be sustainably funded. Costs are rising faster than clearly defined revenue pathways.

Intergenerational equity pressure

Debt funding spreads costs but rate caps limit repayment flexibility. This risks shifting excessive burden to future ratepayers.

1.4 Proposed adaptation measures

Revenue diversification

Greater Wellington could diversify its revenue by using targeted rates for climate resilience projects, aligning user charges with beneficiaries, developing public-private partnerships (PPPs), and seeking increased central government funding or co-investment.

Organisational Climate Adaptation Plan

Expenditure Prioritisation Framework

Greater Wellington could create a structured decision-making model based on risk reduction, community benefit, and cost-effectiveness. This would enable transparent trade-offs under funding constraints.

Build financial resilience buffers

Greater Wellington could increase contingency reserves and emergency funds to smooth the impact of disaster recovery costs and revenue volatility. It should also be noted that this would require rates increases in advance of expenditure being incurred, which may be difficult to achieve under a rates-capped regime or to secure through the required ratepayer consultation process.

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2 Funding and investment in climate mitigation / adaptation

2.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
T10 Lack of funding and investment in climate mitigation/adaptation	Climate change mitigation and adaptation require massive investment to fund infrastructure and public services. Financial resources are often a limiting factor, especially in climate change adaptation. Greater Wellington is seeking external sources of funding to accelerate its climate mitigation and adaptation actions. This approach leads to several risks: - Greater Wellington must allocate resources to apply to grants and funds without any certainty of success. - The available grants or funds often have a limited timeframe and are earmarked for specific types of activities, reducing budget flexibility. Depending on central government's appetite for climate change adaptation and mitigation, funding levels may be reduced and become less accessible.		✓	✓

Table 2: Priority risks identified by the OCRA – Transition risks, funding and investment

2.2 Current adaptation measures

Greater Wellington declared a climate emergency in 2019 and is committed to:

- Reducing its greenhouse gas emissions:
 - o Organisational level: organisational greenhouse gas emissions inventory, emissions model, carbon targets, etc,
 - o Regional level: Regional greenhouse gas emissions inventory, Regional Emissions Reduction Plan, Regional Policy Statement, etc.
- Adapting to climate change:
 - o Organisational level: Organisational Climate-related Risk Assessment, Organisational Climate Adaptation Plan,
 - o Regional level: Regional Adaptation Project, support to local adaptation planning (territorial authorities, mana whenua), Regional Policy Statement, etc.

For those reasons, over the last two LTP cycles, Greater Wellington placed climate change as one of its strategic priorities and budgeted for actions that allows climate adaptation and mitigation. To name a few:

- Climate mitigation:
 - o Energy Transformation Initiative: building renewable electricity generation assets, such as solar farms, to meet Greater Wellington's growing electricity needs as we electrify and actively decarbonise our networks and eliminate Greater Wellington's carbon emissions from purchasing electricity.
 - o Lower North Island Rail Integrated Mobility project: Replacing diesel trains on the Wairarapa line with hybrid trains and increasing frequency on both the Wairarapa line and the Manawatū line.
 - o Favouring low emissions assets and infrastructure (e.g., electric buses, hybrid utes, heavy machinery, design of new infrastructure, etc)
- Climate adaptation:
 - o Flood protection projects: All flood protection projects aim at reducing the risk of flooding from major rivers and streams. Climate change and future impacts of climate change is embedded in the levels of service of those assets and infrastructure. Here are a few examples of flood protection projects:

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- Te Wai Takamori Te Awa Kairangi – RiverLink: addressing infrastructure issues and flood risks by giving the Hutt River room to move and providing a climate resilient flood defence. It provides crucial flood protection and river restoration work (amongst other outcomes).
- Waipōua River flood management: addressing the flood risk to Masterton using structural measures, nature-based solutions, planning control and emergency management and flood warning improvements.
- Data collection and modelling: this helps understand the context and background to understand the risks and identify options for reducing the risks. This also helps to forecast floods and to respond to emergencies.
- Coastal Erosion Plan for Queen Elizabeth Park: adapting to the impacts of sea level rise and coastal erosion.
- The use of nature-based solutions when appropriate.

In 2020, Greater Wellington set up the Low Carbon Acceleration Fund (LCAF) which borrows funds against the free allocation of carbon credits that were given to the organisation. This fund has mainly been used for the Recloaking Papatūānuku project. This project aims at retiring grazing on regional parks and restoring native forests in their place to increase carbon sequestration. Other projects were also funded like the replacement of traditional lighting in Sky Stadium with LED lighting.

2.3 Gaps

Over-reliance on uncertain external funding

Greater Wellington currently relies heavily on grants and central government funding, but there is no certainty that applications will be successful or that funding will remain available. There is also uncertainty about the stability of funding for long-term climate programmes.

Mismatch between long-term climate needs and short-term funding

Climate adaptation requires investment over multiple decades, while available funding is often short-term and tied to specific projects. This limits Greater Wellington's current ability to plan and deliver sustained adaptation at scale.

Limited funding flexibility

External funds are often ring-fenced and restrictive. This reduces Greater Wellington's ability to reallocate resources as climate risks evolve. This can also constrain strategic decision-making, leading to inefficient allocation and creating additional cost pressures and funding requirements that will impact Greater Wellington's credit rating.

2.4 Proposed adaptation measures

Diversify and stabilise funding sources

Greater Wellington could diversify and stabilise its funding sources by introducing targeted climate rates or incorporating climate funding into general rates, pursuing co-investment with central government, iwi and the private sector, and applying user-pays approaches where appropriate. This would reduce reliance on uncertain grants and improve funding certainty.

Organisational Climate Adaptation Plan

Establish a dedicated climate financing framework

Greater Wellington could create a structured approach to prioritise investments, align funding with long-term climate risks, and integrate mitigation and adaptation funding. This would support better long-term planning and capital allocation.

Expand innovative financing tools

Greater Wellington could explore mechanisms such as green or climate bonds and an expanded Low Carbon Acceleration Fund. These tools could unlock larger and more flexible sources of capital for climate investment.

Organisational Climate Adaptation Plan

3 Insurance

3.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
T11 Impacts from climate change on ability to insure assets and on premiums costs	The basis of insurance is unexpected and unforeseen events, climate change is causing the impact and likelihood of chronic and acute physical risks to increase, meaning these events are not only costing more but are becoming probable. Greater Wellington, being an infrastructure owner, is already being impacted by the changing insurance landscape with higher premiums and needing to restructure its insurances and having to choose not to insure assets where it is not economical. As climate change impacts worsen, Greater Wellington will face continued premiums increases, insurance being unavailable for our most at-risk assets and higher burden on our self-insurance reserves.			✓

Table 3: Priority risks identified by the OCRA – Transition risks, insurance

3.2 Current adaptation measures

Greater Wellington is taking proactive steps to reduce premiums and the risk of price fluctuations:

- Change the insurance structure to ensure Greater Wellington benefits from government policy (e.g., support for essential infrastructure assets through the National Civil Defence Emergency Management (CDEM) Plan 2015 or support from New Zealand Transport Agency (NZTA) to cover any Transport related losses),
- Use of insurance collectives to reduce premiums and gain access to larger insurance capacity,
- Ensure appointed insurance brokers test all local and international insurance markets for competitive premiums from established solvent insurers,
- Use appropriate allocation of risk when negotiating contracts with third parties,
- Allocate all premiums and self-insured losses to business units to reinforce importance of managing risks,
- Changes to policy terms to take on appropriate levels of risk such as higher levels of excess or lower sub limits,
- Choosing to not insure assets where insurance is not economical,
- Regularly monitoring and reviewing Greater Wellington's insurance policies, against the Council's risk appetite, to ensure that Greater Wellington is not over insured.

3.3 Gaps

Government contributions to essential infrastructure

The Government has indicated they are looking to change how the cost of reinstatement for critical assets is shared between themselves and local authorities. As Greater Wellington's current insurance structure is based on the expectation that reinstatement of critical assets would be shared with Government using the existing 60:40 split, any change to this split would increase Greater Wellington's exposure with shift to a 50:50 split increasing our insurance gap by \$30 million.

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Third party public transport ticketing revenue

Fare revenue loss from an unplanned events is not insured; however, based on recent events such as COVID-19, Greater Wellington expects that any losses sustained would be partially covered through funding assistance by the Government. If the Government did not provide assistance, it is expected that Greater Wellington would need to cover over \$83 million per annum in case of a maximum probable loss event (e.g., earthquake).

Like-for-like replacement

Lastly, insurance coverage is limited to like-for-like replacement, rather than supporting resilience-enhancing upgrades. As climate risks intensify, this is likely to result in repeated damage, higher long-term costs, and missed opportunities to strengthen assets.

3.4 Proposed adaptation measures

We are updating our Insurance Strategy to reflect the changing insurance landscape which includes providing recommendations to ensure Greater Wellington is prepared in the case insurance becomes unaffordable, or we can no longer insure at-risk assets due to insurance retreat. These measures include a proposed self-insurance fund which would improve our resilience and reduce our reliance on external insurers which are highly reactive to global events.

Organisational Climate Adaptation Plan

4 Council's priorities

4.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
T13 Climate change creates competition between the Council's priorities	As the effects of climate change intensify, the community's demand for stronger climate action grows, while the government is actively implementing climate policies to address these challenges. This leads to an increased workload for Greater Wellington. The growing workload, coupled with the rising impact on Greater Wellington's budget and available funding, means that the Council's priorities are becoming increasingly competitive.	✓		

Table 4: Priority risks identified by the OCRA – Transition risks, council's priorities

4.2 Current adaptation measures

Strategic planning, internal and external collaboration with key stakeholders, partners, the wider community, etc., ensure that our council's priorities are fully aligned and not competing.

Silos are actively being broken down across the organisation—through the CRWG (Climate Resilience Working Group) and other cross-council groups—to strengthen shared ownership and collective action. Climate change is being embedded into everything Greater Wellington does, particularly within the Environment Group, across all programmes, workplans, and budgets.

This approach promotes seamless collaboration and supports coordinated decision-making, ensuring strong alignment across all Council priorities.

4.3 Gaps

A key gap is that current planning, prioritisation, and budget frameworks do not consistently support explicit consideration of long-term climate resilience alongside affordability and levels of service.

While climate change adaptation is a strategic focus of the LTP 2024–34, these frameworks tend to prioritise core services, minimum levels of service, and short-term budget reductions. As a result, climate adaptation outcomes are not always visible or prioritised within decision-making, limiting the organisation's ability to systematically integrate climate resilience into service delivery and investment choices.

4.4 Proposed adaptation measures

The refresh of the 2027–37 LTP Strategic Framework can better support prioritisation and levels-of-service discussions in a changing climate. Climate change adaptation and mitigation remain a key focus area but are being reframed as guiding principles that shape how services are delivered and how strategic objectives are achieved.

This approach supports the identification of climate adaptation as a co-benefit of prioritising and delivering core services and projects, rather than as a standalone activity. Embedding climate considerations in this way is intended to improve visibility of adaptation outcomes within planning and investment decisions, support more transparent trade-offs, and enable more consistent integration of long-term climate resilience into service delivery under financial constraint.

Organisational Climate Adaptation Plan

5 Maladaptation

5.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
T16 Risk of maladaptation due to the application of practices, processes and tools that do not account for uncertainty and change over long timeframes	Because climate change is an evolving and uncertain issue, there is a risk of adopting adaptation measures that are not fit for purpose. This can lead to: - Exacerbating existing vulnerabilities and inequities, - Shifting vulnerability from one community to another, - Preventing people and communities from effectively adapting to climate change impacts (e.g., by giving them a false sense of security, etc), - Creating unexpected issues that did not exist before (not necessarily climate-related issues), - Adopting adaptation measures based on high emissions technologies. Greater Wellington must plan carefully to avoid infrastructural, institutional and behavioural maladaptation such as: - Locking in infrastructure (e.g., flood protection, etc) that becomes unsuitable as the climate changes, - Lacking fit for purpose institutional arrangements necessary for climate change adaptation (see above), - Breaching our Te Tiriti o Waitangi obligations, our settlement obligations and breaching Māori rights and interests in climate adaptation decisions, - Failing to change behaviour regarding climate change mitigation and adaptation. - Creating new risks within the emergency management sphere.			✓

Table 5: Priority risks identified by the OCRA – Transition risks, maladaptation

5.2 Current adaptation measures

Strategic and long-term planning can reduce the risk of maladaptation. Here are some of the main examples of actions taken to mitigate the maladaptation risk:

- LTP 2024-34: Outlines what the organisation will deliver over the next ten years. The document includes the infrastructure strategy and the financial strategy.
 - o Infrastructure strategy: Is set for the next thirty years and responds to some big regional challenges:
 - Ensuring Te Taiao is protected, and its resilience retained,
 - Climate change and adverse natural events,
 - Managing forecast change in demand,
 - Managing risks, infrastructure performance and cost within our changing context.
 - o Financial strategy: Is set for the next ten years and focuses on ensuring our levels of service and activities are financed and funded to generate and protect community outcomes and promote long term community well-being.
- LTP Horizon scan: The horizon scan is done early in the LTP process. It looks at data and insights to identify trends, challenges and opportunities that can be incorporated into the planning process, i.e. Informs Asset Management Plans, prioritisation of budget, levels of service etc across the 3 to 10 year period of the LTP. The Horizon Scan is also reviewed and updated annually for annual plans if needed, but substantively reviewed and refreshed every three years.

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- Strategic Asset Management Plan (SAMP): Sets out how Greater Wellington manages its infrastructure assets to deliver reliable, cost-effective services for our communities. By integrating asset management with Council's strategic priorities like climate adaptation, climate positive/carbon neutrality by 2045, and equitable access, the SAMP is a roadmap for resilience and sustainability. This document is referenced in the Asset Management Plans (AMP), which are developed to address the objectives of the SAMP.
- Regional Policy Statement (RPS): Sets out the framework and priorities for resource management across the region including in territorial authorities. The RPS is reviewed every ten years. The RPS aims at managing resources in a way that meets the needs of the present without compromising the ability of future generations to meet their needs.
- Natural Resource Plan (NRP): Sets out the objectives, policies and methods for people and organisations to use the Region's resources in a sustainable way.
- Organisational and Regional Climate Emergency Action Plan: Action #2 – *"Maintain appropriate governance arrangements for climate change. The Chief Executive enables Greater Wellington to take a consistent and proactive approach to the consideration of climate mitigation and adaptation in decision-making. Ensure there is a senior management champion for climate change priorities within the organisation and promote the programme internally and externally"*.
- Regional Land Transport Plan (RLTP) – regional plan led by the Regional Transport Committee, administered by Greater Wellington: Sets the direction for transport in the region for the next 10-30 years. It identifies regional priorities, and includes the list of transport projects the region intends to deliver.
- Wellington Regional Economic Development Plan (WREDP) – led by Wellington NZ through the Wellington Regional Leadership Committee, Greater Wellington is a contributor: Guides the long-term direction of the economy and helps drive high-impact economic initiatives over the next ten years.
- Future Development Strategy (FDS) – led by the Wellington Regional Leadership Committee, part funded by Greater Wellington: Helps councils and partners across the Wellington Region (plus Horowhenua) coordinate effort and align investment in infrastructure like transport, pipes, and energy. The FDS sets out how growth should be managed – focusing on where new housing and jobs should go, how to make sure the infrastructure keeps up, and the environment and communities can thrive. The strategy is set for the next thirty years.
- Regional Emissions Reduction Plan (RERP) – led by the Wellington Regional Leadership Committee, part funded by Greater Wellington: Presents key actions necessary to transition to a zero-carbon region that meet community needs and aspirations.
- Regional Adaptation Project – led by the Wellington Regional Leadership Committee, part funded by Greater Wellington: Identifies the innovations and changes needed to make better decisions and increase the resilience of the people, the things we value, the environment and the economy (see *Regional Adaptation Tools* section later in this document).

Some of the documents, plans, and strategies referred to above (including the RPS, NRP, and FDS) are proposed to be replaced as part of the reform of the Resource Management Act 1991 (RMA). The Planning Bill (PB) and the Natural Environment Bill (NEB) were introduced to Parliament in December 2025 and are intended to replace the RMA.

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Together, these Bills introduce a Regional Combined Plan for each region. The Regional Combined Plan will comprise three integrated documents:

- a Regional Spatial Plan, providing strategic direction over a 30-year timeframe and guiding use and development within environmental limits,
- a Natural Environment Plan, regulating and enabling the use, protection, and enhancement of natural resources,
- a Land Use Plan, enabling and regulating the use and development of land within each district.

The Bills are expected to come into force in 2026.

At an organisational level, Greater Wellington staff are supported to build their capability in climate change mitigation and adaptation through in-house training. This contributes to increased staff capacity to support regional and organisational climate adaptation planning and coordination, while also strengthening efforts to reduce greenhouse gas emissions.

The training is led by the Climate Change Team, who also provide complementary tools, resources and guidance to help staff consistently consider climate change within their roles and across decision-making processes.

This work sits within the wider project “Strengthening Greater Wellington’s Climate Response”, which aims to lift organisational maturity and embed climate change considerations as business as usual (BAU) across the organisation. Improving staff training is one key sub-project within this programme. Additional sub-projects include initiatives such as reviewing and improving the climate change SharePoint and related internal resources, to ensure staff have easy access to up-to-date and practical information.

Training in Mātauranga Māori – Māori knowledge systems – is also provided to Greater Wellington’s staff in order to include Māori worldviews in their work.

Combined, those actions increase the resilience of the organisation (and the region) and avoid locking in infrastructure, lacking fit for purpose institutional arrangements, failing to change behaviour and creating new risks within the emergency management sphere.

5.3 Gaps

Mātauranga Māori has the capacity to avoid climate maladaptation due to the holistic approach Māori have to the environment and to the climate challenges. Greater Wellington has a role to protect (but not control) Mātauranga Māori and data sovereignty – Māori right to kaitiakitanga. However, misuse could lead to maladaptation.

5.4 Proposed adaptation measures

In 2025, the Local Government Funding Agency (LGFA) released climate scenarios tailored for the local government sector in New Zealand. Integrating these scenarios at a strategic level. – for example, to inform long-term planning – could help reduce the risk of maladaptation.

These scenarios were considered for inclusion in the horizon scanning process for the LTP 2027–2037. While they were incorporated as much as practicable, challenges were encountered because the LGFA scenarios are designed to be nationally applicable rather than specific to the Wellington region. Further downscaling would be required to adapt the scenarios to Greater Wellington’s regional context and planning needs.

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6 Institutional arrangements

6.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
T17 Risk that climate change impacts will be exacerbated because current institutional arrangements are not fit for climate change adaptation. Institutional arrangements include legislative and decision-making frameworks, coordination within and across levels of government, and funding mechanisms.	Adapting to climate change requires statutory and policy alignment, and effective coordination between central government, local government, mana whenua partners, the private sector and other partners. It also requires sustained, long-term funding to ensure partners have the capability and capacity needed for effective climate change adaptation. The absence of these enabling factors has been repeatedly identified as a barrier to successful adaptation. If national and local governments fail to plan for and invest in risk reduction and adaptation initiatives, the economic, social, cultural and environmental costs of climate change will increase. Adaptive capacity across all domains is likely to be constrained unless relevant statutes are strongly aligned, and governance actors and funding mechanisms are well coordinated.	✓	✓	

Table 6: Priority risks identified by the OCRA – Transition risks, institutional arrangements

6.2 Current adaptation measures

While the regional council's institutional arrangements are primarily set by the Local Government Act (LGA) 2002, some flexibility is still possible that could allow the council to be more in line with current and future climate change challenges:

- At least every six years, the Council is required to review its representation arrangements. This representation review considers the number of elected members, the boundaries of electoral constituencies, and the number of members that represent each constituency in the region.
- The Council establishes its governance structures at the start of each Council triennium. This is a chance to set up a committee that oversees climate change issues. The Council has set up an Environment and Climate Committee for the 2025-28 triennium which is a committee of the whole council.
- Every decision-making report that goes to Council and Committee meetings must include a 'climate change consideration' section. The Climate Change Team leads in-house training and provides tools and guidance to support staff and report authors to complete this section and to consider climate change implications from the early stages of each project.
- Organisational Climate Emergency Action Plan: Action #2 – *"Maintain appropriate governance arrangements for climate change. The Chief Executive enables Greater Wellington to take a consistent and proactive approach to the consideration of climate mitigation and adaptation in decision-making. Ensure there is a senior management champion for climate change priorities within the organisation and promote the programme internally and externally"*.

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- Climate Emergency Response Programme Board: The Programme Board consists of senior leaders and group managers from across the organisation, tasked with providing strategic guidance to the climate work programme and to support the programme manager. The Board ensures the programme stays on track and decides on any changes that are outside the pre-agreed programme plan and tolerances. The Board is sponsored by the Group Manager Strategy and supported by the Organisation Emissions Reduction Steering Group and the Climate Resilience Working Group.
- Strengthening Greater Wellington's Climate Response: This work aims to lift organisational maturity and embed climate change considerations as business as usual (BAU) across the organisation. Reviewing Climate Change Considerations in Council decision-making reports is one key sub-project within this programme. Additional sub-projects include initiatives such as reviewing and improving the climate change internal training, SharePoint and related internal resources, to ensure staff have easy access to up-to-date and practical information.
- Greater Wellington risks framework: Greater Wellington frames risk within the context of success, uncertainty, opportunity and threats. This enables risk management to be effectively embedded into core ways of working including planning, operations and monitoring processes while normalising regular conversations surrounding risk. This aligns to the principles of risk management from ISO31001:2018, and associated guidance, while being adapted to suit Greater Wellington. Risk management reporting process is the following:
 - o Governance risk reported to ELT monthly and Financial Risk & Audit Committee (FRAC) quarterly,
 - o Group risk reporting at group level monthly, each group's risk dashboard is managed by their risk champion,
 - o Operational risk reporting is a daily management practice by teams directly,
 - o Uncertainty reporting – focuses on Greater Wellington's twenty-two uncertainties (including climate change), monthly/bimonthly check ins with risk leads, champions and leadership on a regular bimonthly/quarterly basis.
- Greater Wellington risk appetite: Risk appetite is defined by FRAC through statements that articulate the level of uncertainty (in terms of variability of outcomes) that is acceptable to Greater Wellington in the pursuit of its LTP strategic priorities and related to operational activities and programmes of change. Regular reporting is provided to the ELT and FRAC as to the extent to which Greater Wellington is operating within its defined risk appetite and the agreed risk tolerance levels.
- Performance measures: Performance information represents what a local authority commits to provide to the community. The package of levels of service, measures and targets in the LTP performance framework represent the value that residents receive in return for their rates and charges. The levels of service and performance measures disclosed in the LTP should focus on things the residents and ratepayers' value, and there should be a flow of logic between community outcomes and intended levels of service.

6.3 Gaps

Adaptation planning

While the organisation has an established policy for emissions reduction, there is currently no equivalent policy or guidance to support climate change adaptation planning or implementation. This could limit our ability to assess risks, prioritise adaptation actions, and embed resilience considerations across Greater Wellington's projects and activities.

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Performance measures

The LTP 2024–2034 includes fifty-five performance measures across four key activity groups: Environment, Metlink Public Transport, Regional Strategy and Partnerships, and Water Supply.

While some of these measures may indirectly reflect aspects of climate adaptation performance, none are specifically designed to monitor or measure climate adaptation outcomes.

Mātauranga Māori

The absence of mana whenua representation at the governance and decision-making level limits Greater Wellington's ability to meaningfully incorporate Mātauranga Māori into climate adaptation approaches. This represents a missed opportunity to benefit from holistic, place-based knowledge systems that can enhance adaptive outcomes and deliver broader cultural, environmental, and social co-benefits.

Government reforms

While mainly out of Greater Wellington's direct control, the pace and lack of alignment across multiple government reforms present additional challenges. Inconsistencies between reform agendas can create uncertainty and implementation gaps, which may negatively affect our capacity to plan for and respond effectively to climate change impacts.

6.4 Proposed adaptation measures**LTP Strategic framework**

The 2027–2037 LTP Strategic Framework is being refreshed to strengthen Council's ability to prioritise investment and clearly articulate levels of service. Climate change adaptation and mitigation remain core focus areas and will be repositioned as guiding principles that inform how services are delivered, decisions are made, and strategic objectives are achieved across the organisation.

Performance measures

Specially designed performance measures could be implemented in the LTP 2027-37. Here are a few examples of performance measures:

- Governance and planning:
 - o % of organisational strategies, plans or policies that explicitly integrate climate risk and adaptation,
 - o Existence of an adopted and up to date climate-related risk assessment and climate adaptation plan,
 - o Clear governance accountability for adaptation.
- Risk reduction and resilience outcomes:
 - o % of assets exposed to climate hazards,
 - o % of assets designed to future climate scenarios,
 - o Nature-based solutions projects.
- Emergency response:
 - o Cost of damage from climate hazards,
 - o Number of days spent on emergency response activities due to climate-related events,
 - o Number of days under a regional and/or local state of emergency declaration.

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- Financial and investment:
 - o Yearly budget invested in adaptation measures (by hazard type),
 - o Use of adaptive pathways or trigger-based investment decisions.
- Community resilience:
 - o % of population exposed to climate hazards,
 - o % of territorial authorities actively supported for their local climate adaptation activities,
 - o Incorporation of Indigenous knowledge systems in decision-making.

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7 Te Tiriti obligations

7.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
T18 Risk of breaching Treaty obligations, including co-governance, participation, protection, and recognition of Māori rights and interests, leading to ineffective responses, damaged relationships, and inequitable impacts for mana whenua and Māori.	Mana whenua and Māori, as kaitiaki of the whenua and taiao, have enduring rights and interests protected under Te Tiriti o Waitangi, settlement legislation, statutory acknowledgements, and co-governance arrangements across the region (e.g., Wairarapa Moana Statutory Board, Parangarahu Lakes co-management, Te Awarua o Porirua arrangements). Climate change increases both vulnerability and responsibility for these entities. Māori populations, businesses, cultural landscapes, taonga species, and customary practices face disproportionate exposure to climate impacts, and Māori rights and interests may be directly affected by adaptation and mitigation decisions. A climate response that upholds Te Tiriti requires more than engagement: it requires shared decision-making, resourcing for Māori-led climate initiatives, incorporation of Mātauranga Māori, respect for customary rights, and fulfilment of statutory and settlement-based partnership commitments. As a responsible Treaty partner, Greater Wellington is committed to delivering better outcomes for mana whenua and Māori through Te Whāriki which focuses on four focus areas: - Effective partnering with Māori, - Engagement that leads to equitable outcomes for Māori, - Strong, prosperous, and resilient Māori communities, - A capable, culturally competent Greater Wellington workforce. However, if Greater Wellington does not adequately uphold co-governance responsibilities, integrate Māori rights and interests into climate adaptation, or support iwi in exercising rangatiratanga in climate decision-making, there is a significant risk of: - breaching Te Tiriti o Waitangi obligations, - failing to meet statutory or settlement commitments, - undermining co-governance relationships, - reducing the effectiveness and legitimacy of climate responses, - exacerbating inequitable climate impacts on current and future generations of Māori. Strengthened, well-resourced partnerships with mana whenua and Māori are therefore essential to both Treaty compliance and climate resilience.	✓	✓	

Table 7: Priority risks identified by the OCRA – Transition risks, Te Tiriti obligations

7.2 Current adaptation measures

Greater Wellington is committed to be an authentic, trusted, strong and respectful Te Tiriti partner. In order to do so, the Council and the organisation is working on policies and strategies, some internal, some external:

- Internal policies and strategies:
 - o Te Tiriti o Waitangi Policy: The policy seeks to uphold the promise and articles of Te Tiriti o Waitangi. Upholding Te Tiriti mandates that mana whenua are active partners in developments and decision-making that will impact the collective needs, outcomes, and aspirations of our region.

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- o Mātauranga Māori Guidelines: These guidelines set out our organisational responsibilities when working with mātauranga providing a shared understanding to support consistent, deliberate, and responsible practice.
- o Te Whāriki: The key organisational programme to deliver outcomes for mana whenua and Māori. This is supported by four focus areas: effective partnering; engagement for equitable outcomes; strong, prosperous and resilient Māori communities; a capable workforce.
- o Regional Climate Emergency Action Plan:
 - Action #1 – “Ensure Greater Wellington’s catchment planning approach includes mana whenua priorities and Mātauranga and community aspirations for climate action”.
 - Action #6 – “Support and provide resource for mana whenua partners to undertake climate adaptation planning and increase Greater Wellington’s capacity to engage and provide direction with regional stakeholders and communities in climate adaptation planning”.
- External policies and strategies:
 - o Joint sponsorship of Mauri Tūhono: This framework’s vision is “Towards te taiao flourishing in the region”.
 - o Te Matarau a Māui (Wellington Regional Māori Economic Development Plan): The plan establishes greater regional social procurement capacity and processes to facilitate Māori job creation, empowers Māori businesses to deliver value to their members, and develops and supports key Māori industry strategies.
 - o Co-governance/management arrangements and statutory acknowledgements. Here are some examples:
 - Wairarapa Moana Statutory Board – Ngāti Kahungunu ki Wairarapa Tamaki Nui a Rua Settlement Trust and Rangitāne Tū Mai Ra Trust: Greater Wellington supports the establishment and delivery of the Wairarapa Moana Statutory Board through secretariat services and development of papers and advice.
 - Parangarahu Lakes Area Co-Management Plan: Greater Wellington and Port Nicholson Block Settlement Trust jointly manage the Parangarahu Lakes Area through a ‘Rōpū Tiaki’ or guardianship group set up in 2012. The Rōpū Tiaki’s objectives are to develop a long-term vision and co-management and to advise and recommend annual work programmes for the area.
 - Te Wai Ora o Porirua: Porirua Harbour Accord was signed in 2025 by Te Rūnanga o Toa Rangatira (on behalf of Ngāti Toa Rangatira), Greater Wellington, Porirua City Council, Wellington City Council, and Wellington Water. The Accord is a shared vision and commitment to restore and protect the mauri (life force) and long-term health of the harbour and catchment.
 - Whitireia Park Board: The board is responsible for the control and management of the park. It includes representatives from: Te Rūnanga o Toa Rangatira Incorporated (Ngāti Toa Rangatira) and Greater Wellington.

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7.3 Gaps

Genuine partnership is essential to upholding Te Tiriti o Waitangi obligations, integrating Māori rights and interests into climate adaptation, and supporting iwi to exercise rangatiratanga in climate decision-making.

While Greater Wellington already supports iwi and mana whenua, more needs to be done to ensure they have the capacity and capability required to meaningfully participate in climate change mitigation, adaptation, and other work undertaken by Greater Wellington. This challenge is not only about resources; it is also systemic. Greater Wellington's internal systems need more alignment with mana whenua ways of working, to create genuine partnership.

7.4 Proposed adaptation measures

No additional adaptation measures are proposed at this stage. Greater Wellington already has significant work underway through the Te Tiriti o Waitangi Policy, Te Whāriki, existing co-governance and co-management arrangements, and support for mana whenua-led climate adaptation planning. Continued implementation and strengthening of this work is expected to progressively address the gaps identified, particularly as internal systems, resourcing, and ways of working continue to evolve in partnership with mana whenua.



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PHYSICAL RISKS

The following sections have been designed to follow a consistent thread.

First, each domain—public transport, flood protection, regional parks, the nurseries, the natural environment (including catchment areas), and human resources—includes a reminder of the main risks identified.

This is followed by a summary of the actions already taken by Greater Wellington to mitigate these risks. Where appropriate, the actions have been organised under the following themes:

- Strategic planning,
- Infrastructure and operational resilience / Environmental resilience,
- Emergency preparedness,
- Funding and investment,
- Partnership and advocacy.

Please note that in some instances, measures could not be identified for every theme.

1 Public transport

1.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
B21 Risk to public transport (train services and infrastructure – direct and indirect impacts) due to increased temperatures and heatwaves	As temperatures increase, the temperature of the train track increases too. This direct impact on the rail network (not managed by Greater Wellington) has an indirect impact for the train services as trains must reduce their speed in order to prevent the track from warping. It is expected that speed restrictions due to high temperatures will become more frequent in the future. Speed restrictions may have a negative impact on Metlink through reduced patronage and reduced customer satisfaction (reputational risks). Those impacts have financial implications.	✓	✓	✓
B22 Risk to public transport (train services and infrastructure – direct and indirect impacts) due to wildfires	Wildfires could impact train infrastructure owned by Greater Wellington (especially rural train stations) and reduce the level of service (disruptions, etc). Reduced level of service or interruptions in the service provided may have a negative impact on Metlink through reduced patronage and reduced customer satisfaction (reputational risks). Those impacts have financial implications.	✓		✓
B23 Risk to public transport (train services and infrastructure – direct and indirect impacts) due to erosion and landslides	The Kāpiti line is particularly at risk of erosion and landslides, especially between Pukerua Bay and Paekākāriki. There have already been several incidents on this line following the fall of debris onto the track. Landslides and fallen debris directly impact the train tracks which are not managed by Greater Wellington. However, indirect impacts are being felt on the passenger train services. Those can go from speed restrictions to bus replacements and even train derailment (as it was the case in August 2021). Reduced level of service or interruptions in the service provided may have a negative impact on Metlink through reduced patronage and reduced customer satisfaction (reputational risks). Those impacts have financial implications.	✓	✓	✓

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Risk statement	Risk description	Present	Mid-century	End-of-century
B24 Risk to public transport (train services and infrastructures - direct and indirect impacts) due to acute and chronic coastal hazards (sea level rise, coastal flooding, coastal erosion, etc)	Acute and chronic coastal hazards may damage train tracks, leading to disruptions in Greater Wellington's rail services. Reduced level of service or interruptions in the service provided may have a negative impact on Metlink through reduced patronage and reduced customer satisfaction (reputational risks). Those impacts have financial implications.	✓		✓

Table 8: Priority risks identified by the OCRA – Public transport

1.2 Current adaptation measures

1.2.1 Strategic planning

Strategic planning is a useful tool to adapt to current and future impacts of climate change (both physical and transitional impacts).

Strategic documents such as GW's LTP 2024-34, 2024 Metlink Asset Management Plan and KiwiRail Adaptation Plan consider the impacts of climate change and explore ways to mitigate those impacts.

LTP:

- One of the LTP 2024-34 strategic focus area is '*Leading action for climate resilience and emissions reduction*'.

The Metlink Asset Management Plan states that the organisation:

- Incorporates climate change projections and natural hazards into infrastructure and asset planning decisions that assume lifespans of 30 to 100 years,
- Increases focus on resilience planning in maintenance and capital spend,
- Prioritises resilience initiatives,
- Translates climate change effects and adaptation into infrastructure investment,
- Aims at delivering a fit for purpose, resilient and safe rail system through the Wellington Strategic Rail Plan.

KiwiRail, through its Adaptation Plan is committed to:

- Enhancing the climate resilience of their assets, effectively anticipate and manage impacts of climate change, being proactive and responding quickly to restore service when high impact events occur.
- Having clear governance arrangements and leadership oversight of their climate adaptation work programme. Climate adaptation is integrated into their strategy, policy and asset management plans.
- Supporting work which increases the climate resilience of the network through the Rail Network Investment Programme (RNIP) and other funding mechanisms.
- Providing regular and transparent updates to stakeholders on their progress towards creating a more climate-resilient rail system.
- Using the PARA framework (Protect, Accommodate, Retreat, Avoid), to improve resilience (including fast recovery) and respond to climate risks.
- Maintaining relationships with key stakeholders, including Greater Wellington.

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1.2.2 Infrastructure and operational resilience

While KiwiRail manages the risks to the rail network, Metlink provides input to help manage the risks identified. Here is a list of actions taken to mitigate the physical risks identified for public transport:

- The National Resilience Improvements Programme Business Case (KiwiRail) aims at enhancing the resilience of the KiwiRail network by prioritising interventions that address the most significant risks and hazards while being affordable. Long (between 10-30 years) and short (less than 10 years) term interventions have been identified to improve the network's ability to withstand and recover from a range of natural hazards and climate change-related stressors (including landslip, higher temperatures, etc). The Kāpiti Line (lower part of the North Island Main trunk) has been included into the short-term interventions, while the Wairarapa Line has been included into the long-term interventions.
- Wellington Rail Programme Business Case (Metlink) preferred programme provides improvement to the rail network against slips and landslides (amongst other benefits). The programme aims at upgrading the network to increase resilience and operational flexibility: improvements to slopes, bridges, culverts, track infrastructure, areas subject to sea level rise and storm surge.
This business case states that the programme may need to be accelerated if climate change adaption measures are required earlier than expected, or if additional investment for sustainable transport is made available earlier than expected. It also mentions that climate change mitigation and adaptation is incorporated into interventions where appropriate.
- KiwiRail upskills their staff so they can undertake their roles and responsibilities related to climate adaptation effectively.
- The KiwiRail Adaptation Plan states that over the last three years the organisation has enhanced its capacity to manage slopes. In 2025, a revised methodology for assessing slope risk was published. The document enables KiwiRail to identify which slopes pose the highest slip risk to the network and develop risk management plans, including design and implementation of slope stabilisation solutions, increased monitoring, or a triggered response plan associated with a weather event of a certain level.
- KiwiRail and Metlink have collectively reviewed high risk slopes on the rail network and are establishing a priority and investment plan.
- KiwiRail, through its adaptation plan, identifies ways to mitigate the impacts of higher temperatures on the rail track. Technical standards will be reviewed and amended as temperature increase.

1.2.3 Emergency preparedness

The goal of Metlink and KiwiRail is to make the network more resilient and the public transport more reliable over time. Despite increased resilience, Metlink also plans for disruptions and service interruptions by providing bus replacement where necessary and practical.

Also, Metlink, in its Wellington Rail Programme Business Case, states that assets and infrastructure are designed in a way that enable faster recovery from major events.

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Greater Wellington is a member of the Wellington Lifelines Group, which coordinates physical risk-management activities across the region's utility and transport service providers. The Group has delivered projects such as "Protecting Wellington's Economy Through Accelerated Infrastructure Investment Programme Business Case", which focuses on strengthening resilience to major earthquakes. Although the primary objective of this work is seismic resilience, many of the improvements made to increase readiness and recovery capability for earthquakes are also likely to enhance resilience to climate-related events.

1.2.4 *Funding and investment*

KiwiRail has a Rail Network Investment Programme which is used to increase the resilience of the network by:

- Improving asset conditions so they can withstand larger weather events,
- Developing proactive weather and emergency management plans and ensuring immediate availability of rail materials for repairs to reduce the time that the tracks are closed following damage.

Because funds are limited, KiwiRail prioritises the most cost-effective actions to increase climate resilience, focusing first on investment into metropolitan and priority freight lines.

The Metlink Asset Management plan identifies some uncertainties regarding funding:

- Uncertainty of the Crown's willingness to fund and deliver its commitment to lift the rail network Infrastructure up to the required / agreed standard of serviceability. This is particularly affecting the rail network resilience, safety, overall performance, renewal deliverability capability and ultimately asset management maturity,
- Funding allocation and investment certainty for the significant work programmes,
- Uncertainties regarding the Metro Rail Operating Model (MROM) review,
- Uncertainty within the patronage forecast and its translation into capacity requirements,
- KiwiRail network resilience, safety, and overall performance,
- Cost uncertainty due to escalating costs.

Greater Wellington and Metlink continue to advocate to central government to emphasise the importance of investing in public transport infrastructure, to enable strategic access across the region and provide a safe, resilient environment for public transport users and public transport assets.

1.2.5 *Partnerships and Advocacy*

KiwiRail partners with the New Zealand Transport Agency (NZTA), local government (including Greater Wellington) and other stakeholders to enhance resilience of their assets where possible.

As such, Greater Wellington and Metlink have created relationships with KiwiRail (rail network owner), Transdev (train operator), central government and other key partners. Those relationships aim at identifying a way forward to meet current and future challenges across the rail network. Working in partnership also allows better outcomes.

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1.3 Gaps

Infrastructure ownership

The key gap is that Greater Wellington carries service, patronage, reputational and financial exposure from climate impacts on the rail network but does not directly own or manage much of the rail infrastructure at risk. This limits Metlink's ability to control the timing, scope and prioritisation of physical resilience works.

Funding and investment

There is also uncertainty around funding and investment certainty for rail resilience, particularly where works depend on Crown funding, KiwiRail delivery programmes, and NZTA funding settings. This creates a risk that resilience improvements may not keep pace with increasing climate impacts.

1.4 Proposed adaptation measures

Partnership

Greater Wellington will continue to work with KiwiRail, NZTA, and other delivery partners to strengthen the resilience of the public transport network. This includes maintaining a shared view of priority climate risks and agreed investment priorities.

Service continuity

Greater Wellington will also continue strengthening service continuity planning for climate-related disruptions. This includes reviewing bus replacement capacity, alternative routing, layover and depot constraints, customer communications, and operating procedures for more frequent or prolonged disruptions.

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2 Flood protection

2.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
B28 Risk to flood protection assets (including stop banks, tracks and barrage gates) due to acute and chronic coastal hazards (sea level rise, coastal flooding, coastal erosion, etc)	Some flood protection assets are at risk of coastal hazards. Increased sedimentation of the river mouths and rising downstream water level may reduce the level of service provided by flood protection assets. Also, rising groundwater levels may impact the stability of the stop banks. It is expected that maintenance, repair and upgrade costs will increase. Also, there is a health a safety risk for Greater Wellington employees as well as the residents in case of damage / breach to the flood protection assets.	✓	✓	✓
B29 Risk to flood protection assets (including stop banks, tracks and barrage gates) due to flood and river erosion	By nature, flood protection assets are at risk of flood and river erosion. Those assets have been designed for a certain AEP (Annual Exceedance Probability). However, as climate change becomes stronger, flood severity and river erosion may exceed their specifications which could lead to reduced level of service of the stop banks. It is expected that maintenance, repair and upgrade costs will increase. Also, there is a wide range of risks in case of damage / breach to the flood protection assets (Health and safety, environmental impact, legal challenges, etc). Following the experience of Gisborne District Council and Hawke's Bay Regional Council, there could be a risk of legal action against Greater Wellington in case of extensive flood (as was the case during cyclone Gabrielle).	✓	✓	✓

Table 9: Priority risks identified by the OCRA – Flood protection

2.2 Current adaptation measures

2.2.1 Strategic planning

Greater Wellington is responsible for the management of fluvial flood risk only. Fluvial (or riverine) flooding happens when the flow of a watercourse exceeds the banks.

Greater Wellington also carries out clearing work in the watercourses covered by a watercourse agreement.

The Flood Protection Asset Management Plan focuses strongly on risk from flood and river erosion on assets, infrastructure and services (including level of services). Climate change and future rain patterns are being accounted for in all management plans, including the Floodplain Management Plans. The Flood Protection Asset Management Plan defines principles of flood risk management:

- Avoid building in areas at high risk of flood hazards.
- Only consider new flood protection infrastructure when existing development is at risk.
- Establish standards of flood protection related to the degree of risk.
- Plan for climate change in assessing the degree of flood hazards risk and in determining and appropriate response.

Greater Wellington also has adopted Flood Management Plans (FMP). An FMP determines the combination of techniques that will be used to manage flood and erosion risk for a certain area including establishing the level of service. The Level of Service is guided by the Council adopted

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principles of flood risk management (see above) but will vary from scheme to scheme as determined by the community, economic feasibility and catchment characteristics.

While those plans are not strategic plans, they are management plans and they apply the principles of the above AMP to a catchment, a river or a scheme.

Six Floodplain Management Plans (FMP) are published and others FMP are planned or in progress:

- Published FMP:
 - o Hutt River,
 - o Te Kāuru Upper Ruamāhanga,
 - o Pinehaven Stream,
 - o Waikanae River,
 - o Ōtaki,
 - o The Waiōhine / Rakahanga River.
- FMP planned or in progress:
 - o Waiwhetu,
 - o Lower Wairarapa Valley,
 - o Porirua,
 - o Waitohu,
 - o Wainuiomata,
 - o Mangatarere.

Alongside with mana whenua partners and the wider community, Greater Wellington is scheduling how and when it will complete the three FMPs in progress and review the Ōtaki and Waikanae FMP as part of its integrated catchment planning approach. As defined in the Guidelines for Floodplain Management Planning, this work includes climate change projections and community aspirations, as directed by the Flood Risk Management Climate Change Policy. Climate change projections determine the level of services provided by flood protection assets and infrastructure.

2.2.2 Infrastructure and operational resilience

Where agreements are in place, flood protection assets and infrastructure aim at providing a protection of a minimum of 1% AEP plus climate change for urban areas and 5% AEP plus climate change in rural areas. In this case, climate change impacts are based on the latest available guidance released by the Ministry for the Environment (MfE) and Earth Science New Zealand (previously known as NIWA). Typically, the scenarios RCP6.0 to RCP8.5 at a 100-year horizon are being used. This means that when flood risk and flood protection is re-modelled with updated climate projections, the level of service is also re-assessed. Sea level rise and vertical land movement are also included in the projections, using the scenario SSP5-8.5 at a 100-year horizon (2130). This is currently assessed as a 1.67m rise in sea level plus the allowance for subsidence which has site specific variation across the Wellington Region of and additional between 0.08m and 1.01m.

Note that this level of protection is a target. In some instances, the level of protection is below standards. In other instances, Greater Wellington is looking at lowering this level.

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The LTP 2024-34 provides a list of projects that aim at increasing flood protection assets and infrastructure resilience:

- Te Wai Takamori Te Awa Kairangi – RiverLink: this project addresses infrastructure issues and flood risks by giving the Hutt River room to move and providing a climate resilient flood defence. It provides crucial flood protection and river restoration work (amongst other outcomes).
- Regional flood resilience projects: stopbanks are being created to improve flood resilience for the Hutt Valley, Kāpiti and Wairarapa. Improvement of the barrage gates in the lower Wairarapa Valley and land purchases also improve resilience.
- Te Awa Kairangi/Hutt River erosion: this project involves the identification and selection of options that will ensure the resilience of the Te Awa Kairangi/Hutt River network, including various methods of river edge protection (where practicable including soft vegetation solutions) and more traditional protection structures. These measures will be in tandem with associated policies and integrated planning initiatives to reduce the risks to communities from flooding.
- River Road: the project will protect an area in Masterton, along the Ruamāhanga River from flood and erosion. Construction has started and includes nature-based solutions (e.g., planting) as well as more traditional infrastructure.
- Feasibility of nature-based solutions for mitigating flood risk: Greater Wellington is developing its understanding of how nature-based solutions could be implemented to reduce flood risk, restore biodiversity, and enhance ecosystem services.
- Flood hazard mapping, forecasting and warning: development of flood hazard models for Wainuiomata River, Porirua Stream, Ōtaki River, Waitohu Stream, Mangaone Stream, Waikanae River, Donalds Creek and Lower Wairarapa Valley to help predict and assess the risk and impact of flooding. Greater Wellington will also develop flood forecast models, to improve flood monitoring and carry out flood response planning to improve prediction and recovery from flooding.
- Regional climate change parameters: Greater Wellington wish to have a framework developed for identifying and describing climate change parameters on a range of use cases.

2.2.3 Partnerships and Advocacy

Greater Wellington has a deep commitment to meaningfully partner with mana whenua and iwi and work with other organisations and groups such as NZTA, KiwiRail, territorial authorities, local communities, Tiaki Wai, etc.

From 1 July 2026, Tiaki Wai, a new regional water services entity, will assume responsibility for functions currently delivered by Wellington Water. Tiaki Wai will be responsible for the provision of drinking water, wastewater, and stormwater services across the Wellington metropolitan area, and will retain ownership and control of all related infrastructure and assets.

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2.3 Gaps

Flood management – Pluvial flooding vs other flood mechanisms

Flood risk management has multiple jurisdictions including, regional and local government as well as the new water entities and landowners all playing a role.

This creates complexity and confusion in the flood management. Indeed, Greater Wellington is only responsible for major pluvial flooding as set out in Regional Water Agreements. The management of the other flood mechanisms sit with others which adds complexity in both risk management planning and during response.

Funding and resources

Another important gap is lack of funding and resources needed to progressively adapt hazard information in assets, and management plans. The adaptation measure is to continue reviewing and updating plans while ensuring that LTP funding keeps pace with growing needs.

Coastal flooding

The AMP discloses that it does not account for coastal flooding. Indeed, Greater Wellington is not responsible and funded to respond to coastal flooding. However, as an infrastructure manager, the organisation is responsible for the impacts of coastal flooding on its own assets.

Monitoring network

Gaps in the regional flood monitoring network have been identified. The current and future issues are known and currently addressed through the LPT.

2.4 Proposed adaptation measures

No additional adaptation measures are proposed at this stage. Greater Wellington already has significant flood protection work underway, and continued implementation, review and strengthening of this work is expected to progressively address the gaps identified over time.

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3 Regional parks

3.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
B13 Risk to regional parks (infrastructure) due to wildfires	Regional parks being natural areas with native and exotic forests, they are prone to wildfires. Wildfires may damage or destroy the regional parks' built environment. This could lead to partial closure of the parks and health and safety issues (for staff members as well as visitors). Those effects will have impacts on Greater Wellington's budget (infrastructure maintenance, repair, increased needs for water treatment, etc) as well as reputation.		✓	✓
B14 Risk to regional parks (infrastructure) due to erosion and landslides	Some built infrastructure in the regional parks such as buildings, structures (culverts, bridges, etc), carparks, roads, tracks, etc are located in a high or very high erosion susceptibility classification area and are facing risks. Note that Queen Elizabeth Park and Pakuratahi Forest are the two parks with the most risks. Overall, 5.5% of the built environment and 6.4% of the linear infrastructure is located in a high or very high erosion susceptibility classification area. Damage to infrastructure because of erosion or landslide may lead to partial closure of the parks and health and safety issues (for staff members as well as visitors). Those effects will have impacts on Greater Wellington's budget (infrastructure maintenance, repair, increased needs for water treatment, etc) as well as reputation.	✓	✓	✓
B16 Risk to regional parks (infrastructure) due to flood and river erosion	Some built infrastructure in the regional parks such as buildings, structures (culverts, bridges, etc), carparks, roads, tracks, etc are located in flood zones and are facing risks. Damage to infrastructure because of flood and river erosion may lead to partial closure of the parks and health and safety issues (for staff members as well as visitors). Those effects will have impacts on Greater Wellington's budget (infrastructure maintenance, repair, increased needs for water treatment, etc) as well as reputation.	✓	✓	✓

Table 10: Priority risks identified by the OCRA – Regional parks

3.2 Current adaptation measures

3.2.1 Strategic planning

The Toitū Te Whenua – Parks Network Plan aims at delivering Greater Wellington's long-term vision for regional parks: *'restore healthy ecosystems'*. This plan is a 10-year programme of work, delivered by many people in a wide variety of collaborations. Pressures and long-term changes on regional parks (including climate change) can be anticipated through the review cycle of the Toitū Te Whenua – Parks Network Plan.

The plan states that *"a planned response is required for restoring habitats, adapting park facilities and modifying management practices to accommodate climate change impacts and minimise the risks"*. It also sets up the foundations for erosion control and wildfire risk management.

3.2.2 Infrastructure and operational resilience

The Asset Management Plan for regional parks aims at maintaining assets, supporting recreation experiences and protecting natural and cultural values with a focus on maintaining existing facilities. The LTP 2024-34 has seen minimal development of new facilities.

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Projects are in place to mitigate the impacts of climate change:

- Facilities are being upgraded to a higher level of natural resilience to natural events. Higher resilience requirements are also considered when designing and constructing new assets.
- A Coastal Erosion Plan has been set up for Queen Elizabeth Park to mitigate the impact of sea level rise and coastal erosion.
- Pest management is also done in regional parks through the Regional Pest Management Plan and Predator Free Wellington.

3.2.3 *Funding and investment*

How unplanned maintenance is funded is a challenge, due to its unpredictability. The Asset Management Plan set up the following approach:

- Fund works from surplus funds generated through parks activities (e.g., revenue gained above annual targets),
- If the value of works is larger than funds available, then declare forecast over-expenditure through the normal budgeting cycle.

3.2.4 *Partnerships and Advocacy*

Greater Wellington has a deep commitment to meaningfully partner with mana whenua and iwi and work with other organisations and groups such as territorial authorities, local communities, etc, in some projects undertaken on the regional parks (e.g., East Harbour Regional Park, Queen Elizabeth Park).

3.3 Gaps

No gaps were identified for regional parks.

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4 Planting Operations – Nurseries

4.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
B07 Risk to the nurseries (including pole production) due to extreme weather events	Greater Wellington owns and manages two nurseries: Akura Nursery and Te Uru o Tāne (formerly Daleton Nursery). The nurseries supply and procure all of the plants (both poles and seedlings) used in Greater Wellington's programmes (planting, land management, erosion control, riparian management, environmental projects, flood resilience etc). Both nurseries are located in high-wind and flood zones. As wind conditions are expected to intensify in the future, there is an increased risk of damage to nursery infrastructure and plant stock. This could reduce production capacity and create a shortfall in the number of trees needed to support Greater Wellington's programmes.	✓	✓	

Table 11: Priority risks identified by the OCRA – Nurseries

4.2 Current adaptation measures

4.2.1 Infrastructure and operational resilience

Wind protection

Wind gusts can snap young poles, dry out soil, and cause root disturbance. Windbreaks directly reduce these vulnerabilities:

- Established natural windbreaks at Akura Nursery: Existing shelterbelts help reduce wind speed, limiting the physical stress on young native plants and poplar/willow poles during extreme wind events. Ongoing maintenance ensures they continue functioning effectively.
- Artificial windbreaks at Te Uru o Tāne Nursery: Although currently damaged (since late 2025), these structures were originally designed to buffer plants from high winds.

Stool¹ health and soil stability

Healthier stools with strong, and deep root systems survive storms more effectively. Proactive biosecurity practices reduce disease stress that could otherwise amplify storm vulnerability:

- Use of longer one year old wood pole cuttings: Longer cuttings allow the development of stronger root systems, improving anchorage in wet or windy conditions. This directly mitigates the risk of poles being toppled during heavy rain (when soil is saturated) or strong winds.
- Early-season irrigation strategy: Starting irrigation from early spring ensures that the soil remains moist, reducing hydrophobic conditions that stress plants and make them less resilient during storm events. Note that Te Uru o Tāne Nursery uses treated wastewater to irrigate the stool beds for pole production. This is managed under clear Health & Safety requirements for staff and a scientific irrigation programme that balances volumes of treated wastewater with plant growth and soil health and capacity.

¹ A stool is the base of a tree left in the ground after cutting, from which new shoots can grow.

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- Pole monitoring and growth programme across both pole nurseries: This early-stage programme improves the timing and precision of irrigation, ensuring poles are robust and well hydrated before weather events (storms, drought etc) and protect soil health. It also helps adjust for shifting seasonality driven by climate change. As the monitoring programme advances, additional data will provide insights which will inform nursery operations and help with evidence and nature based operational decisions.
- Plant Pass accreditation for both nurseries: The Plant Pass scheme strengthens biosecurity controls, helping prevent pests and diseases that weaken plant health, thereby reducing susceptibility to storm damage.
- Eco-sourced seeds: Plants grown from locally adapted genetics are better suited to regional climate conditions, improving survival under extreme rainfall and wind.

Adaptability and workforce capability

Quick operational decisions—such as adjusting irrigation before a storm—directly reduce the risk of plant loss. Staff experience in propagation, horticulture, irrigation, and storm preparation enables rapid response when extreme weather is forecast. This reduces losses and supports continuity of supply.

Good communication between Planting Operations staff and Greater Wellington planners involved in planting programmes/projects to ensure planting projects can be adjusted and reprioritised based on supply.

4.2.2 Partnerships and Advocacy

Stable land tenure is essential for long-term investments in shelterbelts, irrigation upgrades, and climate-resilient nursery infrastructure. Te Uru o Tāne Nursery currently operates on Carterton District Council-owned land, with an upcoming transfer to the new water services entity. Continued engagement helps maintain secure land access and reduce uncertainty that could affect mitigation planning.

4.3 Gaps

GW nurseries supply and procure poles and seedlings for all Greater Wellington's planting programmes, including flood resilience, environmental restoration and projects. Significant gaps include.

Windbreak Infrastructure at Te Uru O Tane Nursery

Artificial windbreaks at Te Uru o Tāne Nursery remain broken: Their current condition leaves plants highly exposed to strong winds, increasing the risk of structural failure in poles and young plants. Work is underway to reinstate the artificial windbreaks. Option analysis was presented to Delivery Governance in March 2026.

Insufficient natural windbreak establishment: Natural shelterbelts take years to mature. Until planted and grown, Te Uru o Tāne Nursery remains vulnerable to severe wind events.

Soil and Flooding Risks

Akura and Te Uru o Tāne Nurseries are located in a flood zone which means that extreme rainfall/flooding would increase anaerobic soil conditions, saturate soils and cause root instability, all affecting the health of the stool beds. Existing mitigation measures do not fully address the underlying flood susceptibility. Impacts of silt and time critical silt removal responses need further study to protect pole stool assets.

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Supply and Demand Uncertainty

Current analysis is limited, and no robust system is in place to understand:

- What happens to Greater Wellington's planting programmes if extreme weather and/or other climate change event occurs, e.g., biosecurity issue. This could severely reduce nursery output with both poles and seedlings (e.g., slope stabilisation, environment restoration, biodiversity, flood protection projects reliant on willow/poplar poles and eco engineering trials, etc),
- What happens if demand unexpectedly drops and nurseries overproduce, in both poles and seedlings production.

Seasonality Challenges

Changing climate patterns not only affect planting windows, but sourcing and yield of eco-sourced seed, the growth patterns of poplar and willow poles and seedling and pole survival rates. Mitigations measures (e.g., monitoring programmes) exist but some are still at early stages and not yet robust enough to fully counter seasonal unpredictability.

Changing climate patterns are likely to cause an increase biosecurity risk with more pests and diseases for Greater Wellington's nurseries. Some preventive measures are being implemented but additional study/research is needed to help mitigate these risks.

Land Tenure and Strategic Risk

The planned transfer of Carterton District Council owned land including the Te Uru lease area, to the new water services entity introduces a significant strategic risk to nursery operations. Because this site strategically provides long term pole supply and carries high capital investment, any changes to tenure, access or land use priorities could disrupt pole production and nursery operations. Early engagement and proactive mitigation are required to preserve continuity.

4.4 Proposed adaptation measures

No additional adaptation measures are proposed at this stage. Greater Wellington already has work underway, and continued implementation of this work is expected to progressively address the gaps identified.

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5 Natural environment (incl. catchment areas, regional parks and KNE)

While bulk water delivery assets ownership will be transferred to a new water entity in 2026, Greater Wellington will retain ownership of drinking water catchment areas in Kaitoke and Wainuiomata to support broader outcomes including for ecosystems, recreation and climate change mitigation².

5.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
N07 Risk to natural environment due to flood and river erosion	Floods and river erosion can damage ecosystems, alter biodiversity (including native fauna and flora) and disrupt ecological processes and services. There is also a risk of more pests in the region, due to disturbed ecosystems and changing conditions. Slash (woody debris from forestry and logging operations) is also an issue. Greater Wellington owned land is used for forestry purposes. Slash can be mobilised, potentially dammed, and increase damage to assets, infrastructure, natural environment, etc. during heavy rainfall events. Greater Wellington could be held responsible for such damage.		✓	✓
N08 Risk to natural environment due to acute and chronic coastal hazards (sea level rise, coastal flooding, coastal erosion, etc)	Regional ecosystems, biodiversity and ecological processes and services are impacted by acute and chronic coastal hazards. Those impacts are not limited to the ocean eco systems and biodiversity. Indeed, saline intrusion has an impact on inland ecosystems. There are also impacts on native fish (e.g. inanga spawning in lowland areas).	✓		✓
N09 Risk to natural environment due to erosion and landslide	Erosion and landslide can damage the terrestrial ecosystems and biodiversity (impacts on native fauna and flora) which can disrupt ecological processes and services. There are also impacts on freshwater and wetlands (high level of sediments). More pests could also settle on the sites that were impacted by landslides or erosion. Note the potential risk on the forests registered by Greater Wellington under the New Zealand Emissions Trading Scheme (NZ ETS).		✓	✓
N11 Risk to natural environment due to ocean changes	Regional ecosystems, marine biodiversity and ecological processes and services are impacted by ocean changes such as increased temperatures and ocean chemistry. More pests could also settle due to ecosystems (and services associated) disturbances and biodiversity loss.			✓
N13 Risk to the catchment areas and ability to provide bulk water due to droughts and dry spells	Droughts and dry spells may affect the amount of water available in both the Hutt catchment area (usually provides 40% of the water distributed each year) and the Wainuiomata-Orongorongo catchment area (usually provides 15% of the water distributed each year). If water levels are too low, water collection has to be temporarily stopped. The Macaskill Lakes offer a buffer for the Hutt River but there is no storage available for the Wainuiomata River and the Orongorongo River.	✓	✓	
N15 Risk to the catchment areas and ability to provide bulk water due to wildfires	Catchment areas being natural areas with native and exotic forests, they are prone to wildfires. Wildfires have a high impact on water quality. Those impacts are felt during the event but are also felt months (and even years) after the wildfire happened due to loss in vegetation, biodiversity loss, soil erosion, increased sediment, etc.	✓	✓	✓

² [Metropolitan wellington Water Services Delivery Plan](#), 2025

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Risk statement	Risk description	Present	Mid-century	End-of-century
N16 Risk to the catchment areas and ability to provide bulk water due to extreme weather events	Extreme weather events (extreme rain and winds) have the ability to disturb the extraction of water used to supply the community. Indeed, intakes are closed at the catchments areas when the river is in flood (to prevent rocks and gravel from entering the intake pipes) or the water quality is too low to be used for human consumption.	✓	✓	
N18 Risk to the catchment areas and ability to provide bulk water due to erosion and landslides	Some part of the Hutt catchment area and the Wainuiomata-Orongorongo catchment area have a high or very high erosion susceptibility classification. Landslide happening nearby the rivers could impact the water quality (increased sediments, etc), and the ability to supply water.	✓	✓	

Table 12: Priority risks identified by the OCRA – Natural environment

5.2 Current adaptation measures

5.2.1 Strategic planning

In order to increase the resilience of the environment, Greater Wellington undertakes strategic planning such as:

- Catchment planning: Greater Wellington supports a Catchment Approach which is an integrated programme at a catchment scale that ties our work together and allows genuine priorities to be seen and considered at a meaningful level for each catchment. This enhances long-lasting support by being responsive and listening to different views. We work with communities and mana whenua to determine priorities at the right scale. These priorities inform internal planning through annual and long-term planning. All of this is to ensure we are working with externals to deliver the right things in the right place at the right time.
- Whaitua implementation in partnership with mana whenua partners, communities and other organisations. This programme delivers better freshwater management through improved regulation and action, and increases resilience, including supporting council investment in bulk water storage and supply.
- Change the Regional Policy Statement (RPS) and the Natural Resources Plan (NRP) to align with government direction, respond to emerging environmental issues and achieve outcomes sought in Greater Wellington's Whaitua Implementation Programme. Note that the RPS is planned to be replaced by Regional Combined Plans. Those plans consist of:
 - o the regional spatial plan,
 - o the natural environment plan,
 - o a land use plan for each district within the boundaries of the region.
- Toitū Te Whenua – Parks Network Plan is also a useful strategic document to increase the resilience of the natural environment in the regional parks.

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5.2.2 Environmental resilience

The natural environment in the Wellington Region is and will be impacted by climate change hazards such as flood, coastal hazards, erosion, droughts, wildfires, etc. That is why climate change considerations are included in everything Greater Wellington does to restore and protect the natural environment. Some of the projects are:

- The Porirua Harbour Accord: This accord aims at improving water quality, restoring biodiversity, integrating sustainable water management with urban development, and addressing climate change impacts, in partnership with Te Rūnanga O Toa Rangatira, Porirua City Council, Wellington City Council and Wellington Water Ltd.
- Waikanae Ki Uta Ki Tai: This project aims at revitalising the Waikanae awa (river) in partnership with Ātiawa ki Whakarongotai Charitable Trust, Kāpiti Coast District Council, and Department of Conservation.
- Recloaking Papatūānuku: Funded by Greater Wellington's Low Carbon Acceleration Fund, this project delivers native planting to restore the formerly grazed areas of regional parks.
- Pest management: Pests are being managed through the Regional Pest Management Plan and Predator Free Wellington.
- Wairarapa Moana project: This project aims at protecting a wetland system through pest animal and plant management. Over 90,000 shrubs, trees, grasses and flaxes have been planted since July 2022. Any future work in protecting and restoring the Wairarapa moana wetlands will come under the Wairarapa Moana Statutory Board which is a joint governance initiative. The members are post-settlement governance entities, local authorities and the Department of Conservation established through the Ngāti Kahungunu Treaty settlement.
- Treatment of erosion-prone hill country: Greater Wellington delivers a treatment programme on identified erosion-prone land to prevent sediment from entering streams and estuaries to maintain or enhance water quality.
- Key Native Ecosystems programme: the KNE Operational Plans identify key stakeholders, ecological values and threats as well as activities to maintain the ecological values identified and reach the objectives stated in each one of the plans.
- Biosecurity: Greater Wellington controls pests in the regional parks and the KNE. The organisation also works with people to control pests on their properties, in rural and urban areas.
- Droughts: Greater Wellington monitors drought through soil moisture and rainfall monitoring. The organisation also provides support, through advice and connections, to farmers in case of droughts.

There are projects that are more specific to water catchment areas and the ability to deliver enough good quality water to sustain the need and health of the communities in the region:

- Wainuiomata/Orongorongo Water Collection Areas Management Plan: This plan's goals are:
 - o Maximise the quality of raw water and minimise the extent of water treatment required:
 - Pest control (pest animal and pest plants),
 - Maintaining fire breaks and reduce area of flammable pest plants,
 - Maintaining up to date climate change projections and planning for those impacts,
 - Maintaining healthy and diversified canopy and forest floor vegetation cover to minimise sediment discharge.

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- o Manage threats to water supply to maintain volumes of raw water:
 - Pest control (pest animal and pest plants),
 - Implementation of management actions in periods of drought (promote reduced water consumption, increased water storage capacity, etc),
 - The effects of climate change are considered as an integral part of planning and operational decision making (e.g., increase the resilience of water supply infrastructure; plan for infrastructure to accommodate increasingly frequent high rainfall events leading to high levels of turbidity and organic matter in water entering treatment plants).
- o Maintain and enhance the significant ecosystem and biodiversity values of the water collection areas:
 - Pest control (pest animal and pest plants),
 - Strategic and collaborative partnerships are developed and maintained with other organisations and/ or volunteers to support overall objectives for ecosystem health.
- o Maintain the cultural heritage values of the water collection areas including managed recreational access,
- o Maintain collaborative working relationships within and between agencies and with others to achieve water quality, supply and biodiversity objectives.

5.2.3 Funding and investment

Most of the work is funded through the LTP. Recloaking Papatūānuku has been funded by Greater Wellington's Low Carbon Acceleration Fund until recently.

5.2.4 Partnerships and Advocacy

Greater Wellington has a deep commitment to meaningfully partner with mana whenua, iwi and mana whenua kaimahi and work with other organisations and groups such as territorial authorities, local communities, etc.

5.3 Gaps

At a strategic level, the main risks identified by the OCRA for the natural environment and the catchment areas are understood and addressed. However, some of the Key Native Ecosystems Operational Plans do not identify some climate hazards and adaptation activities.

KNE	Climate hazards identified by the OCRA	Climate change considerations in the Operation Plan	Operation Plan up to date (Y/N, date)
Mataikona Coast	Coastal hazards Erosion and landslide	No climate hazards or adaptation measures identified	No 2019-24
Parangarahu Lakes Area	Coastal hazards Erosion and landslide	No climate hazards or adaptation measures identified	No 2020-25
East Harbour Northern Forest	Erosion and landslide Flood and river erosion	No climate hazards or adaptation measures identified	Yes 2021-26
Lake Waiorongomai and Stream	Coastal hazards Erosion and landslide	No climate hazards or adaptation measures identified	Yes 2024-29
Whangaimoana Coast	Coastal hazards Erosion and landslide	No climate hazards or adaptation measures identified	Yes 2025-30

Table 13: Gap identified in five of the KNE Operational Plans

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5.4 Proposed adaptation measures

Internal discussions between Rōpū Taiao – Delivery and the Climate Change Team are expected to begin soon, focusing on addressing the gaps identified in the KNE Operational Plans. This may involve updating the plan templates, for example by including a dedicated climate change section.

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6 Human resources

6.1 Priority risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
H02 Risk of overwhelming capacity and capability of available human resources when starting an emergency response in case of extreme weather events	WREMO (Wellington Region Emergency Management Office) coordinates emergency management for the nine councils in the region, working with councils to prepare for, respond to and recover from emergencies. Greater Wellington supports this via its responsibility to ensure the functional operation of the ECC (Emergency Coordination Centre) which includes the provision of staff from Greater Wellington. The risk of a most likely event (e.g. cyclone Gabrielle) is that the capacity and capability will be overwhelmed leading to an ineffective emergency management response and protracted costly recovery. This type of events has the potential to be disruptive to BAU operational functioning as staff deploy to the ECC. This should be manageable via re-prioritisation of BAU or activation of Business Continuity Plans (once updated) if the event is prolonged. A most likely plus event will consume huge numbers of staff and operational tasking across the council which will essentially stop all BAU except for critical functions being delivered.	✓	✓	
H03 Risk of starting an emergency response in case of flood and river erosion	WREMO (and Greater Wellington) coordinates Civil Defence and Emergency Management Services. An emergency response (Emergency Coordination Centre, Emergency Operations Centre) may need to be activated in case of flood event. Depending on the extent of the event, the emergency response may require few resources (including human resources and Greater Wellington's employees, which can prevent them to fulfil their day-to-day tasks) or a significant amount.	✓	✓	✓
H08 Risk to people's health, safety and wellbeing due to extreme weather events	Many collaborators at Greater Wellington work outside in remote locations to fulfil their duties (field work). These employees are exposed to various weather conditions, including extreme weather events such as strong winds and heavy rain. These conditions can pose health, safety, and well-being risks (e.g., slippery surfaces, falling debris, etc.). Moreover, limited access to immediate assistance in remote areas can exacerbate the risks faced by these employees.			✓

Table 14: Priority risks identified by the OCRA – Human resources

6.2 Current adaptation measures

6.2.1 Strategic planning

Emergency management can have a significant impact on Greater Wellington's human resources.

Emergency management is a function of Greater Wellington alongside WREMO. It is Greater Wellington's responsibility under the Civil Defence Emergency Management Act 2002 to plan and provide for emergency management within its area, which includes the readiness and preparedness of councils and the community (WREMO's role), the response and the recovery from extreme weather events and their impacts (Greater Wellington's role). Under the LTP Greater Wellington is responsible for the operational functioning of the Emergency Coordination Centre (ECC), which is the mechanism by which an emergency response and recovery is coordinated across the region. The provision of trained staff, supporting processes and equipment for the ECC is the responsibility of the council.

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To enable the emergency response, Greater Wellington has internal structures and processes in place to support the ECC. Internal incident management arrangements via an enterprise Incident Management Team (eIMT) helps to manage any impact that the council may be experiencing from the emergency event itself and action any requests/requirements that the ECC may have. Business continuity underpins both the internal and external incident management arrangements, through the identification of critical business functions and the creation of business continuity plans, which enable the council to continue delivering services that the public rely on in disruptive events.

6.3 Gaps

No gaps were identified for human resources.



Organisational Climate Adaptation Plan

REGIONAL ADAPTATION TOOLS

1 Regional Policy Statement

The proposed RPS introduces climate change objectives, policies and methods. The RPS focuses on both climate adaptation and mitigation as well as co-benefits (for mana whenua, for the community, for the ecosystems and the environment, etc). This has repercussions on the whole region as well as the regional Council as an organisation. The RPS objectives are the following:

- Objective CC.1: The Wellington Region is a low-emission and climate- resilient region, where climate change mitigation and climate change adaptation are an integral part of:
 - o a) sustainable air, land, freshwater, and coastal management; and
 - o b) well-functioning urban areas and rural areas; and
 - o c) the planning and delivery of infrastructure (including regionally significant infrastructure).
- Objective CC.2: The costs and benefits of transitioning to a low- emission and climate-resilient region are equitable between sectors and communities.
- Objective CC.3: To support the global goal of limiting warming to 1.5 degrees Celsius and New Zealand's greenhouse gas emissions reduction targets, net greenhouse gas emissions in the Wellington Region are reduced:
 - o a) to contribute to a 50 percent reduction in net greenhouse gas emissions from 2019 levels by 2030; and
 - o b) to contribute to achieving net-zero greenhouse gas emissions by 2050.
- Objective CC.4: Nature-based solutions are an integral part of climate change mitigation and climate change adaptation, improving the health, well-being and resilience of people and communities, indigenous biodiversity, and natural and physical resources.
- Objective CC.5: By 2030, there is an increase in the area and health of permanent forest, preferably indigenous forest, in the Wellington Region, maximising benefits for carbon sequestration, indigenous biodiversity, land stability, water quality, and social, cultural and economic well-being.
- Objective CC.6: Resource management and adaptation planning increases the resilience of communities, infrastructure and the natural environment to the short, medium, and long-term effects of climate change.
- Objective CC.7: People and businesses understand the current and predicted future effects of climate change, how these may impact them, how to respond to the challenges of climate change, and are actively involved in appropriate climate change mitigation and climate change adaptation responses.
- Objective CC.8: Mana whenua / tangata whenua are empowered to achieve climate-resilience in their communities.

Note that some climate change content in the RPS Proposed Change 1 is not operative yet and in some cases under appeal.

Also, the RPS is proposed to be replaced by a Regional Combined Plan as part of the reform of the Resource Management Act 1991 (RMA).

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2 Regional Adaptation Project

The Regional Adaptation Project (RAP) is a deliverable under the Wellington Regional Leadership Committee (WRLC), of which Greater Wellington is a member, part funder and host. The RAP aims to provide the framework, tools and resources needed to make better adaptation decisions across the region, and to increase the resilience of our people, the things we value, the environment and the economy. The three key outputs of the RAP (all under development at the time of OCAP writing) are:

- **Regional Adaptation Framework:** The Framework aims to act as the ‘trunk’ or ‘spine’ to support coordinated and consistent adaptation action across the region, as well as shared learning and collaborative ways of working in adaptation.
- **Regional Adaptation Kete/ Toolkit:** The Kete is an online resource that will house adaptation tools, resources, templates and guides to support mana whenua and regional stakeholders with their adaptation planning.
- **Geospatial Resilience Information Tool (GRIT):** The GRIT is a geospatial tool that will bring information related to hazards, communities and assets together to support adaptation planning at place.



Organisational Climate Adaptation Plan

APPENDIX

Appendix A – References

Statutory document:

[Regional Policy Statement for the wellington Region](#) – Proposed Change 1 and Variation 1 – Appeals version

[Natural Resource Plan for the Wellington Region](#) – Proposed Change 1 and Variation 1 –

Strategic document:

[Greater Wellington Regional Council Long Term Plan 2024-2034](#), Greater Wellington Regional Council, 2024

[Asset Management Policy](#), Greater Wellington Regional Council, 2024

[Greater Wellington Strategic Asset Management Plan 2025](#), Greater Wellington Regional Council, 2025

[Wellington Regional Development Plan 2022-2032 – V2](#), Wellington Regional Leadership Committee, 2024

Public transport:

[Asset Management Plan 2024-54 – Metlink](#), Greater Wellington Regional Council, 2024

[Wellington Regional Land Transport Plan 2021: 2024 Mid-Term Review](#), Greater Wellington Regional Council, 2024

[Strategic Public Transport Asset Control Strategy](#), Greater Wellington Regional Council, 2024

[Wellington Rail Programme Business Case – Wellington Strategic Rail Plan](#), Greater Wellington Regional Council, 2022

[National Resilience Improvements Programme Business Case](#), KiwiRail, 2023

Climate adaptation Plan 2025-2028, KiwiRail, 2025

Water:

Wellington Metropolitan Water Services Asset Management Plan, Wellington Water, 2025

Greater Wellington Regional Council Water Supply Asset Management Plan, Greater Wellington Regional Council & Wellington Water, 2025

Flood protection:

[Asset Management Plan 2024-54 – Flood Protection and Control](#), Greater Wellington Regional Council, 2024

[Flood Risk Management Climate Change Policy](#), Greater Wellington Regional Council, 2023

[Guidelines for floodplain management planning](#), Greater Wellington Regional Council, 2015

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Watercourse Agreements: [Greater Wellington — Other Rivers and Streams](#)

[Regional Flood Risk and How It Is Managed](#), Environment Committee Workshop, 22 Novembre 2024

[Infrastructure and Asset Management](#), Environment Committee Workshop, 15 May 2025

[Watercourse agreements](#), Greater wellington

Regional parks:

[Toitū Te Whenua - Parks Network Plan 2020-30](#), Greater Wellington Regional Council, 2020

[Asset Management Plan 2024-54 – Regional Parks](#), Greater Wellington Regional Council, 2024

Natural environment:

[Asset and Activity Management Plan 2024-54 – Knowledge and Insights function](#), Greater Wellington Regional Council, 2024

[Greater Wellington Regional Council Biodiversity Strategy](#), 2016

[Hutt and Wainuiomata/Orongorongo water collection areas management plan](#), Greater Wellington Regional Council, 2016

[Key Native Ecosystem Operational Plans:](#)

- | | |
|--|---|
| - Akatarawa forest 2024-2029 | - Paekākāriki Escarpment 2021-2026 |
| - Baring Head - Ōrua pouanui 2021-2026 | - Pākuratahi Forest 2022-2027 |
| - Battle Hill Bush 2022-2027 | - Parangarahu Lakes Area 2020-2025 |
| - Belmont Dry Creek 2023-2028 | - Peka Peka Coast 2023-2028 |
| - Belmont – Korokoro 2024-2029 | - Porirua Western Forest 2022-2027 |
| - Belmont – Speedys 2025-2030 | - Queen Elizabeth Park 2021-2026 |
| - Cape Palliser – Te Mātakitaki a Kupe 2021-2026 | - Raroa – Pukerua Coast 2022-2027 |
| - East Harbour Northern Forest 2021-2026 | - Rewanui 2019-2024 |
| - Fensham 2022-2027 | - Riversdale Coast 2019-2024 |
| - Haruātai/Pareomatangi 2025-2030 | - Rocky Bay Coast 2014-2017 |
| - Haywards Scenic Reserve 2020-2025 | - Strang’s Bush 2022-2027 |
| - Hutt Water Collection Area 2020-2025 | - Taupō Swamp Complex 2025-2030 |
| - Kaitoke Regional Park 2022-2027 | - Te Hāpua Wetland Complex 2024-2029 |
| - Karehana Bay Bush 2023-2028 | - Trentham Memorial Park 2021-2026 |
| - Keith George Memorial Park 2020-2025 | - Wainuiomata-Orongorongo 2023-2028 |
| - Kourarau Valley 2019-2024 | - Waitohu Coast and Wetlands 2021-2026 |
| - Lake Waiorongomai and Stream 2024-2029 | - Wellington South Coast 2025-2030 |
| - Mātāikonā Coast 2019-2024 | - Western Wellington Forest 2024-2029 |
| - Omahu 2022-2027 | - Whangaimoana Coast 2025-2030 |
| - Ōtaki Coast 2024-2029 | - Whitireia Coast (inc Rocky Bay) 2019-2024 |
| - Otepuā-Paruāuku Wetlands 2020-2025 | - Wi Tako Ngatata 2023-2028 |

[Greater Wellington Regional Pest Management Plan 2019-2030](#), amended in 2023

Whaitua Implementation Programmes:

[Te Awarua-o Porirua Whaitua Implementation Programme](#), Te Awarua-o-Porirua Whaitua Committee, April 2019

[Ruamāhanga Whaitua Implementation Programme](#), Ruamāhanga Whaitua Committee, August 2018

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[Te Whaitua o Kāpiti Implementation Programme](#), Whaitua Kāpiti Committee, September 2024

[Te Mahere Wai o Te Kāhui Taiao](#), Te Whanganui-a-Tara Whaitua Committee, November 2021

Human resources:

[GW Crisis Management Team – Playbook](#), Greater Wellington Regional Council, 2024

[Business Continuity Management Policy](#), Greater Wellington Regional Council, 2020

Other:

[Wellington-Lifelines-PBC-MAIN-Combined-20191009.pdf](#)

[Mauri Tūhono Framework](#), Mauri Tūhono ki Te Upoko o Te Ika a Māui working group, 2023

[Council 12 February 2026 Order Paper, Resource Management Reform Submission](#), Greater Wellington, February 2026

Insurance strategy, Greater Wellington, June 2026

Organisational Climate Adaptation Plan

Appendix B – Bulk water delivery

Context

Bulk water delivery was included in the OCRA (Organisational Climate-related Risk Assessment). Some work was done during the OCAP for bulk water, but it was decided that this topic should be included in the appendix as Greater Wellington will transfer the responsibility to a new water entity from July 2026. Indeed, “*Hutt City, Porirua City, Upper Hutt City and Wellington City Councils and Greater Wellington Regional Council working in partnership with mana whenua partners Ngāti Toa Rangatira and Taranaki Whānui ki Te Upoko o Te Ika have committed to establishing a joint water services council-controlled organisation to deliver water services within the territorial boundaries of the four city councils from 1 July 2026*”.

While bulk water delivery assets ownership will be transferred to the new water entity, Greater Wellington will retain ownership of drinking water catchment areas in Kaitoke and Wainuiomata to support broader outcomes including for ecosystems, recreation and climate change mitigation³.

Main risks identified

Risk statement	Risk description	Present	Mid-century	End-of-century
B30 Risk to bulk water supply (infrastructure) due to wildfires	While most of the bulk water supply infrastructure is located in urban areas, some is located in remote and natural areas which makes them at risk of wildfire (e.g., infrastructure located in the Wainuiomata and Kaitoke/Hutt Water Collection Area catchments). Wildfire may lead to interruption in the bulk water supply as well as decreased water quality and non-compliance to water standards and damage to the built assets. Those effects will have impacts on Greater Wellington’s budget (infrastructure maintenance, repair, increased needs for water treatment, etc) as well as reputation. Ultimately, there is a risk on the residents’ health and safety.	✓	✓	✓
B31 Risk to bulk water supply (infrastructure) due to acute and chronic coastal hazards (sea level rise, coastal flooding, coastal erosion, etc)	Gear Island water treatment plant (major importance), one reservoir (minor importance) and up to 13 km of pipeline are at risk of sea level rise at the horizon 2100, under the Regional Rivalry scenario. Coastal hazards may lead to interruption in water supply as well as decreased water quality and non-compliance to water standards and damage to the built assets. Saline is also an issue for the Waiwhetū aquifer, which provides up to 70% of the bulk water supply in summer. This aquifer’s salinity is monitored and if salt concentrations become too high, the amount of water being pumped has to be lowered. Those effects will have impacts on Greater Wellington’s budget (infrastructure maintenance, repair, increased needs for water treatment, etc) as well as reputation. Ultimately, there is a risk on the residents’ health and safety.	✓	✓	✓
B32 Risk to bulk water supply (infrastructure) due to flood and river erosion	Gear Island water treatment plant (major importance), five pumping stations (minor importance), four reservoirs (minor importance) and 23.9km of pipeline are at risk of flood and/or river erosion. Most of the infrastructure is located in the Hutt Valley. Flood and river erosion may lead to interruption in water supply as well as decreased water quality and non-compliance to water standards and damage to the built assets.	✓	✓	✓

Table 15: Main risks identified by the OCRA – Bulk water delivery

³ [Metropolitan wellington Water Services Delivery Plan](#), 2025

Organisational Climate Adaptation Plan

Current mitigation measures

Strategic planning

Wellington Water Ltd, through its Asset Management Plan, has six strategic priorities including:

- Look after existing infrastructure,
- Ensure sustainable water supply for the future,
- Reduce carbon emissions and adapt to climate change,
- Increase resilience to natural hazards.

This is done through strategic priority and capital investment such as: monitoring SLR and rainfall, climate change flooding impact vulnerability assessment (including mapping flood hazard), reducing carbon emissions and addressing sea level rise and flood risk through maintenance, upgrade or construction of new assets.

Infrastructure and operational resilience

The LTP 2024-34 mentions many projects that aim at improving the network resilience and reducing the risk of asset failure, interruption and limitation to water supply. While some projects have a clear goal of reducing impacts from seismic events (e.g., relocation of Kaitoke main pipeline at Silverstream Bridge and Kaitoke Flume Bridge replacement), all projects are designed to increase resilience to climate-related hazards.

The Asset Management Plan states some actions taken by Wellington Water Ltd to mitigate the impacts of climate change:

- Models are used to help identify and prioritise infrastructure improvements,
- A climate change flooding impact vulnerability assessment is being worked on,
- Decisions taken need to consider the current and future land use.

Wellington Water Ltd also identifies adaptation measures to climate change, including adaptation of coastal assets and services to sea level rise. The objective is to understand and plan for the impact of sea level rise on assets located in vulnerable coastal areas. The Asset Management Plan states that it is important for Wellington Water Ltd to understand the coastal risks and have plans in place to mitigate and manage those risks. These assets are often critical for services across the entire system and not just to the local coastal areas.

Partnerships and Advocacy

Wellington Water Ltd understands the need for authentic partnerships with mana whenua and is moving away from a relationship that could be described as transactional to one of active partnership by design so that they can achieve goals through collaboration and high trust. This means moving from short term initiatives and goals to long term high-quality relationships that are mokopuna and rangatahi focused⁴.

Gap analysis

While the Asset Management Plan for Wellington Water Ltd addresses some of the climate risks identified in the OCRA, it also clearly states that “*Climate change impacts have not been included in project/programme forecasting, particularly networks (land, waterway and coastal)*”.

⁴ Wellington Water Asset Management Plan, 2025

Environment and Climate Committee
20 August 2026
Report 26.298



For Information

TE RŌPŪ TAI AO | ENVIRONMENT GROUP ACTIVITY UPDATE

Te take mō te pūrongo **Purpose**

1. To update the Environment and Climate Committee (the Committee) on:
 - a. The strategic direction and priorities of the Environment Group
 - a. Activities underway across the Greater Wellington Region and within each catchment.

Te tāhū kōrero **Background**

2. An update on the progress of action items from previous Committee meetings is attached ([Attachment 1](#)).

Strategic Direction

Linking our work to our strategic direction

3. To demonstrate how our strategic direction leads to tangible results, we have linked activities covered in this report to the 10-year outcomes of the Rōpū Taiao Strategic Framework. The icons represent each of the overarching 10-year statements. They are



Safeguarding and restoring ecosystems and natural environments across our rohe

Air, land, ecosystems, freshwater bodies, the coastal marine area and the indigenous species that live in these environments through catchments are enabled to thrive in an integrated and connected way.



Fostering connection to nature, recreation and safe harbour navigation

Mana whenua and communities across the region are connected to te Taiao and know the stories of their home. Everyone can safely access and connect to nature across our regional parks network, river corridors and harbours.



Strengthening regional resilience and supporting our communities

Mana whenua and communities are becoming more resilient to the effects of drought, flooding and sea level risk in ways that support a thriving environment. Net greenhouse gas emissions in the Wellington region are reduced.

Regional Overview

The Regional Restoration Programme



4. Planning is well underway for the 2026–27 Te Wā o te Taiao programme, which will continue to evolve Restoration Day and deliver 15 restoration events across the region to inspire and support greater community participation in environmental restoration.
5. A new online application portal for the Community Environment Fund is now live; saving staff time, streamlining administration and supporting the expansion of funding across multiple catchments. The Te Awa Kairangi/Hutt Valley Community Environment Fund is the first to use the new system and was open for applications until 5pm Sunday 16 August.
6. The five-year fish passage programme concluded with excellent results. Year 4 concluded with 44 fish passage remediations, including 16 high-value structural improvements. The programme also exceeded targets by completing 238 additional fish passage barrier assessments and monitoring six more sites than planned.

Regional Planting Operations

7. The Winter 2026 planting programme is progressing well across the region, with the establishment phase now well underway and delivery tracking strongly against seasonal targets. The transition to a Greater Wellington wide, end-to-end Planting Service model continues to deliver benefits through improved coordination of site preparation, plant procurement, logistics, quality assurance, and operational delivery across multiple programmes. So far this winter:
 - a. 421,211 seedlings planted
 - b. 37,210 poles supplied
8. Regional planting delivery remains on track, with 66% of planned seasonal activity completed across restoration, flood resilience, and erosion control programmes.
 - a. 388,159 planting spots sprayed and released

Regional Programme Progress

9. Seedling Programmes

	Number of seedlings planted	Total expected to be planted	Tracked progress % to date
Eastern Environment Restoration	124,085	188,046	54% On track

	Number of seedlings planted	Total expected to be planted	Tracked progress % to date
Western Environment Restoration	36,550	48,612	75% On track
Recloaking Papatuanuku	132,526	212,922	62% On track
Flood Resilience Tranche 1 (dispatched from Akura)	128,050	220,000	58% On track

10. Pole programmes

	Number of Poles planted	Total expected to be planted	Tracked progress % to date
Environment Restoration (Contract planted)	16,705	17,210	97% Excellent progress
Flood Operations	5,500	20,000	27.5% On track

11. The performance of our planting programmes reflects the value of taking a coordinated Greater Wellington regional approach to planting delivery, enabling resources, contractors, nurseries, and field operations to be managed as a connected system while maintaining quality outcomes at scale.
12. Alongside the current season delivery, work has started on developing a Greater Wellington bulk seedling procurement process for Winter 2027, which will consolidate demand across planting programmes. This approach is expected to improve supply certainty, strengthen relationships with nursery providers, and deliver greater efficiency and consistency in seedling procurement across the region.
13. Overall, the programme remains on track to deliver another significant planting season, contributing to long-term environmental restoration, biodiversity enhancement, climate resilience, and erosion control outcomes across the region.

Environmental strategy, policy and protection



Reform

14. The Select Committee has reported back on the Natural Environment and Planning Bills. Very few points from the Greater Wellington submission have been taken up by the Committee, who have maintained their direction. The recommended changes weaken the role of environmental limits in the system, continue to be Tiriti non-compliant and continue with the regulatory relief provisions despite strong opposition and cost uncertainty.

15. The Parliamentary Commissioner for the Environment has recommended a pause in the process and for the Bills to be referred back to Select Committee¹. It is likely, however, that they will continue their journey through Parliament with further changes expected via amendment papers. The legislation is expected to be passed during September with no bipartisan support.

Regional Policy Statement Change 1

16. Appeals against Greater Wellington's decision on Change 1 have mostly been resolved (subject to the Court granting the consent orders sought). The exceptions are appeals on Policy 39 and Policy 47.
17. Policy 39 directs the decision maker to recognise the benefits from renewable energy and regionally significant infrastructure. The appeals on Policy 39 were heard by the Court on 11-12 May 2026, and we are awaiting a decision from the Court.
18. Policy 47 manages the effects on indigenous ecosystems and habitats with significant biodiversity values and other significant habitats of indigenous fauna. The appeals against Policy 47 are also outstanding. There was a judicial conference held on 16 June 2026 at which it was determined that hearing time was required. Wellington City Council (WCC) is responsible for preparing an issues paper, which sets out what relief each of the seven appellants is seeking and the issues for determination. The issue paper is due to be filed within 5 working days of the consent order documentation being filed on the rest of the indigenous ecosystems appeals. That consent order documentation is currently with the parties for signing (with roughly half of the signatures received). Once filed, the Court will direct next steps to resolve the appeals on Policy 47.

Natural Resources Plan Change 1

19. Submissions on Plan Change 1 (PC1) Variation 1 closed on 31 January 2026. The summary of submissions is available on Greater Wellington's website². Nine submissions were received. Submissions largely supported Variation 1's intent to defer the operative date for financial contributions and stormwater controls on smaller sites. Additional matters raised in submissions generally sought some clarifications, alternative dates for financial contributions and stormwater controls to become operative, or further amendments to rules to be more permissive for submitter's activities.
20. Further submissions on PC1 Variation 1 closed on 12 June 2026. The summary of further submissions is available on Greater Wellington's website³. Two further submissions were received. Further submissions were largely supportive but also

¹ <https://pce.parliament.nz/media/zfjk2cwj/pce-note-to-members-of-parliament-planning-bill-and-natural-environment-bill-pdf-393-kb.pdf>

² <https://www.gw.govt.nz/your-region/plans-policies-and-bylaws/updating-our-regional-policy-statement-and-natural-resources-plan/natural-resources-plan-2023-changes/consultationssubmitters/summary-of-submissions/>

³ <https://www.gw.govt.nz/assets/Documents/Documents/2026/06/PC1-Variation-1-Further-Submissions-Summary.pdf>

included commentary on the practical implications of changes sought by other submitters, particularly the alternative dates for financial contributions and stormwater controls to become operative.

21. PC1 remains on hold at this stage, pending the release of an updated National Policy Statement for Freshwater Management (NPS-FM). This is anticipated in a new suite of national policy direction under the new resource management system. Once the new NPS-FM is available, we will consider this against PC1 provisions and recommend a path forward for PC1.

Regional flood resilience



Regional Infrastructure Fund – Flood Resilience (Tranche 2.0) –Telemetry Project

22. In October 2025 Tranche 2 funding of approximately \$97m was granted for 32 projects nationwide. One of these projects is the \$7.5m "National Telemetry Project" worth \$1.093m for Greater Wellington.
23. The scope of the Telemetry project is upgrading flood warning infrastructure. Upgrades include infrastructure, power, comms, instrumentation & high-flow gauging.
24. The Monitoring Water Resilience team have been progressing this project for Greater Wellington. We have an ambitious programme to carry out upgrades of our entire flood warning network across 70 sites over the next 3 years. Currently we are focusing on the high priority sites and have upgraded 6 sites so far.

25. *Image 1 An example showing a before and after of a key rainfall station in the Tararua Ranges. This site has been upgraded to include back up power sources power supply, and communications systems. The new housings are more robust and have built in heating to keep the sensors cosy in winter.*



Responding to flood and storm damage

26. Following rainfall events in the region in June, we have provided pragmatic and proactive advice to rural landowners to help them understand what activities they can undertake when they need to respond to flood and storm damage. This advice is on our website³.

Environmental restoration, recreation and harbour safety



Navigation Safety

27. The Maritime Transport (Lifejackets on Recreational Craft) Amendment Bill had its second reading on 22 July. This would see a change to Part 91 of the Maritime Rules put in place to require all persons in vessels of less than 6 metres in length to wear a lifejacket while the vessel is underway.
28. This is not significant in terms of requirement for Wellington (and several other regions) as that requirement is already in Navigation Safety Bylaws. It is significant in that it will become the national standard. This also paves the way for an update to Part 91 of the recreational rules that should, in turn, lead to a simplification of our Navigation Safety bylaws.
29. Along with other Harbourmasters we are working with Maritime New Zealand on those updates and changes.

Freshwater Biosecurity Response

30. Surveillance monitoring for Corbicula (golden clam) was carried out in June and July at the request of the Ministry for Primary Industries (MPI). The results showed no Corbicula were detected in any of the samples collected from across the Ruamāhanga catchment (including Lake Wairarapa), Te Awa Kairangi, and the Waitohu/Lake Waitawa catchment.
31. We will continue to work with MPI over the summer months to carry out sampling at sites still to be decided.

Pest Animals

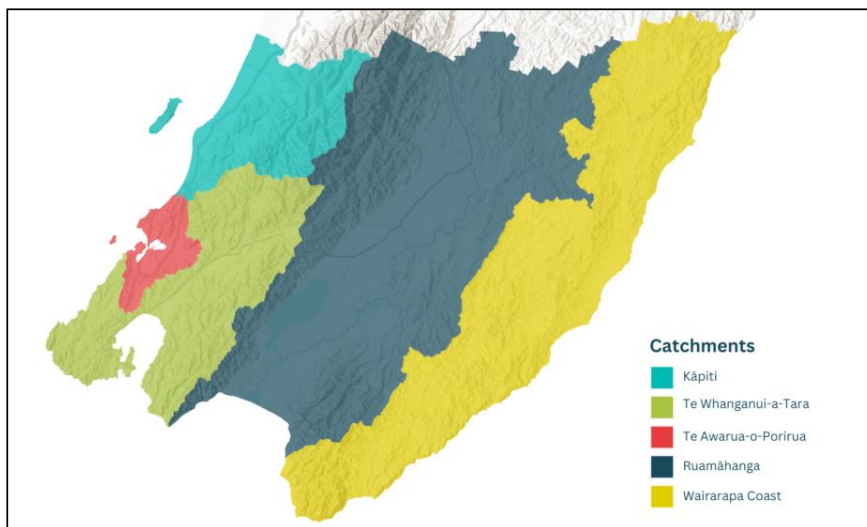
32. A 56% increase in the number of pest animals culled by Greater Wellington in the 2025/26 financial year is being attributed to new thermal hunting technology, and extra funding for pest control in the region's 2024-34 Long-Term Plan (LTP). 11,578 pest animals were culled by staff and contractors last year, the highest number controlled by the regional council in the last five years. 40% were rabbits, 20% wild goats, 10% possums and 9% hares. The use of advanced technology like thermal drones, scopes, and viewers means better targeting of these pests during night shoots.

Parks and recreation planning

33. Work on the draft Queen Elizabeth Park Masterplan is progressing, informed by ongoing work with mana whenua. Officers are preparing to return to Councillors with the draft masterplan and a proposed approach to public consultation. The Belmont Regional Park Masterplan remains in stage 2, which focuses on initial engagement and information gathering.
34. Work on the Belmont grazing licence is continuing. The closing date for submissions on the *Correction Public Notice* is 15 August 2026. A hearing will be held if any person or organisation wishes to be heard. Once the date is confirmed, it will be published on the public notice webpage and all parties that expressed interest in speaking will be informed.
35. Early work is underway on a new Wairarapa chapter within Toitū Te Whenua – Parks Network Plan to guide the future management and use of Hiwinui Forest, Stoney Creek Forest, and Tauanui Forest. Hiwinui is the immediate focus, reflecting its greater potential for improved public access and recreation in the short to medium term. A report is proposed for the October Committee meeting seeking confirmation of the planning and development approach before broader public engagement.

Catchment Overview

36. The following sections present Greater Wellington’s activities by each of the five super catchments or Whaitua: Kāpiti, Te Awarua-o-Porirua, Te Whanganui-a-Tara, Ruamāhanga and Wairarapa Coast.



37. Image 2: The Greater Wellington rohe presented by five super catchments or Whaitua

Kāpiti



Mana whenua of the place:

- Ngā Hapū o Ōtaki
- Te Ātiawa ki Whakarongotai
- Ngāti Toa Rangatira

Please see Appendix 1 for the catchment overview

Catchment Services/LTP Activity Groups

Environmental restoration, recreation and harbour safety



38. The second round of control work for the pest plant, Manchurian Wild Rice, is completed for MPI and the national eradication programme.
39. The Regional Predator Control Programme is planned to undertake possum control in the Reikorangi basin. Planning for this is underway, working up to a boundary that OSPRI was also going to do possum control in. OSPRI have now changed their strategy and are not doing any possum control in the Lower North Island in the foreseeable future. This could impact the effectiveness of this work.
40. Coordinated rabbit control continues to be undertaken throughout Kāpiti. Some great work has been done to focus on high density rabbit populations on private properties in the Waikanae area and engaging with landowners to achieve control across multiple nearby properties.
41. Predator control trapping on the Predator pathways is going well, with no ferret road kills noticed last financial year south of QEP. A high number of stoat catches were recorded in the June. A high number of volunteer traps haven't been recorded in the last 6 months, and effort needs to be made to re-engage with the volunteers.

Environmental knowledge and insights



42. Procurement for the updated Kāpiti Groundwater model has commenced with the preferred supplier. The work programme is phased over the next five years through to 2030/31 as part of a coordinated approach to investment and programme delivery across multiple strategic priorities. The future groundwater model and associated work programme is being co-developed with our Mana Whenua partners.

Environmental strategy, policy and protection



43. We have limited notified an application relating to the stormwater discharge from a residential development on Rangiuru Rd, Ōtaki. Affected party approval was not obtained by all affected parties hence the application was notified to these parties on 22 June 2026. Submissions closed on 24 July 2026. Submissions have been received from affected parties and we are presently working through next steps in the consent process.

Flood resilience



Flood Resilience – Tranche 1 Programme

44. Site 9 Ōtaki Cliffs, Ōtaki Awa: Practical completion was achieved in June. Access road remedial works are still to be completed on the true right bank.

Planning and prioritising integrated work at a catchment scale



45. Officers continue to work in partnership with Nga Hapu o Ōtaki (NHoŌ) and Te Ātiawa ki Whakarongotai Charitable Trust (TAKW) on the Ōtaki and Waikanae River flood management consent applications. Throughout 2025/2026, officers focused on building relationship and trust with NHoŌ and TAKW and supporting them to understand and propose changes to the scope of the applications and Code of Practice.

46. This financial year the focus is on preparing new applications, with a proposed lodgement date of 30 June 2027. Engagement with stakeholders will be commencing this quarter, with technical assessments to support the applications to be underway before the year end.

47. A key interest of TAKW is gravel management in the Waikanae River. To be able to obtain TAKW support for Greater Wellington's river management consent, our approach to gravel management needs to be shared with TAKW and potentially adapted based on their feedback.

48. The Kāpiti Whaitua Partnership group and kaimahi working group continue to meet regularly to progress implementation of priority recommendations.

Edgewater Park Community Planting Day

49. There were 2,000 plants planted during a collaborative event with Kāpiti Coast District Council (KCDC), Te Ātiawa Ki Whakarongai, Parikawau Restoration Group, Waikanae Estuary Care group and Friends of the Waikanae River.

50. The event was attended by 60 Students from Waikanae School and 70 students from Kapakapanui School.



51. Image 3 (Left) and 4 (Right) – students participating in the Edgewater Park Community Planting Day

Te Awarua-o-Porirua



Mana whenua of the place

- Ngāti Toa Rangatira (Ngāti Toa)

Please see Appendix 2 for the catchment overview.

Catchment Services/LTP Activity Groups

Environmental restoration, recreation and harbour safety



Battle Hill Farm Forest Park

52. Preparations for the spring and summer visitor season are underway, with increasing park visitation driving a programme of maintenance and improvements. Key priorities include ongoing pest control operations targeting rabbits, hares and possums; and continued ecological restoration

53. A successful community planting day that saw 1,000 plants established in the upper oak wetland. Community engagement remains strong, with active volunteer

recruitment, development of an equestrian working group, and ongoing support from local volunteer conservation groups.

54. Progress continues on the nature play space, sensory garden, fencing works and large-scale restoration planting across retired farmland and wetland areas.
55. Operationally, sections of the campground remain closed to vehicle access to protect ground conditions, while the Puketiro Loop track remains subject to weekday access restrictions due to forestry harvesting.



56. Image 5 (Left) and Image 6 (Right): Recent photos taken at Battle Hill Farm Forest Park.



57. Image 7 (Left) and Image 8 (Right): Wetlands Restoration opportunities investigated with a site visit to Cannons Creek and Kahotea Stream with Greater Wellington staff, Te Rūnanga o Toa Rangatira and Porirua City Council

Whitireia Coast Key Native Ecosystem (KNE) site

58. Aerial weed control using drone technology was successfully undertaken at the Whitireia Coast Key Native Ecosystem (KNE) site. This was the first trial of drone-based weed control at the site, with encouraging initial results. The steep coastal escarpment presents significant access and safety constraints for ground-based operations, and drone deployment enabled efficient treatment of otherwise inaccessible infestations. This technology has strong potential as a valuable tool for managing ecological weeds at Whitireia Coast and other sites with difficult or hazardous terrain.

59. While drones are highly effective for targeted weed control in challenging environments, helicopter spraying remains the most efficient and cost-effective option for large-scale treatment. Alongside the drone operation, approximately 16 hectares of gorse and licorice plant were helicopter sprayed across wildfire-affected areas of Whitireia Park. Following the January 2024 fire, both weed species rapidly colonised the disturbed landscape and, if left unmanaged, would have hindered native succession and slowed restoration to indigenous forest. The helicopter operation provided timely intervention, reducing weed competition and improving conditions for native regeneration and long-term ecosystem recovery.

60. *Image 9: Aerial weed control using a drone at Whitireia KNE site*



Environmental knowledge and insights



61. The Performance and Monitoring Committee of the Porirua Harbour Accord has used our advice to review and revise their approach to performance monitoring. As a result, it has strengthened the focus on performance alongside 'state of the environment' measurement and new systems are being developed to improve performance reporting

Planning and prioritising integrated work at a catchment scale



62. Two actions within the Porirua Catchment Plan are already underway:

- a. Te Awarua o Porirua Community Environment Fund –opened on 1 August 2026 and now has PCC and WCC funding.
- b. Kahotea Stream –Two workshops with the community group (Kahotea Kaitiaki) to help develop a mauri ora framework for the stream, and a walk over have been completed, with a larger walkover (with staff from the partner agencies) is scheduled for September.



63. Image 10: Harbour Accord Chairs and CEs at the Tiaki Wai Accord signing on 15th July.

Flood resilience



64. The flood operations team trialled a pampus removal methodology in the Kenepuru (Porirua) Stream lower reaches adjacent to the Greater Wellington monitoring site, which proved very effective. Removal of the pampus in the urban reach will restore the channel width and flow capability.



65. Image 11 and 12: Pampus removal trial on Kenepuru Stream

Te Whanganui-a-Tara



Mana whenua of the place

- Taranaki Whānui ki te Upoko o te Ika (Taranaki Whānui)
- Te Rūnanga o Toa Rangatira (Ngāti Toa)

Please see Appendix 3 for the catchment overview

Catchment Services/LTP Activity Groups

Environmental restoration, recreation and harbour safety



66. The Parks team have worked with 14 community groups, stakeholders, schools and partners to deliver planting in Wainuiomata, Kaitoke and East Harbour Regional Parks. There are an additional 10 volunteer planting days currently planned.
67. At Pakuratahi Regional Park *the Eastern Parks team have partnered with volunteer mountain bike track builders Ntrailz remediating a 3.2km track loop. This work was undertaken to support Ntrailz to meet new National mountain bike trail guidelines.*
68. The local ranger and the Parks Maintenance crew worked with local volunteers from Point Howard to install four new seats at lookout points throughout Point Howard and Lowry Bay tracks in East Harbour Regional Park. The new seats will likely outlast our own lifetimes as they have been made by volunteers from reclaimed hardwood wharf timbers donated by the Hutt City Council for repurposing.
69. Community volunteers completed herbicide gel training at Belmont, increasing their capability to safely support pest plant management.
70. Egeria (aquatic weed) spraying was undertaken in the head of Lake Kohangatera, Parangarahu. The method was aerial spraying via helicopter using Diquat (aquatic agrichemical). We fly from Gollan Valley on a very calm winter day.

71. Image 13: Aerial spraying from Gollan Valley for control of Egeria at lake Kohangatera, Parangarahu



72. The Pest Plants team staffed a stand and answered questions for Victoria University students promoting Greater Wellington and Biosecurity at the University Sustainability Day. It was well received with great positive feedback from those that attended.

73. The Pest Plants team completed work on Old Man's Beard along Te awa Kairangi using contractors to do the control work.

Pest Animals

74. Wainuiomata/Orongorongo Zero Ungulate Project ended the year strong with 404 ungulates removed - 291 goats, 84 red deer & 29 pigs.

75. The first 500m of ungulate proof fence is nearing completion with contractors awaiting a fine spell of weather to install the netting.

76. 5511 images of wild animals were captured on the game camera network, providing valuable insight into animal distribution and density.

77. 10x SRI (Seeding Ratio Index) monitoring transects were undertaken as part of a vegetation monitor to track trends over the life of the project. We found that ungulates were having even more of an impact than first thought, with very few young native plants successfully establishing due to grazing pressure.



78. *Image 14: Load of fencing material being flown in for WOWCAZUP fence*

79. Aerial 1080 operational planning is underway for Akatarawa Forest, and it is expected to go ahead from September 2026. Pre-operational signage will be going out over the next month. Feral ungulate control in multiple areas continued up to the end of financial year and planning is underway now for the new financial year. Control to protect Recloaking Papatūānuku plantings continues, with a focus on sites that are being planted this winter.

80. In Te Kopahou, another 352 possums have been caught with the AT220 trap network since its last check. Numbers continue to slow down from the previous result of 523 in February. Possums are still being caught across the entire network, not just the boundaries adjacent to incursion properties. In March, possum have been assessed with a trend monitor, with an outcome of 35% Wax Tag Index (WTI), down from 48% the year before. This shows the AT220 network is working well, the original pre monitor in 2023 was 68% WTI.

Environmental strategy, policy and protection



Moa Point

81. Investigation into non-compliance before and after the Wastewater Treatment Plant failure event in early February 2026 is on-going. This includes regular offshore water sampling and coastal monitoring.
82. Greater Wellington is working with Tiaki Wai on getting the plant back into compliance with a road map and timeframes released publicly by Wellington Water Limited (WWL) and WCC.

Hutt City Council District Plan

83. Hutt City Council (HCC) is progressing through hearings for the Proposed District Plan. Hearings commenced in late April and will run through until mid-December 2026.
84. Greater Wellington has tabled evidence in support of HCC's recommendations for Hearings 1 – 4, as there were no points of contention between Greater Wellington and HCC.
85. Hearing 5 covers the natural hazards topic. Greater Wellington officers have been working with HCC during the preparation of the S42A Officer's report to resolve matters where possible prior to the Hearing. Greater Wellington officers will be attending the Hearing in person to support our submission as it included technical information (hazard mapping) that the Hearing Panel may wish to interrogate.
86. Greater Wellington will continue to review each S42A report as it becomes available. We anticipate Greater Wellington's largest focus during the HCC Proposed District Plan hearings will be on providing supporting evidence for the following topics, as they are the topics most likely to affect Greater Wellington's assets and operations:
 - a. Hearing 6: Infrastructure, 22-24 September
 - b. Hearing 7: Other topics (including activities on the surface of water and earthworks), 14-16 and 20 October
 - c. Hearing 9: Designations, 23-24 November

Planning and prioritising integrated work at a catchment scale



Gollans Valley

87. Operational management of the Gollans Valley property continues. At the 3 September 2026 Council meeting, a report will be presented on mana whenua partnership, opportunities for public access and pathways for future planning for the property.

88. Feral goat control will continue at regular intervals throughout 2026-27, with some night shooting added; at least 421 goats have been removed since control began in late April 2026.

Houghton Valley landfill leachate project

89. Report writing by the collaborative working group is in final stages and is due to be completed near the end of August. Once complete it will be added to a future Environment and Climate Committee agenda. This collaborative catchment project will set out a long-term holistic vision for the sub-catchment, findings from technical review of prior engineering solutions, direction on initial actions for future funding, and lessons for other catchments constrained by the challenges of closed and historic landfills.

Māori outcomes – key engagement with mana whenua partners and feedback

90. Port Nicholson Block Settlement Trust (PNBST) have advised Hikoikoi Trust is to act on their behalf for resource management matters relating to flood operational work on Te Awa Kairangi/Hutt River. This includes participation in an Independent Review Panel on Greater Wellington's Flood Operations work and implementation of the Code of Practice, input into the Te Awa Kairangi/Hutt River Annual Works Plan, and Site-specific Environmental Management Plan (SSEMP).

Navigation Safety



91. From the end of June large vessels are using the new recommended tracks in and out of the harbour. A temporary navigation aid was installed south of Inconstant Point on the Eastbourne Coast Road to assist with this. In consultation with stakeholders, upgrades to several of the main navigation lights will now commence to further support these changes.
92. The draft Port and Harbour Marine safety code draft review was received and has been returned with some comments. The report identified areas for improvement and will now go to the Code steering group and working group for final approval.

Ruamāhanga



Mana whenua of the place

- Ngāti Kahungunu ki Wairarapa
- Rangitāne o Wairarapa

Please see Appendix 4 for the catchment overview

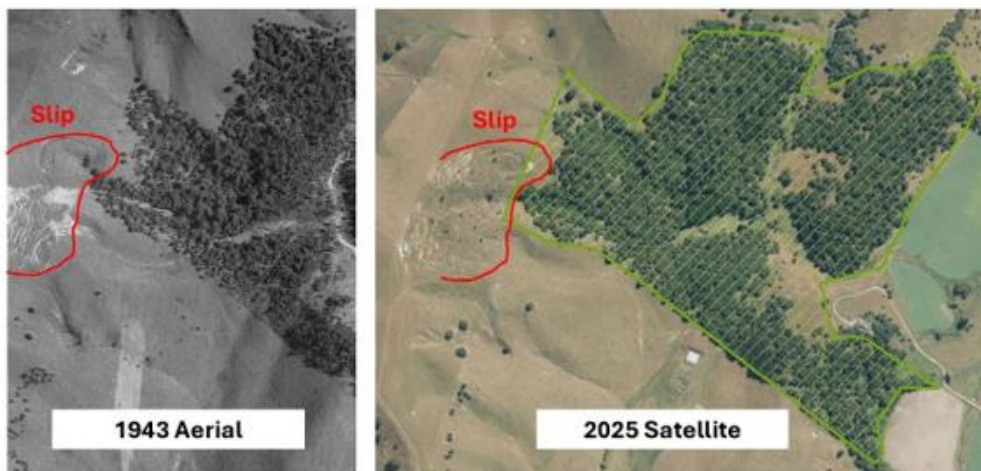
Catchment Services/LTP Activity Groups

Environmental restoration, recreation and harbour safety



93. We are working with landowners in the Makahakaha foothills above Strang's Bush Key Native Ecosystem (KNE) site to use pole planting to remediate an unstable slump. This will protect fencing that excludes stock from the KNE site and reduce sediment runoff into the Makahakaha stream. In addition to the biodiversity value of the work, the stabilised land will improve productivity for the mixed sheep and deer farm.

94. Funding for poles on the site is being shared across the Hill Country Erosion and KNE programmes and the landowner's own contributions to maximize the number of poles planted this year. This planting is one of several projects on this farm and within the larger Makahakaha stream catchment.



95. Image 15: The slip in question has been active since the first forest clearance of the site and is unlikely to resolve without further intervention.



96. Image 16: A brief stop in the work, showing the fractured clay soil of the slip face.

Wairarapa Moana

97. A school planting day was held at Kahutara Lagoon with Kahutara School supported by Enviroschools and Rangitāne o Wairarapa. 120 plants from Kohunui Marae Nursery were planted.

98. Approximately 160 DOC 250 Traps and Timms Traps have been installed in JK Donald wetland to help protect the wetland which supports the threatened Matuku-hūrepo and dwarf mistletoe.

99. Image 17: New trap installed in JK Donald wetland with its first customer.



100. Ongoing engagement with the Wairarapa Moana Statutory Board is required to seek approval for the use of toxins and firearms across their areas and blocks, as this method is significantly more effective for targeting possums in wetland environments.

101. Greater Wellington has entered a co-funding agreement with Earth Sciences New Zealand to support greenhouse gas research at Wairarapa Moana. The research will

improve understanding of the climate benefits of wetland restoration while supporting a local Masters student with whakapapa to Wairarapa.

102. A new Wairarapa Moana stock exclusion project will help improve water quality. The project aims to exclude stock from key tributaries flowing into Wairarapa Moana. The project will reduce sediment and nutrient inputs, improve streambank stability, strengthen relationships with landowners, and increase awareness of Greater Wellington's environmental support programmes in the rohe.
103. Wairarapa Moana spatial data is being consolidated into ArcGIS Enterprise, with an interactive field mapping tool under development to improve information sharing and collaboration between agencies represented on the Wairarapa Moana Statutory Board.

Wider pest control

104. Pukaha
 - a. The first year of Pukaha rabbit control overall has gone well. Extra cost recovery rabbit control work was taken on for Pukaha, on the Horizons side of the buffer.
 - b. Pukaha buffer night shooting 25/26 FY resulted in a total 2334 pests shot, consisting of 1944 rabbits, 245 hares, 73 Hedgehogs, 66 possums, 1 Ferret, 4 cats.
 - c. In the last three services the Pukaha Buffer predator network has controlled 38 Cats, 3 Ferrets, 20 Hedgehogs, 55 Rats and 3 Weasels.
 - d. Possum control also happens around Pukaha as part of the Regional Predator Control Programme (RPCP), and this maintains possums at low densities.
105. RPCP South Wairarapa Plains Operation had good overall coverage, however, high possum numbers remain around J.K. Donald Reserve and along the Tauwharenikau River area where work has only just started or will be ongoing.
106. A total of 6,297 bait stations have been installed and possum wax tag monitoring will happen first quarter 26-27. The Greytown township area was also targeted using traps and bait stations.
107. Landowners were approached to seek permission to undertake coordinated control around their properties. A total of 2,159 possums were caught across the operation. In the Woodside area, some issues were identified around OSPRI undertaking work and now pulling out of the area completely.
108. Pest Animals staff attended a community event at Dalefield hall in conjunction with the Wairarapa catchment collective and Wairarapa Pukaha to Kawakawa to engage with the community and offer insight into predator control and operations we are currently undertaking.

Environmental knowledge and insights

109. The first stage of public engagement on the Lower Wairarapa Valley Development Scheme Review took place between 20 July and 9 August. This stage was focused on informing the public that we have started the review and to involve them in starting to collect supporting information for the flood hazard modelling. We have asked the public to share their photos and stories of specific flood events with us. As the review is taking a holistic approach to managing the Lower Valley, we have also taken this opportunity to seek comments on environmental changes and any values the community holds about the area.
110. The recently completed Eastern Wairarapa Moana Turf Survey provides an important evidence base for understanding the condition, extent, and long-term trends of nationally and regionally significant lakeshore turf communities around Wairarapa Moana. The survey found that, while the overall extent of turf and aquatic habitats has remained relatively stable over time, community composition and distribution continue to respond to changes in water levels, sedimentation, inundation, and erosion. The findings will be a key input to investigations associated with the Lower Wairarapa Valley Development Scheme (LWVDS), helping to inform our understanding of potential scheme-related effects on lakeshore habitats and the ecological outcomes associated with future management options.
111. During the 2025/26 survey season, fish surveys targeting threatened species were undertaken across the region. A notable outcome was the discovery of two previously unknown populations of shortjaw kōkopu (*Galaxias postvectis*), a species classified as Threatened - Nationally Vulnerable. These populations were identified in the partially urbanised Karori Stream and in two tributaries of the Waiohine River, including Coal Stream. Prior to these discoveries, shortjaw kōkopu records within the Ruamāhanga catchment were limited to a site near Lake Onoke. The Waiohine findings suggest that the species' distribution within the region may be more extensive than previously understood; however, further survey work is required to confirm the extent of its distribution and identify any additional populations.

Planning and prioritising integrated work at a catchment scale

112. A road and bridge resilience working group with South Wairarapa District Council is making progress identifying short, medium and long-term options to protect priority roading infrastructure. Greater Wellington is contributing staff time and expertise. Following a meeting with Carterton District Council (CDC) we are exploring whether this approach could expand to both districts via the Ruamāhanga Roads shared service model.
113. Department of Conservation (DOC), South Wairarapa District Council (SWDC) and Greater Wellington officers have developed a shared list and map of assets that exist in the Wairarapa Moana Reserves. This work was requested by the Wairarapa Moana Statutory Board to support future planning.

114. A preferred option has been identified for the Waipoua Urban Reach major project; however, the stopbank alignment through Mawley Park and the Sports Bowl remains unresolved. Greater Wellington and MDC officers recently met to discuss a collaborative approach for finalising the alignment, which will allow flood risk management aspects (Greater Wellington) and reserve and recreational asset management aspects (MDC) to be addressed together.

Flood resilience



115. Recovery works have been planned and scheduled across South Wairarapa following a series of major rain events since the start of the year.
116. A resource consent application to renew the existing consents for the operation of the Geoffrey Blundell Barrage Gates and Lower Wairarapa Development Scheme is being prepared. This will be lodged on 30 June 2027. Consultation is commencing in tandem with the wider LWVDS Review.
117. Greater Wellington is preparing an application to amend existing designations for the Tauanui Stopbank and Lower Ruamāhanga Stopbank. This is to correct a misalignment between the designation boundary and the physical stopbank assets.
118. Tauanui Forest, part of Greater Wellington's commercial forestry land, has been significantly impacted by the last two weather events in South Wairarapa. One section of the road has been completely washed out, while several other sections have been compromised by the river. The Parks team are working with the forest managers to look at options such as alternate access or retirement of sections of the block where harvesting will have high environmental impacts.

Flood Resilience – Tranche 1 Programme

119. Site 6 Awaroa Sill, Ruamāhanga Awa: Project progress has been impacted by three significant weather events on 16 February 2026, 20 April 2026, and 27 June 2026. The remaining works are scheduled for completion during the coming Spring/Summer construction season, following a sustained period of dry weather.
120. Site 10 Tawaha Sill, Ruamāhanga Awa: Consenting, design and scope confirmation is currently ongoing.
121. Site 12 Fish Passage upgrades: All works have been completed, and practical completion was achieved in June.
122. Site 13 South Masterton Stopbank, Waingawa: All works have been completed, and practical completion was achieved in June.
123. Site 14 Homebush Wastewater Treatment Plant: Detailed design documentation has been received, and the contractual agreement with PowerCo has been executed. Construction activities, including the transformer and switch raising, are scheduled to commence in February 2027.

124. Site 15 Upper Buffer Establishment: 13/17 (76%) sites have been planted to date. Pest plant and pest animal control is ongoing.

125. Site 16 Whakawhiriwhiri Stream: Two pricing options are in development for landowner discussion and decision-making.

Māori outcomes – key engagement with mana whenua partners and feedback

126. Greater Wellington attended a Matariki wānanga hosted by Kohunui Marae after being invited to share and discuss our work on the Lower Wairarapa Valley Development Scheme.

127. A mana-whenua led approach to restoring fish passage at Pounui Lagoon is being explored. Greater Wellington is providing technical and practical advice on how our flap gate can be modified to support fish passage. Officers are also coordinating information for a paper to the Wairarapa Moana Statutory Board.

128. Through the Flood Resilience – Tranche 1 Programme, Greater Wellington's support of Ahu Collective has delivered benefits far beyond flood protection, creating meaningful employment pathways, building workforce skills, strengthening kaitiakitanga, and increasing economic opportunities for Māori and local communities. By supporting environmental restoration and growing hapū and iwi-led capability and leadership, the partnership is helping to build more resilient, sustainable communities while delivering lasting social, environmental, and economic outcomes across the region.

129. Hon. Kieran McAnulty is scheduled to visit an Ahu Collective planting site in August, supported by Greater Wellington. The visit will provide an opportunity to highlight the broader outcomes of the programme and showcase the value of investment in community led environmental restoration, resilience, and Māori led development initiatives.

Wairarapa Coast



Mana whenua of the place

- Rangitāne o Wairarapa
- Ngāti Kahungunu ki Wairarapa.

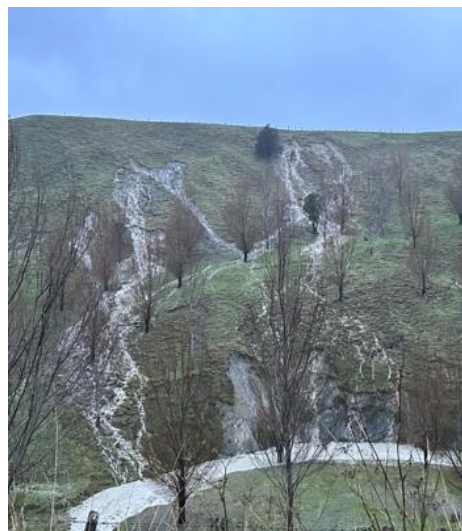
Please see Appendix 5 for the catchment overview

Catchment Services/LTP Activity Groups

Environmental restoration, recreation and harbour safety



130. The Wairarapa Coast and Ruamāhanga experienced their third major storm event in six months this June, but in amongst the destruction some positive stories have been heard. A Wairarapa Coast farmer sent us the photo below, showing how well the poplar and willow pole that were planted as part of the Hill Country Erosion Programme (co-funded by the Ministry of Primary Industries) were holding up the bulk of the hillside on his property. He stated that in his opinion if those trees weren't there the whole hillside would have probably slipped away.



131. *Image 18: The benefit of having poplars and willows on erosion prone land.*

132. Population of Madagascar ragwort was reported to Pest Plants via MPI after being wrongly identified in iNaturalist for at least 5 years. This is the first known site of Madagascar ragwort south of Northland and it is a serious agricultural pest. The pest plant team is doing surveying to understand the extent of the infestation.

133. Aerial control work of white edge nightshade is being undertaken with the landowner to reduce the extent of the infestation.

134. Surveying and mapping of the new spartina infestation along Whareama River with the assistance of the Harbours team.

135. A potential Didymo report came from MPI at Mangatoetoe Stream that our pest plant team supported Knowledge and Insights to investigate. Samples were taken and confirm that it was not Didymo.

136. Possum control is now completed in the Awhea-Oterie area, meeting performance targets, but contractors had to re-work some of the Te Awaiti area, and planned aerial control has slowed with landowner negotiations.
137. Possum control in the Langdale area is now completed and feratox signs will be removed in 3 months' time.
138. Planning for the 26-27 year commenced with Request for Quotes going out for two areas within the Pahaoa River to Tora area. One contract has been awarded, which started July 26, and the other contract will be awarded in the 1st quarter. This area contains very high possum numbers due to not been treated for more than a decade, and is very rugged, so costs are high, and could take several control operations to get them back down to low numbers. Aerial control is being planned for part of this area around the plantation forestry.
139. Ungulate control within Stoney Creek is progressing well with 160 ungulates removed since we started work in February, 129 of these were deer. The remainder are pigs and goats.

Environmental knowledge and insights



140. We are preparing environmental profiles for each of the seven sub-catchments in the Wairarapa Coast. These profiles will provide a summary of the terrestrial, freshwater and marine/coastal environmental information we hold and the environmental challenges and opportunities for each sub-catchment.

Planning and prioritising integrated work at a catchment scale



141. The Masterton District Council (MDC) coastal resilience group for Mataikona had their first meeting (includes mana whenua reps, Greater Wellington, MDC and residents). Greater Wellington has asked to be part of Governance group.
142. The first Wainuioru Hikoi film is complete; an oral history of the catchment with mana whenua experts and community. This is a resource to connect to place; funded and supported by Greater Wellington, the Wairarapa Catchment Collective, the Wainuioru catchment group, and the local nursery.
143. Greater Wellington, as a partner in the Wairarapa Catchment Collective, is progressing work on the MPI Feral Deer Management Pilot, a 12-month catchment-scale project designed to test how coordinated deer management can improve farm productivity, sustainability, and long-term land management outcomes. The pilot catchment is the Homewood catchment within the Wairarapa Coast. MPI is keen to understand how catchment groups can come together to lead this kind of mahi and how this model for feral deer control could be replicated throughout NZ. Greater Wellington's partnership in the Collective is a unique model for NZ, and we are already seeing the strength this brings to design and actions on the ground.

144. Continuing to progress the Wainuioru Possum knockback project. This new co-investment model for possum control with Greater Wellington is connected to the catchment plan and the annual review of their catchment plan. Greater Wellington are meeting with the forestry company and they are keen to be part of the project.



145. Image 19: Wairarapa Catchment Collective annual showcase and AGM was held with appreciation for Greater Wellington partnership and support expressed.

Flood resilience



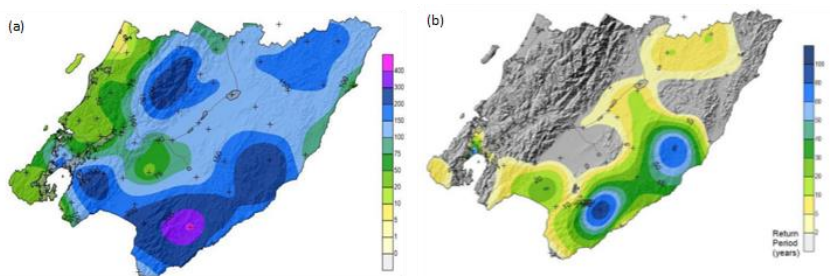
146. The June/July 2026 severe weather event had widespread impacts across Wairarapa, with the most significant damage concentrated in South Wairarapa, the Lower Ruamāhanga Valley and the eastern and southern coastal catchments. The event caused rapid rises in rivers and streams, extensive surface flooding, widespread slipping and erosion, significant roading damage, and power outages across the region.
147. The Rural Support Trust released a reporting more than 1,000 stock dead or missing/presumed dead, significant damage to farm tracks, bridges, culverts, fences, floodgates, pasture, silage and baleage, and widespread effects on sheep and beef, dairy, viticulture, agritourism and other rural businesses.
148. The event also occurred after several previous weather events in 2026, adding to financial, practical and wellbeing pressures for landowners, communities, councils and support agencies. Ongoing rain after the initial event increased the risk of further slips, erosion and infrastructure failure, and highlighted the need for coordinated recovery planning, targeted technical support, and longer-term resilience work across vulnerable catchments and access routes.

149. Greater Wellington responded to immediate issues via emergency river works in Awhea River but also progressing a longer-term solution at the same time with SWDC, community, and forestry. Emergency works are required to repair a stop bank, return Awhea River back to its river channel before the next heavy rain event, and protect the power pole that supplies power to the Awhea area.



150. *Image 20: Examples of some damage following the weather event.*

151. The Stoney Creek rain gauge recorded the highest rainfall over this period, with more than 400 mm across four days. The Te Wharau (Flat Point) rain gauge was similarly high with over 200 mm across four days. Based on the average rainfall record for this site, this was assessed as approximately a 1-in-100-year return period event at both sites.



152. *Image 21: Rainfall imaging*

Māori outcomes – key engagement with mana whenua partners and feedback

Ngāti Hinewaka rāhui and section 186A temporary closure application

153. Ngāti Hinewaka me ōna Hapū Karanga has submitted an application to Fisheries New Zealand for a temporary closure under section 186A of the Fisheries Act 1996. The application follows the severe weather event in early July, which caused extensive damage along the southern Wairarapa coastline and resulted in large numbers of dead kaimoana, including pāua, kōura and wheke, being washed ashore.

Ngā āpitihanga

Attachments

Number	Title
1	Te Rōpū Taiao Activity Report – Catchments overview

Ngā kaiwaitohu

Signatories

Approver	Fathima Iftikar – Kaiwhakahaere Matua Taiao Group Manager Environment (Acting)
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He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council's roles or with Committee's terms of reference</i> The Environment and Climate Committee has responsibility to consider all matters across the development and implementation of the work programmes of Greater Wellington's Environment Group and the Climate function in the Strategy and Performance Group.
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> Development and implementation of related work programmes fall under the core activities of the 2024-34 Long Term Plan
<i>Internal consultation</i> Internal consultation was limited to officers of Greater Wellington's Environment Group and Strategy and Performance Climate function
<i>Risks and impacts - legal / health and safety etc.</i> The report covers the full breadth of work programmes, and equally a broad range of environmental, reputational, legal, financial and health safety and wellbeing risks and associated implications.

Attachment 1 to Report 26.298

Action items from previous Environment and Climate Committee meetings

Date	Action item	Status and comment
26 March 2026	Committee Chair to keep petitioners and public presenters informed on next steps for Belmont Regional Park.	Status: Closed Comment: Chair emailed petitioners and presenters on 2 March, 25 March and 7 April. Officers will maintain communication and issues raised will be discussed through the master planning process
7 May 2026	Te Rōpū Taiao Environment Group Activity Update – 7 May 2026 – Report 26.151	
	Noted: The Committee requested the fuel supply update provided to the Finance, Risk and Audit Committee be provided to all councillors, and how the fuel costs and supply are affecting environment and climate activities, including any potential deferrals.	Status: Closed Comment: An internal Fuel Disruption Working Group has been established that is currently looking at the cost implications of the wider fuel situation and any implications of fuel restraint measures on critical fuel dependent functions should there be an escalation in the national fuel response plan phases. All updates go to Council
	Noted: The Committee requested that officers be consistent in use of agreed terminology, for example “master planning”; and where renaming is needed, to seek agreement for the change.	Status: Closed Comment: Officers have noted this direction. They are currently using the term ‘masterplanning’ and should

Attachment 1 to Report 26.298

Action items from previous Environment and Climate Committee meetings

		they feel renaming is needed will bring a paper seeking agreement for a change to the Environment & Climate Committee
	Noted: The Committee requested that a dung beetle and the catchment model referred to in the report be available for demonstration at a future Committee meeting.	Status: Closed Comment: The dung beetle demo will be incorporated into the Wairarapa field trip
18 June 2026	Public Participation Noted: The Committee requested that officers provide a response to queries raised by Councillors Clark and Watson, from South Wairarapa District Council.	Status: Closed Comment: Tamsin Mitchell sent an email to Cllr Rachel Clarke with overview information. This was followed by an email from Richard Shields answering the queries raised by SWDC Councillor Rachel Clarke.
18 June 2026	Te Rōpū Taiao Activity Report – Report 26.217 [For information] Noted: The Committee requested an item to a future meeting on Greater Wellington’s flood resilience, including information on the recent flooding event in Stokes Valley, and respective responsibilities for the management of the smaller streams and waterways in the Wellington Region.	Status: In progress Comment: Papers are scheduled for 20 August (Wairarapa) and 17 September (Stokes Valley)

Attachment 1 to Report 26.298

Action items from previous Environment and Climate Committee meetings

Environment and Climate Committee
20 August 2026
Report 26.354



For Information

FARMING REFERENCE GROUP CHAIR'S REPORT - JULY 2026

Te take mō te pūrongo

Purpose

1. To inform the Environment and Climate Committee (the Committee) of the deliberations of the Farming Reference Group meeting held on 29 July 2026.

Te tāhū kōrero

Background

2. On 2 April 2026, Council re-established the Farming Reference Group (the FRG). The FRG advises on matters related to Greater Wellington's functions that affect the well-being of the Wellington Region's farming communities.
3. The Council appoints the Chair of the FRG and after each meeting, a written report of the items discussed at that meeting is provided to the Environment and Climate Committee.
4. The Chair of the FRG shall speak to that written summary report at the relevant Environment and Climate Committee meeting.

Te tātaritanga

Analysis

Update from the Chair and matters considered by the FRG

5. The Chair reported that farming conditions across the region remain generally positive, with strong commodity returns, good winter feed levels and high sheep scanning results providing optimism for the season ahead.
6. However, significant rainfall in South Wairarapa caused widespread infrastructure damage, stock losses and access issues on affected properties. Members noted ongoing concerns regarding gravel accumulation in riverbeds and supported efforts to investigate practical and financially sustainable extraction solutions to improve flood resilience. Members highlighted the valuable support provided by the Rural Support Trust to flood-affected communities.
7. Farmers are also beginning to plan for a forecast El Niño weather pattern and the potential for extended dry conditions later in the year.

8. The FRG also discussed emerging opportunities and challenges for the sector, including the increasing use of technology such as Halter and faster livestock health monitoring tools
9. After receiving updates on the Wairarapa Catchment Collective Feral Deer Pilot Project and the review of the Regional Pest Management Plan, the importance of effective pest management, landowner engagement and collaborative approaches to biosecurity was emphasised.
10. The Chair also encouraged nominations for the Greater Wellington Ballance Farm Environment Awards 2027, recognising the value of showcasing innovation and good environmental stewardship across the region.
11. For further detail please refer to the attached letter from the Chair ([Attachment 1](#)). The agenda from the July meeting has also been attached (Attachment 2).

Belmont Regional Park

12. David Boone, Manager Ecosystems and Community, provided a comprehensive overview of land management within Belmont Regional Park, including the park's farming history, its transition towards greater environmental restoration, and the legislative framework that guides management decisions.
13. Members heard about the role that grazing continues to play within the park, both as a practical land management tool and as part of balancing multiple objectives such as recreation, biodiversity enhancement and landscape maintenance.
14. The presentation also outlined the process being followed to issue a new grazing licence and the considerations being taken into account when determining future management arrangements.
15. Members discussed the ongoing role of grazing within regional parks and the importance of maintaining a practical balance between environmental restoration goals and active land management.
16. The conversation highlighted the value of farming expertise in managing large landscapes and recognised that grazing can be an effective tool for controlling vegetation and supporting broader park outcomes.
17. Members were concerned that the grazing licence did not offer secure grazing tenure and unsure how attractive this option would be to a potential licence holder.
18. Consideration needs to be given to infrastructure maintenance such as fencing, tracking and stock handling facilities.

Local Government Reform

19. Luke Troy, Group Manager Strategy, provided an update on the Government's local government reform programme and its potential implications for the Wellington region.
20. Members heard about the preferred regional unitary authority model currently being considered, including proposed governance arrangements, representation structures, financial implications and the process through which councils would

consider reform options. The presentation also outlined the broader context for reform and the decisions likely to be required over the coming months.

21. Members expressed considerable interest in the potential impacts of reform on local communities, service delivery and regional representation. Discussion focused on the uncertainty surrounding the process, particularly given the relatively compressed timeframe for significant structural change.
22. Members emphasised the importance of ensuring rural voices remain well represented within any future governance arrangements and discussed the need for clear communication about the role and value of regional council functions.
23. Several members reflected concerns they were hearing from their communities regarding the scale of change being proposed and the ability to achieve positive long-term outcomes within the current reform timetable.

Biosecurity Overview

24. Officers presented an overview of Greater Wellington's biosecurity responsibilities and the wide range of programmes delivered through the Regional Pest Management Plan (RPMP).
25. Members heard about the legislative framework governing pest management, the requirement to review the RPMP, and Greater Wellington's decision to commence the review early to better address emerging risks. The presenters outlined key programmes targeting both plant and animal pests, including approaches ranging from eradication and exclusion to progressive containment and sustained control.
26. Emerging threats such as alligator weed, Chilean needle grass, wallabies, velvetleaf, woolly nightshade and Madagascar ragwort were highlighted, along with recent successes in pest animal control and biocontrol initiatives. Opportunities for rural landowners to contribute to the upcoming RPMP review were also discussed.
27. Members engaged in a wide-ranging discussion on the practical challenges of biosecurity management across the region. Particular attention was given to the difficulties of controlling pests where neighbouring properties or large reservoir populations can undermine local control efforts.
28. Members discussed rabbit and possum management, the need for coordinated catchment-scale approaches, and the importance of collaboration between councils, government agencies and landowners. There was also interest in emerging technologies, including thermal drone surveillance, and how these tools may improve pest detection and control outcomes.
29. The discussion reinforced the importance of maintaining strong partnerships with rural communities and ensuring landowners have opportunities to shape future biosecurity priorities through the RPMP review process.

Bird Flu

30. David Boone provided an update on the status of highly pathogenic avian influenza (bird flu) within the region. The update outlined current monitoring and

response arrangements, management protocols, and advice available to landowners and rural communities.

31. Members discussed the potential implications of bird flu for farming operations, poultry producers and native wildlife. The conversation highlighted the importance of maintaining vigilance, understanding reporting requirements, and ensuring landowners have access to up-to-date information and guidance as the situation evolves.

Forward work programme

32. A draft Forward Work Programme for the Farming Reference Group was considered at the May meeting and has subsequently been finalised and attached for the Committee's information (Attachment 3). The programme is intended to provide a flexible framework for future discussions and may be amended as required to incorporate emerging issues, member priorities, or matters referred to the FRG.
33. The Farming Reference Group welcomes feedback and guidance from members of the Environment and Climate Committee on the Forward Work Programme, including any views on priority topics and the nature of reporting the Committee would find most valuable as these matters are progressed in future.

Ngā āpitihanga

Attachments

Number	Title
1	Letter from the Chair
2	FRG Agenda 29 July 2026
3	FRG Future Work Programme 2026-2029

Ngā kaiwaitohu

Signatories

Writer	Will Syben – Team leader Policy
Approvers	Barbie Burton – Chair FRG Fathima Iftikar – Group Manager Environment (acting)

Attachment 1 to Report 26.354

Greater Wellington Farmer Reference Group Report

July 2026 following a meeting on July 29th 2026

To the Greater Wellington Climate and Environment Committee

The New Zealand farming industry is currently in a rare position where all three legs of the production stool are evenly balanced- financial returns are good, grass growth has been good so far for winter and there are plenty of trading stock about to sell at the good prices.

So far, the Wairarapa winter has been kind temperature wise but rain has caused great damage to infrastructure in the south east of the region. Stock losses were quite high along with access to areas on farm being dangerous and a high risk of animals becoming caught in slips once set stocking is completed for lambing.

There has been a lot of discussion about gravel build up in the rivers creating a shallow riverbed that overflows easily. It is good to see that there are moves in place for all parties to have a look at the problem and try and find workable solutions- it is definitely financially viable to extract gravels from the rivers but as with all infrastructure the company investing on the extraction process needs guaranteed tenure- currently we are digging up two dairy farms for land-based gravel extraction that is non-renewable. It has been noted that the lower Waiohine has benefitted from the gravel extraction at the bridge just north of Greytown.

Pregnancy scanning results in sheep for the region show record percentages for a lot of properties and a definite lift over last year. With the forecasted El Nino farmers are already thinking ahead about how to manage what maybe an extended dry period.

Dairy farmers are the most of the way through calving with good feed levels. Except those properties inundated with water in the recent rain event.

As with all farmer meetings there is an increasing talk of technology. Halter is opening up grazing opportunities in our hill country beef operations and this maybe looked at in forestry blocks opening up endless opportunities. Worm counts are now able to be done via a photo of a sample with a 2-3 hour turn around to know if you need to drench a mob- previously up to 3 days.

The Rural Support Trust has been doing an amazing job in our region of providing support to those properties affected by the deluge- from food parcels, a shoulder to lean on to mobilising teams to remove flood debris along with organising a couple of buses into the Irish rugby test with great local business support to sponsor the trip.

The Wairarapa Catchment Collective is running one of three national Feral Deer Pilot Project initiative to try and understand the level of the problem with feral deer and then try and collectively find solutions. This is an MPI funded initiative and is well received in the pest control space. FRG were briefed on the Regional Pest Management Plan and were left with a greater understanding of where the responsibilities lie with landowner responsibilities. There is always a difficult task for pest plants as they are much harder to be identified than a pest animal.

As requested by a FRG member we had a briefing on the future of Belmont Park. We were briefed about the legislative restrictions that are placed, meaning that only a grazing licence can be issued and not a full lease. With no long-term tenure, we did not see much financial return from the farming community to run animals in this area. The FRG members all have reservations about the replanting of such a vast area around the increased pest habitat- goats, pigs, deer and possums along with the major fire risk.

Attachment 1 to Report 26.354

A very interesting presentation on Local Government reform which filled in a lot of gaps the media at that point had not explained. As I write this report a lot has happened and the district councils have made their decisions known to government.

Bird flu is of worry to us all- Wairarapa Eggs have put all their hens indoors and it was good to see the legislative arm of 'free range' saying that whilst it is illegal they will not be chasing prosecutions.

On our farm had Greytown school, 65 children, put in 770 trees along edge of stream. Technically a thank you from the school for 30 years of running the cross country at our place. The children, teachers, parents and GW staff did a wonderful job. I am now battling the pukekos who are on a mission to pull the plants out- ironic really when trying to create a habitat for them

Finally, entries are open for the Greater Wellington Ballance Farm Environment Awards for 2027

<https://nzfetrust.org.nz/regions/greater-wellington/>

Please encourage people to enter, it is a great way for them to get feedback on their business, join a great alumni group and grow their network. There are nomination forms on the website- so get out and nominate someone from your area that is doing exciting stuff in food production.

Thank you

Barbie Barton

Chair, GWRC Farmer Reference Group

RogBar@xtra.co.nz

0274 418 187

GWRC Farming Reference Group

Agenda for meeting to be held at 34 Chapel Street, Masterton and via MS Teams on:

Wednesday, 29 July 2026 at 10:00 am

Membership

Cr Quentin Duthie	Councillor, Greater Wellington Regional Council
TBA	Councillor, Greater Wellington Regional Council
Barbie Barton	Member, Greater Wellington Regional Council
Aidan Bichan	Member, Greater Wellington Regional Council
Stan Braaksma	Member, Greater Wellington Regional Council
Gavin Bruce	Member, Greater Wellington Regional Council
Stu McKenzie	Member, Greater Wellington Regional Council
Kerry Walker	Member, Greater Wellington Regional Council
Meg Wheatstone	Member, Greater Wellington Regional Council
Richard Johns	Member, Greater Wellington Regional Council
Hannah French	Member, Greater Wellington Regional Council

MEETING AGENDA**29 July 2026**

	Item	Time
1.	Welcome	10:00am
2.	Round table of members and Councillors	10:05am
3.	Land Management in Belmont Regional Park Verbal update from David Boone	10:40am
4.	Local Government Reform An online update from Luke Troy (Programme Director of Local Government Reform) on current developments across the region, with a particular focus on the Wairarapa, and an outline of the options being considered. Our understanding is that by this time Wairarapa elected members will have much more information available to them on feasibility of reform options and so it's important this topic is covered at this meeting. Where possible we will seek to cover how a unitary authority might operate functions and duties that apply to the rural sector, such as land management – this will be covered to the best ability based on information known at that stage.	11:00am
5.	Biosecurity overview A presentation from Louis Schwer, Mark McAlpine and Glen Falconer, representatives from our Pest Plants, Pest Animals and Policy teams, on what GW is currently doing in pest plant and animal control, including the reasons behind our approach (including legislative context) and the key tools we use. Given the strong interest in this topic across the group, this session aims to build a shared understanding of the basics, which we can then expand on in future meetings with more detailed discussions on specific pest animals and plants, as well as processes (like the Regional Pest Management Plan review).	11:45am
6.	Bird flu update Megan Oliver	12:25pm
7.	Close / Lunch	12:35pm

Farming Reference Group



Forward work programme for the Farming Reference Group

1. During this triennium, the Farming Reference Group (FRG) will consider and support Greater Wellington on a range of organisational work relevant to the rural community. The following projects are likely to be presented, either to seek the Group's feedback on approach or for information.
2. **Resource Management Reform** – New Zealand is undertaking major resource management reform, replacing the Resource Management Act 1991 (RMA) with a Planning Act and a Natural Environment Act. These Bills were introduced in December 2025 and are expected to pass into law by mid-2026, with implementation continuing over several years.
3. The reforms aim to simplify the system, provide more national consistency, and reduce the need for resource consents, while strengthening environmental limits. However, some rural sector groups have raised concerns that, as currently drafted, the changes could increase complexity and costs in practice, particularly around water, with stricter environmental limits, potential market-based allocation or levies, and reduced access to freshwater.
4. Once announcements are made later this year and as further detail is released via National Policy Statements and National Environmental Standards, Greater Wellington will present to the FRG what the impacts are on the rural community and the approach we will take in implementing the new system. We would value the opportunity to test our approach with the FRG.
5. **Regulated Farm Planning** – The government is also progressing the rollout of Freshwater Farm Plans (FWFPs) as a key tool for managing on-farm environmental impacts. These were introduced under the current RMA system but are expected to be embedded and expanded under the new framework, with implementation continuing over the next few years alongside wider reforms. FWFPs are intended to shift away from traditional consent processes toward a more farm-specific, risk-based approach to managing freshwater impacts.
6. Compared to the previous regime, the main change is a move from prescriptive rules to more flexible, outcomes-focused plans tailored to individual farms. However, rural groups have raised concerns that FWFPs may add complexity rather than reduce it, particularly if farmers are still required to obtain consents alongside plans, or face stricter freshwater limits that constrain land use and increase compliance costs.
7. Greater Wellington also has its own farm plans (Certified Farm Environment Plans) as set out in the Natural Resources Plan (NRP) and Plan Change 1 to the NRP. In addition to advising on the final make up of national Freshwater Farm Plans and how Greater Wellington implements its role in that system, we will be seeking FRG feedback on the

approach we take to our own regional farm plans once the national system is rolled out. Your feedback on implementing the national FWFP in this region will be critical to ensuring it is delivered effectively.

8. **Storytelling Campaigns** – The Environment group has recently showcased the environment restoration work that has occurred, in conjunction with Greater Wellington, on Matariki Terraces with Georga Tatham, Fernhill Farms with Jason Christensen and Ongaha Farm with Shane McManaway. Feature videos were created to showcase the great work that farmers, catchment groups and Greater Wellington are doing together on their farms and in their catchments. It would be valuable to seek the Farming Reference Group's feedback on these features and to discuss how we can continue to showcase the positive work undertaken with farmers in environmental restoration.
9. **Regional Pest Management Plan** – The Environment and Climate Committee has agreed to initiate an early review of the Regional Pest Management Plan (RPMP). An RPMP is developed under the Biosecurity Act 1993 and it outlines a strategic and statutory framework for the regional management and eradication of specified pest species. Regional councils are required to review the RPMP at least every 10 years to assess whether it is achieving its objectives. The review process involves technical assessments, public consultation, and formal submissions from stakeholders before the plan is finalised and adopted. For rural landowners, an RPMP places responsibility for landowners to actively manage pest species. We will be connecting with the FRG for your feedback as we review the RPMP.
10. **Pest plant work** – A small-scale management plan for pest plants that are not currently in the Regional Pest Management Plan (RPMP) is typically developed by the regional council to target specific species or locations where focused control/management is required. Our Pest Plants team are in the process of creating a small-scale management plan for White-Edge nightshade on the Wairarapa Coast with aerial surveys completed, chemical trails done and aerial spraying planned. These plans set out clear objectives, control methods, timelines, and responsibilities for managing the pest. The team would value FRG's feedback on the plan.
11. In addition to this, we will provide general overviews of key pest plant issues across the Wellington region, including current distribution, emerging threats, and trends in weed spread. Particular attention will be given to species of concern raised by members, including gorse, Bathurst burr and inkweed, along with an explanation of the "good neighbour" approach and how responsibilities for pest plant management are shared between landowners and Greater Wellington.
12. **Canada Geese** – Continue to provide updates on Canada Geese as an emerging and significant pest issue, including any feedback from MPI and opportunities for management through the Regional Pest Management Plan. The discussion should also cover current research, regional coordination opportunities, and potential advocacy with other regional councils to support a more joined-up national response.
13. **Crack willow** - Provide an overview of Greater Wellington's current approach to crack willow management, including how control activities are prioritised and funded. Members are interested in understanding whether there is a regional strategy for crack

willow control, particularly in areas of high biodiversity value, and how this issue may be considered through the Regional Pest Management Plan review process.

14. **Catchment approach** – The Catchment Approach is how Greater Wellington collaborates with communities, mana whenua, Territorial Authorities and agencies, and the shift to planning at a catchment-scale. This is a system-based approach that links multiple outcomes within and between catchments.
15. An integrated programme at a catchment scale ties our work together and allows genuine priorities to be seen and considered at a meaningful level for each catchment and the communities that live and work there. The Catchment Managers would like to present how the catchment approach is developing for rural communities and invite feedback from the FRG.
16. **The Lower Wairarapa Valley Development Scheme** – Flood prevention and drainage work undertaken by local government, river and catchment boards and settlers have been an ongoing intervention in the hydrology of Wairarapa Moana and the Ruamāhanga River catchment stretching back more than 100 years. The scheme has significant impacts on Māori/mana whenua as well as affected landowners and other stakeholders.
17. Greater Wellington is responsible for the scheme assets and operations, including the extent to which they provide flood protection. In light of growing challenges with parts of the scheme (partly due to the age but also the way its operations have evolved overtime) and changing weather patterns, we have initiated a future focused review of the scheme. An update could be provided to the FRG on the approach being taken to the review, the complexity involved in it and its progress to date.
18. **Water Races** – Water races have long been a feature of Wairarapa's rural landscape, in most cases playing an integral role in providing access to stock drinking water. There are currently five water races in operation: Longwood & Moroa (SWDC), Carrington & Taratahi (CDC) and Ōpaki (MDC). The races themselves are operated by the District Councils however are regulated (via consents and compliance) by Greater Wellington.
19. There are varying views as to the pros and cons of water races (including cost of operation & maintenance, efficiency of use, the role they play in aquifer recharge, drainage and ecosystem creation). Discussions are ongoing in communities around these factors, most recently highlighted by discussions regarding the future of the Ōpaki water race network. An update to the FRG on the complexity of water races, along with Greater Wellington's role, would be beneficial.
20. **An Environment Restoration showcase** – We propose to update FRG on the Environment Restoration team's expanded scope of work, its current operating approach, and to showcase the valuable work being delivered with our rural communities. This topic is likely to be presented progressively across multiple sessions.
21. **Successes and learnings from recent weather events** – The Region has been impacted by multiple severe weather events in recent times. As a result, we have both successes and key learnings to share with FRG. This would likely comprise two parts:
22. an overview of how the regions flood control measures performed during these events; and

23. emergency response measures (including media, communications (warning systems) and data sharing
24. Alongside this we would like to invite feedback from FRG and the rural communities they represent, on how the above was received by rural communities and any learnings we could take forward.
25. **Local Government Reform** - Provide regular updates on local government reform proposals and seek feedback from Farming Reference Group members on the potential implications for rural communities across the region. Particular focus should be given to the impacts of any changes to regional governance arrangements, including discussions relating to the Wairarapa and views from members on how reform may affect representation, service delivery, and rural outcomes.
26. **Wairarapa Water Resilience** - The Wairarapa Water Resilience Strategy was developed collaboratively in 2021 and offers a long-term, holistic framework for improving water security while protecting our environment, supporting communities, and enabling sustainable economic growth.
27. In 2024, a governance group, with representatives from iwi, the three district councils and Greater Wellington Regional Council, was established to oversee implementation of the Strategy.
28. In 2025, WEDS Work Programme funded a report commissioned by this governance group, providing "A Case for Action". The report draws together decades of research, planning, and stakeholder engagement to clearly outline both the risks of inaction and the opportunities created by improving water resilience across the region.
29. New economic modelling presented in the report compares two potential mid-century scenarios — a water-constrained future and a water-resilient future. The modelling indicates that with secure water availability and management, Wairarapa could unlock significant economic opportunity, particularly in horticulture and associated processing.
30. The FRG have requested an update on the Wairarapa Water Resilience Strategy, including the work of the governance group and findings from the recent "Case for Action" report. The discussion should focus on the potential benefits of improved water security for rural communities, environmental outcomes, and economic development, and seek feedback from members on regional water resilience priorities.

Environment and Climate Committee
20 August 2026
Report 26.327



For Information

RUAMĀHANGA ANNUAL RIVER SCHEMES & FLOODPLAIN MANAGEMENT PLANS IMPLEMENTATION REPORT 2026

Te take mō te pūrongo

Purpose

1. To advise the Environment and Climate Committee (the Committee) on the effectiveness of Greater Wellington's implementation and delivery of Council's Te Kāuru Floodplain Management Plan, the Waiōhine River Plan and the Lower Wairarapa Valley Development Scheme.

He tūtohu

Recommendations

2. That the Committee:
Agree that the current and proposed actions provide an effective response to identified flood risks and are on track to deliver the objectives and agreed levels of service contained within the relevant flood plans.

Te tāhū kōrero

Background

3. This is the nineteenth annual report on the Ruamāhanga (previously titled Wairarapa) Floodplain Management Plans and capital works. We have provided a brief overview on flood protection in [Attachment 1](#).
4. The implementation of floodplain management plans (FMPs) is undertaken through three business units: Knowledge and Insights; Infrastructure, Assets and Support; and Environment Operations.
5. Each workstream comes together to manage the risk from the Wellington Region's flood hazards by developing and reviewing floodplain management plans; implementing structural, non-structural and environmental measures to reduce the flood risk to the respective floodplains and improve the environment; and maintaining constructed works and river schemes.
6. The Te Kāuru Floodplain Management Plan (Te Kāuru FMP) was adopted by Council in June 2019, and although capital funding to implement the major projects within the FMP was not available until 1 June 2022, slowing progress for the first two years. Planning, rates and governance changes were successfully implemented in 2023.

7. The Waiōhine River Plan (the WRP) was adopted by Council in April 2022. The implementation for the structural measures (capital works) of the Waiōhine River Plan began in 2023.
8. The Lower Wairarapa Valley Development Scheme (LWVDS) includes capital funding to support the delivery of substantial works where required. Recent projects include the Pukio East stopbank retreat, Tawaha Floodway investigations, Awaroa Sill, Fish Passage upgrades to the Whangaehū Stream/Pā Creek and the progressing Mahaki Stopbank investigations.
9. All operational works in relation to Te Kāuru FMP, WRP and LWVDS have continued through the 2025/26 financial year.

Te tātaritanga Analysis

Te Kāuru Floodplain Management Plan (2019)

10. The report has been prepared for the eight Northern Wairarapa river management areas covering Mt Bruce, Te Ore Ore, Gladstone, Kopuaranga, Waipoua, Waingawa, Whangaehu and Tauaru Rivers that are covered by the Te Kāuru FMP.
11. The implementation of Te Kāuru FMP began in 2023. The projects that were started are outlined below, with several projects completed within expected timeframes.
12. The Upper Ruamāhanga Advisory Group met on Wednesday 22 July 2026 to discuss the 25/26 Annual Report and 26/27 Work Programme. The issue of gravel extraction was discussed, although it was noted that the majority of the Upper Ruamāhanga catchment experiences degradation, so the need for extraction is not as prevalent as lower down the catchment. Overall, the Upper Ruamāhanga Advisory Group were satisfied with the work undertaken in FY2025/26 and the proposed 26/27 Work Programme.

Te Kāuru Capital Projects – Flood Resilience - Tranche 1 Programme

13. Central government has allocated \$1.2b to the Regional Infrastructure Fund, administered by Kānoa, to support regional infrastructure, productivity and resilience. This includes \$200m for flood infrastructure across two tranches, with a 60:40 Crown: Council funding split and strong delivery expectations.
14. Greater Wellington has 16 of the 42 approved national projects, covering flood protection and management works such as stopbanks, riparian planting, groynes and culverts. In 2025/26, the Tranche 1 Programme delivered five major Te Kāuru projects worth approximately \$2.01m, summarised below.
15. Site 4 – Waipoua Industrial Site – Akura Road: Located upstream of the rail bridge (completed September 2025) – construction of five rock groynes and a 15m length of rock revetment, totalling 2,347 tonnes on the true right bank. The project was completed at an approximate cost of \$1.18m.



Site 4 – Waipoua Industrial Site (Akura Road) – five rock groynes and a 15m rock revetment completed.

16. Site 7 – Masterton Raw Water Supply: Located within the Waingawa River adjacent to Black Creek (Kaituna) with the construction of three rock groynes, totalling 2,510 tonnes. The project was completed in April 2026 at an approximate cost of \$1.38m.



Site 7 – Masterton Raw Water Supply (Waingawa River) – three rock groynes completed.

17. Site 8 – Hood Aerodrome: Located within the Waingawa River at the end of South Road with construction work of four 140 tonne rock groynes. The project was completed in September 2025 at an approximate cost of \$1.0m.



Site 8 – Hood Aerodrome (Waingawa River) – four rock groynes completed

18. Site 13 – South Masterton Stopbank: Located within the Waingawa River upstream of the SH2 road bridge with the removal of tree and the remediation of a section of contaminated stopbank. The project was completed in June 2026 at an approximate cost of \$380,000.



Site 13 – South Masterton Stopbank (Waingawa River) – removal of three trees and the remediation of a section of contaminated stopbank

19. Site 15 – Upper Ruamāhanga Buffer Establishment – Site prep and planting has commenced on various sites throughout the Wairarapa (Upper Ruamāhanga). The project has expended approximately \$690,000 during the 2025/26 financial year.

Te Kāuru – Waipoua River (Waipoua Urban Reach) Flood Risk Management Plan

20. The Environment Committee endorsed the preferred flood risk management option for the urban reach of the Waipoua River in June 2025. The preferred option was the outcome of Stage 1 of the Major Project Response: Urban Waipoua. Stage 2 and Stage 3 are to reduce flood risk in high-priority and flood-sensitive areas.
21. The preferred option combines structural flood protection upgrades in the urban reach, nature-based solutions upstream of Masterton, and non-structural responses across the wider catchment. The next phase will investigate opportunities to align and stage nature-based solutions alongside the structural works.
22. Greater Wellington’s Ruamāhanga Catchment team is leading discussions with Masterton District Council on implementation and desired service levels for key assets, including Mawley Park.

Te Kāuru FMP - Upper Ruamāhanga Flood Hazard Modelling

23. Progress on the flood hazard mapping for the Upper Ruamāhanga has been modest. The modelling is currently undergoing final peer review and is being readied for independent audit. This is programmed to be completed in FY 2026/27.

Te Kāuru FMP – Operational work

24. Mt Bruce works focused on preventing a Ruamāhanga River course change across farmland opposite Rathkeale College. Bed and beach re-contouring was completed at a cost of \$26,000, with willow cabling planned to further strengthen the riverbank.



Ruamahanga River - Bed Recontouring works (near Rathkeale College)

25. Te Ore Ore works in the Ruamāhanga River area focused on willow planting and management. Vegetation clearing on inside bends between Waipoua and Wardells Bridge was completed by a bulldozer contractor. The total cost of all works was \$89,000.
26. Gladstone Ruamāhanga River works focused on extensive willow planting and management, including burning willow piles at Taumata Island, cutting new poles, and starting native planting in cleared areas. Total project cost was \$136,000.
27. Waipoua River works focused on beach vegetation clearing in the upper reaches to improve river capacity and flood conveyance, along with stopbank maintenance and willow layering. Total cost was \$181,000.



Emergency works in urban reach flood 16th Feb 2026.

28. Waingawa river works were centered around vegetation clearing in design channel, construction of gravel groynes for erosion protection and removal of channel debris. Total cost of work is \$156,000.
29. Significant crack willow removal was completed across the eastern rivers in 2024/25, with follow-up work to manage willow piles and debris blockages after minor flood events. Additional removal was undertaken in the Taueru River (Bideford). The focus next year will be controlling crack willow regrowth. Total costs across the eastern area came to \$190,000.

Waiōhine - Mangātarere River Management Scheme (WRP)

30. The Waiohine Advisory Group met on Monday 20 July 2026. The Waiohine Advisory Group were satisfied with the work undertaken in FY 2025/26 and the proposed maintenance work planned for FY 2026/27. Members also noted the importance of continuing clear communication around the proposed rates

increase for next financial year, particularly in the context of current cost-of-living pressures.

WRP Investigations for Structural Work

31. Waiohine Stop Banks: The focus for the coming year is on completing the pre-construction planning required to progress the stop bank works identified in the Waiohine Flood Management Plan (FMP). While the FMP outlines the preferred flood protection solution, further work is needed to develop landowner agreements, confirm consenting requirements, and refine project costs. These activities are essential to ensuring the project is fully prepared for implementation and meets both regulatory and community expectations.

WRP Capital Projects – Flood Resilience - Tranche 1 Programme

32. In 2025/26, under the Tranche 1 Programme, Greater Wellington delivered one major Waiōhine River project worth approximately \$3.3m, summarised below:
33. Site 5 – Fullers Bend: Located 1.3km upstream of SH2 road bridge (completed April 2026) – construction of seven rock groynes and a 197m length of rock revetment, totalling 10,548 tonnes on the true right bank. Offset mitigation planting has now been completed. The project was completed at an approximate cost of \$3.3m.



Site 5 – Fullers Bend – seven rock groynes and a 197m rock revetment



Site 5 – Fullers Bend – offset mitigation planting completed.

WRP Operational works

34. Rock purchase – 1,000 tonnes of heavy rock was supplied to Gueze yard, replacing rock used at Fullers Bend. A further 100 tonnes were used for fish refuge structures. Current stockpile: 2,400T. Cost: \$180,000.
35. Stopbank maintenance – Most Waiōhine stopbanks were maintained, including mulching and tree removal. Cost: \$60,000.
36. Vegetation and debris clearing – Flood debris and windfall were cleared from channels, tracks and stopbanks. Cost: \$28,000.
37. Waiōhine enhancement – Tracks, community planting support and native planting were completed at Kuratawhiti and Fullers Bend. Cost: \$27,000.

38. Spray programme – Scheme-wide weed spraying was completed. Cost: \$20,000.
39. Mangatārere erosion works – Willow clumps were tied into gum poles to protect the CDC wastewater site bank. Cost: \$18,000.
40. Mangatārere stopbank maintenance – Lower stopbanks were mulched to manage grass and scrub. Cost: \$17,000.
41. Willow planting – 471 willow poles were planted. Cost: \$11,000.
42. Channel works – Beach re-contouring was completed from the confluence to Kuratawhiti Street. Cost: \$11,000.

Lower Wairarapa Valley Development Scheme (LWVDS)

Review of LWVDS

43. Greater Wellington has initiated a comprehensive, future-focused review of the Lower Wairarapa Valley Development Scheme (LWVDS, or the Scheme), using a whole-of catchment approach. A paper providing more detail on the scheme and review is also on the order paper for this committee meeting.
44. Greater Wellington’s resource consents to undertake river management activities within the Lower Wairarapa Valley Development Scheme (LWVDS) and to operate the Barrage Gates expire on 31 December 2027. In preparation for the renewal of these consents, and in accordance with the requirements of the existing consents, the review programme will inform future consent applications and support the development of a future-focused strategy for the Scheme.
45. The Lower Valley gravel extraction resource consent is being renewed as part of the wider LWVDS consent. The programme includes four workstreams that cover reviewing the level of flood protection, reviewing the current operation and maintenance regime, understanding, and monitoring the level of effect on the surrounding environment, and providing options and recommendations to improve environmental and cultural outcomes.
46. A substantial programme of investigations is being undertaken across the Lower Valley to fill critical information gaps, support the preparation of technical reports required for consent applications, and provide the evidence base needed to inform the Lower Wairarapa Valley Development Scheme Review and future long-term consent renewals. The investigations cover a broad range of disciplines, including hydrology, flood hazard modelling, freshwater ecology, terrestrial ecology, coastal processes, and other environmental and engineering assessments relevant to the scheme and its future management.
47. We completed two core investigations in 2025 to establish the baseline dataset for the Lower Wairarapa Valley Development Scheme Review: topographic LiDAR and bathymetric LiDAR surveys.
48. A consultant has been engaged to deliver the flood hazard model, with draft flood hazard maps expected to be available by mid-2027.
49. A report reviewing the current operation and maintenance regime has been completed. The associated recommendations are currently being assessed to

determine how they can be incorporated into the Lower Wairarapa Valley Development Scheme Review programme.

50. In parallel, we are working with mana whenua to establish how we will work together throughout the review.
51. We are also working with the Wairarapa Moana Statutory Board to establish how we will work together throughout the Review, recognising the Board's statutory responsibilities and interests.
52. We have developed dedicated engagement plans for both the Lower Wairarapa Valley Development Scheme Review and the associated consent pre-application process.
53. Initial community engagement on the hydraulic modelling will begin in July this year. The purpose of this phase of engagement is to understand the extent and behaviour of recent flooding events across the Scheme area, supporting accurate calibration of the hydraulic model. We are also exploring opportunities to use the engagement process to gather information on environmental and cultural values to inform the review programme.
54. Engagement for the renewal of the consents will commence in the first quarter of the new financial year. Where appropriate, these activities will be aligned with the engagement for the Lower Wairarapa Valley Development Scheme Review to ensure a coordinated approach and provide clarity and consistency for everyone involved.
55. An update was presented to the Lower Ruamāhanga Advisory Group on 20 July 2026.

LWVDS Operational Activity

56. The Lower Ruamāhanga Advisory Group met on 20 July 2026. Members confirmed they were satisfied with the work undertaken in FY2025/26 and the proposed maintenance work planned for FY 2026/27. Discussions were focused on the recent flood recovery works and what was proposed to address landowner concerns going forward, particularly in relation to gravel extraction. The group acknowledged the constraints of priorities and resourcing but wanted to see further exploration of opportunities to enable better gravel extraction in the Lower Valley to address some of the landowner concerns. There were also discussions around the opportunity to connect with some of the landowner groups that have been initiated in response to the severe weather in with the LWVDS Review.
57. General work progress summary (delivered though operating expenditure-OPEX) - A wetter summer kept river levels high. Planned works progressed but were paused after the February, April, and June flood events.
 - Pole willow and native planting schedules were delivered at various sites along the Ruamāhanga, Turanganui, Tauanui and Huangarua Rivers.
 - 'Yellow iris' pest plant removal programme was undertaken below the barrage gates in the Ruamāhanga River.

- Stopbank vegetation removal, mulching and mowing programme was delivered at scheduled sites in the Lower Ruamāhanga Valley.

58. Response to mid-February 2026 flood event

- Stopbank erosion repairs were undertaken at five separate locations:
- Ruamāhanga River at the Upland Cutoff Drain.
- Turanganui River downstream of Lake Ferry Road Bridge.
- Turanganui River Delta.
- Tauanui River section above Lake Ferry Road Bridge.
- Waihora Stream 100m above the confluence with the Ruamāhanga River.
- Channel diversion work in the Turanganui River to protect Te Rata Road from future flood damage.
- Channel diversion work in the Waihora Stream between the Ruamāhanga confluence and the Lake Ferry Road Bridge.



Ruamahanga River at Upland Cut Off Stopbank Before and After Damage (with Repair)

59. Response to mid-April 2026 flood event

- Turanganui River channel maintenance upstream of Te Rata Road bridge.
- Turanganui River gravel groyne construction upstream of Te Rata Road bridge.
- Pole willow planting to re-establish vegetative buffer upstream of Te Rata Road bridge.
- Tauanui River Erosion Repairs and channel management upstream of Lake Ferry Road Bridge.
- Tauanui Vegetation clearing to increase channel capacity above Lake Ferry Rd Bridge.



Turanganui River at Te Rata Rd Before and After April Event

60. Response to early July 2026 flood event

- Turanganui Vegetation clearing to increase channel capacity at the Lake Ferry Road Bridge.
- Turanganui river Stopbank repair directly below the Lake Ferry Road bridge.
- Tauanui Delta channel realignment
- Tauanui River Lake Ferry Rd Bridge rock work protection to north abutment and sediment clearing of south bridge span.
- Tauanui River bridge debris 'blockage clearing.
- Tauanui Erosion repairs at 3 locations.
- Repairs to previous recovery work in both the Tauanui and Turanganui Rivers.



Erosion repairs (rock Protection) to Tauanui River Bridge

61. The Lake Ōnoke outlet was mechanically cut nine times and self-opened twice during the year.

LWVDS Capital Projects – Flood Resilience Tranche 1 Programme

62. In 2025/26, the Tranche 1 Programme delivered four major LWVDS projects worth approximately \$1.550m, summarised below:
63. Site 6 – Awaroa Sill, Ruamāhanga Awa: Most of the sill has been built to design level, but completion was delayed by weather events in February, April, and June 2026. Remaining works are planned for spring/summer after sustained dry weather. Expenditure in 2025/26 was approximately \$750,000.



Site 6 - Awaroa Sill, Ruamāhanga Awa - construction still in progress

64. Site 10 – Tawaha Sill, Ruamāhanga Awa: Consenting, design and scope confirmation for the Tawaha Floodway site upstream of SH53 are ongoing. Expenditure in 2025/26 was approximately \$430,000.
65. Site 12 – Fish Passage upgrades: The Whangaehū Stream/Pā Creek rock ramp at Lake Ferry Road, near Kohunui Marae, was completed in June 2026 at an approximate cost of \$330,000.



Site 12 – Fish Passage upgrade (Whangaehū Stream/Pā Creek

66. Site 16 – Whakawhiriwhiri Stream: Upgrade options are being costed and will be reviewed with affected stakeholders to determine next steps. Expenditure in 2025/26 was approximately \$35,000.

Regional Initiatives

Ruamāhanga Valley Aggregate Demand

67. Waiōhine River and Ruamāhanga river gravel extraction operations at a range of sites have been completed and assist with river alignment management.

68. A total of 125,000 m³ was extracted in 2025/26, comprising of 53,500 m³ from the Lower Valley Scheme, 56,700 m³ from the Upper Valley Te Kauru Scheme, and 14,800 m³ from the Waiōhine Scheme

Summary of Ruamāhanga Valley Annual Gravel Extraction History (last 10-years)

Year	Total Volume Extracted m ³	Upper Valley m ³	Lower Valley m ³
2015/16	195,000	141,000	54,000
2016/17	185,500	96,500	89,000
2017/18	230,000	133,500	96,500
2018/19	225,500	134,000	91,500
2019/20	156,500	96,000	60,500
2020/21	160,500	93,000	67,500
2021/22	178,000	93,500	84,500
2022/23	206,500	126,000	80,500
2023/24	152,500	76,500	76,000
2024/25	144,400	81,000	63,500
2025/26	125,000	71,500	53,500

Table 1 –Ruamahanga Summary of Gravel on Extraction for Upper and Lower Valley

Asset Management

69. Refer to the Annual Flood Asset Assessment Report 2026 – Wairarapa River Schemes ([Report 26.339](#)) for a detailed breakdown of asset condition ratings, flood protection asset performance, risk assessments, and proposed maintenance and capital improvement programmes across the Upper Ruamāhanga, Lower Ruamāhanga and Waiōhine River Schemes.
70. The report notes that the Wairarapa River Schemes comprise approximately 3,668 flood protection and erosion control assets with a replacement value of approximately \$422 million. The 2026 assessment, supported by a return to full asset inspections, indicates that 85 percent of assets are in Very Good, Good or Moderate condition and that the overall flood risk profile remains stable.
71. Asset condition and performance continue to be managed through Greater Wellington’s risk-based asset management framework, with maintenance, renewal and capital improvement works prioritised towards assets and river reaches that present the greatest risk to communities, infrastructure, and productive land.

Consents

72. The Barrage Gates and LWVDS consents expire in 2027. Greater Wellington is in the process of preparing renewal consent applications, supported by a consenting strategy. The applications are being prepared in parallel to the ongoing LWVDS review, with information and data being sourced to support technical

reporting requirements for the consents and for the investigations that form part of the long-term review.

73. The current plan is to seek a short-term consent for the Barrage Gates and LWVDS, with the long-term review forming the basis for future consents.
74. The Lower Valley gravel consent is expected to be lodged with, or alongside, the Barrage Gates and LWVDS renewals. Existing consents continue until a new consent is granted.
75. The renewal application for the Upper Ruamahanga river management activities remains on hold while engagement with mana whenua takes place. A priority activity is a stocktake on where the application is currently at, including engagement, and to update any assessments to progress towards granting.

Flood Incident Management

76. The Flood Warning & Response Improvements programme was launched in 2019 to strengthen Greater Wellington's flood readiness and improve outcomes for communities by focusing on three key opportunities:
77. Improving alignment in response procedures across Greater Wellington and WREMO to support a more effective, regionally consistent emergency response.
78. Enhancing Greater Wellington's forecasting capability so flood warnings can better support proactive emergency management across the region.
79. Building community awareness in flood-prone areas so people better understand their risk and know how to respond when flooding occurs.

Flood Warning

80. Greater Wellington is now in the deployment phase of our new suite of flood forecasting models. These floods forecast models will be able to provide early warning of floods up to 3.5 days in advance of alarm thresholds being exceeded.
81. We are working with WREMO and regional partners to calibrate the flood forecast models and develop confidence ratings for the communication of uncertainty.

Flood Response

82. The Flood Incident Management Team (FIMT) has completed a full training programme in the 25/26 financial year and is preparing for a further round in the 26/27 financial year. The FIMT alongside the wider CDEM Group has conducted debriefs following each major activation over the course of the 25/26 financial year and is bringing these lessons back into the improvements programme.

Flood Recovery

83. Recovering from significant flood events is a major undertaking. We are currently developing a project to learn lessons from Hawkes Bay, flood impacted communities in the Wairarapa as well other flood impacted areas to develop a framework for use by Environment Group staff in recovering from significant flood events. This project is due to run this financial year.

Summary of progress

84. The 2024–34 Long Term Plan prioritises safeguarding communities from major flooding by providing agreed levels of flood protection. This is achieved by implementing Floodplain Management Plans and maintaining existing and new flood protection assets.
85. Table 2 presents the financial summary for the implementation of the FMP or Scheme, based on original cost estimates. These figures have been adjusted to 2026-dollar values using the Reserve Bank’s CPI calculator, with the index value set as of 30 June 2026.

Note: no inflation adjustments have been applied to the year in which each FMP or Scheme estimate originated. And general CPI values have been used.

Scheme or FMP	Original FMP Total 40-year estimate (\$Millions) Inflation Adjusted	Expenditure to June 2026 (\$Millions)	Total Budgeted to 2034 (\$Millions)	Total expenditure forecast to 2034 (\$Millions)
Lower Valley (LWVDS)	14.4	11.5	22.4	33.8
Waiōhine (WRP)	2.3	3.8	4.7	8.5
Upper Valley (Te Kāuru FMP)	36.4	10.9	5.3	16.2

Table 2 – FMP Implementation Financial Summary

Ngā hua ahumoni Financial implications

86. For this reporting period, projects are within the current flood protection budgets.

Summary Flood Damage Reserves

87. Scheme reserves cover floods up to a 25-year return period, while the Major Flood Investment Reserve covers larger events. Recent flood events will require flood damages reserves to be drawn down for the Lower Wairarapa Valley District Scheme.
88. Greater Wellington also holds contingency and major flood funds. If reserves are used, costs are split 50:50 between the scheme reserve and the equivalent Greater Wellington fund.

89. Table 3 below is a summary of the individual scheme and total reserves.

Ruamāhanga Catchment Schemes	Scheme Reserve	Major Flood Investment Reserves	Total Reserves
Lower Valley (LWVDS)	2,300,700	2,117,300	4,418,000
Waiohine	1,014,100	74,900	1,089,000
Waiohine River Plan (WRP)	25,100	-	25,100
Upper Valley (Te Kāuru FMP)	1,928,600	150,800	2,079,400
	5,268,500	2,343,000	7,611,500

Table 3 – Flood Damages Reserves for Ruamāhanga River Schemes as of 30 June 2026

Ngā Take e hāngai ana te iwi Māori Implications for Māori

90. Greater Wellington is required to manage land and water within a range of statutory requirements, including giving effect to Te Mana o Te Wai and considering Te Tiriti o Waitangi in the development and implementation of the Council's strategies, plans, programmes, and initiatives.
91. Our partnership with mana whenua partners within Council's Long-term Plan 2024-34 recognises and supports mana whenua as kaitiaki (guardians) of their broad whenua, freshwater and moana interests in their ancestral lands. We continue to work with our mana whenua partners in new ways at all levels of our organisation including governance, management, and operations.
92. A considerable number of Māori, both mana whenua and mātāwaka, live and work in flood prone areas within the Upper and Lower Ruamāhanga catchments. There are also numerous sites of cultural and spiritual significance potentially at risk from flooding. Effective delivery of our flood risk management programme helps to protect Māori communities and their values across the four well beings.

Te huritao ki te huringa o te āhuarangi Consideration of climate change

93. Each catchment project considers predicted climate change impacts when determining the appropriate response.
94. The programme supports the 2015 Climate Change Strategy by improving regional adaptation and resilience to natural disasters.
95. Rock supply emissions vary by quarry source and transport distance and are not currently included in the organisation's GHG inventory.
96. Heavy machinery emissions have not been estimated; in 2024/25, diesel use for flood protection operations accounted for 4.3% of Greater Wellington's carbon footprint, or 1,385 tCO₂e.

97. Quarry selection is the main driver of project emissions. Reducing long-distance rock transport offers the greatest emissions reduction opportunity, but procurement found limited scope due to scarce supply and unsuitable material.
98. Greater Wellington assesses flood risk options using 100-year climate change projections, generally assuming 20% higher rainfall intensity, 1m sea-level rise for District Planning, and 1.3m for infrastructure planning.
99. Since 2023, Climate Resilience projects have included planting and river corridor greening to support carbon reduction, ecosystem resilience, and long-term adaptation alongside hard infrastructure.

Ngā tūāoma e whai ake nei

Next steps

Te Kāuru Floodplain Management Plan (2019)

100. We will progress scheduled capital works under the Flood Resilience Tranche 1 Programme for FY 2026/27 including for the continuation of construction activities, planting and installation works during the next financial year.
101. We will transition the preferred option for the Waipoua River urban reach project from Greater Wellington Knowledge and Insights to Greater Wellington Delivery, with the delivery programme subject to available funding.

Waiōhine River Plan (2022)

102. We are reviewing the Waiohine FMP implementation costs and delivery processes, with work underway to confirm the process and a realistic sequencing of activities. This includes validating assumptions, assessing resourcing requirements, and developing an indicative timeline for the next phase of implementation. At this stage, we are focused on ensuring the approach remains practical and aligned with agreed outcomes and will provide further detail once the review is complete.
103. We will continue ongoing maintenance works for the Waiōhine River.

Lower Wairarapa Valley Development Scheme

104. We will continue to develop a long-term management plan for the scheme. Unlike other schemes, there is no FMP or equivalent document in place for the LWVDS. Public engagement to support development of a strategic management plan is beginning now, with an initial focus on establishing accurate modelling and wider community involvement in establishing the values and benefits/dis-benefits of the scheme.
105. We are developing the best way to involve mana whenua in decision-making through our partnerships with Ngāti Kahungunu ki Wairarapa and Rangitāne. We are also consulting with the Wairarapa Moana Statutory Board to establish an appropriate framework to guide the LWVDS review.
106. We will continue to keep the Lower Ruamāhanga Advisory Group informed throughout the review process and will be relying on their advice on how best to engage the wider community.

107. We will engage with the community on the hydraulic modelling to support accurate calibration of the model.

108. We will explore opportunities to use the engagement process to gather information on environmental and cultural values to inform the review programme.

Turanganui

109. We will advance work to develop potential approaches for better management of the Turanganui River given repeated severe rainfall events in the headwaters of this catchment. We plan to do this by working with landowners through conversations with the Pirinoa Catchment Group, mana whenua and with any new group set up by farmers.

110. We shall then programme work accordingly with actions such as further investigations, flood modelling, Council decisions for access to special funding as developed from these conversations.

Resource consent renewals

111. We are also preparing to begin engagement on the associated consent pre-application process.

112. Lodgement of the applications to renew both the LWVDS river management activities consent and the Barrage Gates consent is anticipated in June 2027.

113. We shall deliver the scheduled capital works under the Flood Resilience Tranche 1 Programme for FY 2026/27. This will include continued construction activities, along with planting and installation works at the following locations:

- Site 6 – Awaroa Sill: Earthworks and planting
- Site 10 – Tawaha Sill: Earthworks and planting
- Site 16 – Whakawhiriwhiri Stream: Complete optioneering / rescoping documentation

Asset Management

114. We shall continue Asset condition and performance assessments for Greater Wellington Flood Assets.

Ngā āpitihanga

Attachments

Number	Title
1	Wairarapa Flood Papers Introductory Overview

Ngā kaiwaitohu Signatories

Writers	Tina Love – Team Leader, Infrastructure Projects Steven Fargher – Acting Team Leader, Assets and Performance, Delivery Hamish Fenwick – Team Leader, Flood Operations, Delivery Francie Morrow – Team Leader, Knowledge Water Resilience, Knowledge, and Insights Andy Brown – Knowledge Risk Management and Resilience Lead, Knowledge and Insights
Approvers	Jacky Cox – Manager, Infrastructure, Assets and Support Jack Mace – Hautū Whakatutuki Director Delivery Fathima Iftikar – Kaiwhakahaere Matua Taiao Group Manager Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council’s roles or Committee’s terms of reference.</i> The Committee has specific responsibility to review the effectiveness of implementing and delivering Council’s Te Kāuru Floodplain Management Plan, the Waiōhine River Plan and the Lower Wairarapa Valley Development Scheme.
<i>Contribution to Annual Plan / Long term Plan / Other key strategies and policies</i> The projects contained within this report deliver on Greater Wellington’s strategic priority area of te tū pakari a te rohe/regional resilience, and support delivery of Greater Wellington’s strategic priority area of te oranga o te wai Māori me te rerenga rauropi/freshwater quality and biodiversity.
<i>Internal consultation</i> Specific projects consult with groups and departments across Greater Wellington where relevant to that project.
<i>Risks and impacts: legal / health and safety etc.</i> The purpose of implementation floodplain management plans is to reduce the risk to communities and improve the region’s resilience.

Attachment 1 to Report 26.327

Wairarapa Flood Papers

Environment & Climate Committee August 2026

The Committee is receiving three papers today

A. Two regular (annual) reports on our flood protection service delivery in the Ruamāhanga catchment:

i.) **Report 26.327** - Ruamāhanga annual river schemes & floodplain management plans implementation report 2026

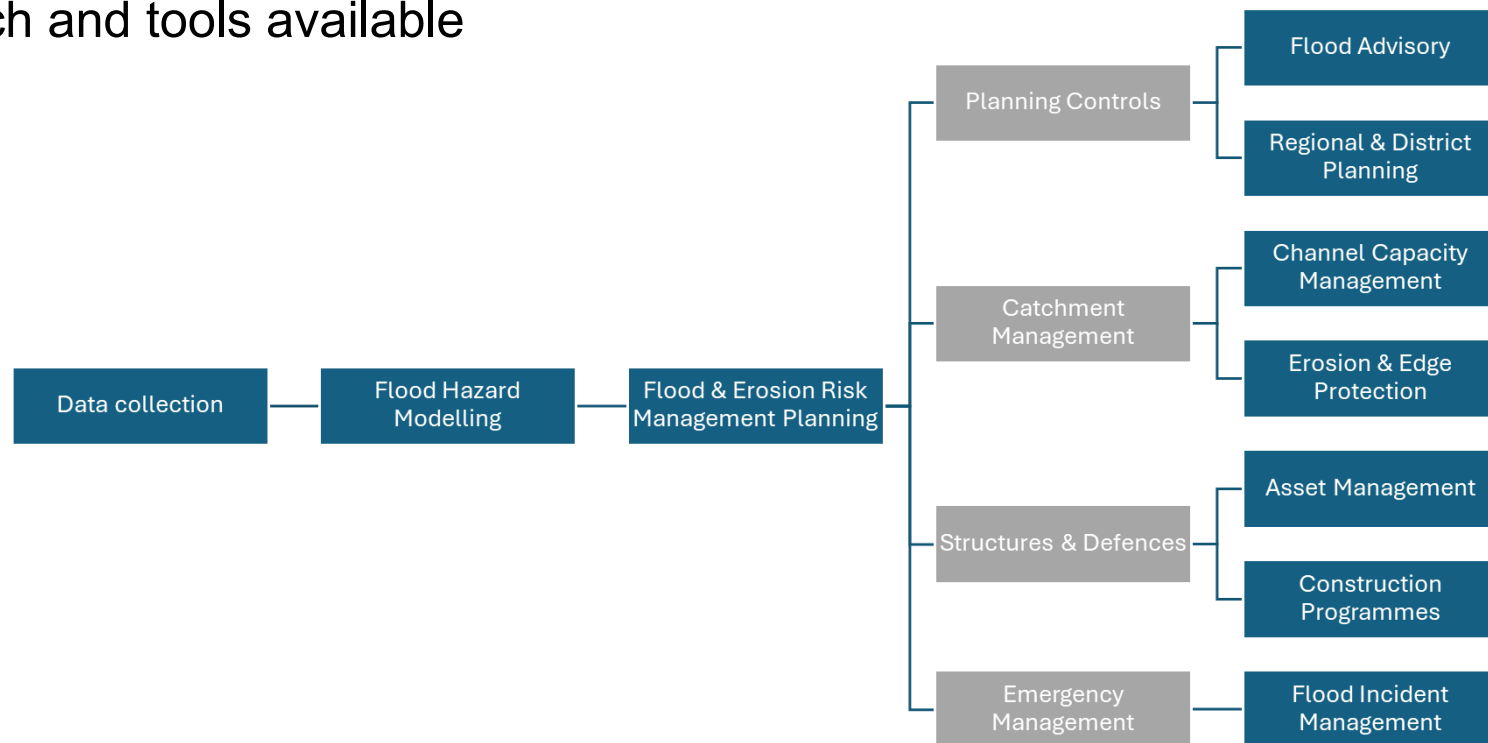
ii.) **Report 26.339** - Ruamāhanga river schemes - annual flood asset assessment report 2026

B. A special report on flood recovery activity and future flood resilience in South Wairarapa following recent severe rainfall events:

Report 26.303 - Review of flood protection in South Wairarapa

Flood Risk Management

Approach and tools available



What is a scheme and how does it work

- Schemes attract a targeted rate to deliver an agreed level of service for flood protection and erosion control. They are 50:50 targeted and general rate-funded.
- Greater Wellington owns and maintains the assets that form the scheme (i.e. willows buffers, stopbanks, flapgates, and other infrastructure).

Role of Floodplain Management Plans

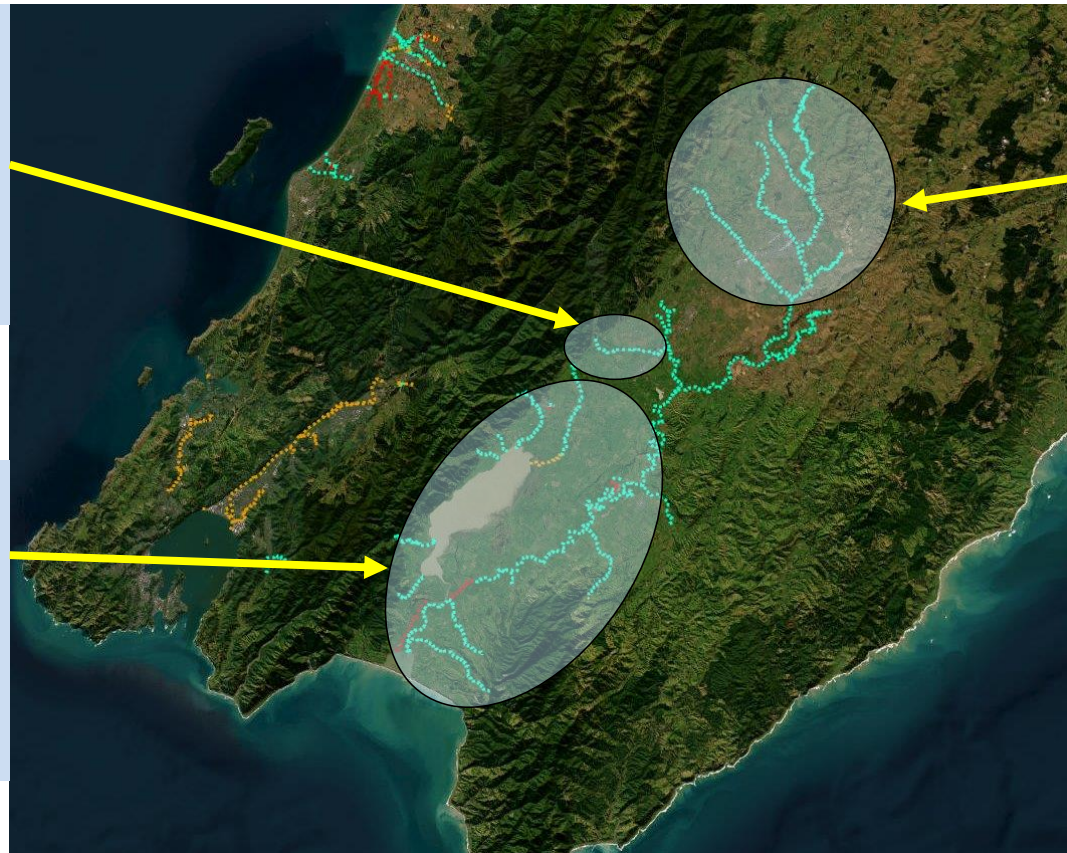
- Floodplain management plans are a strategic tool Greater Wellington uses to manage flood risk and define the methods and level of service for flood protection and erosion control in a scheme area.

The two annual reports cover the three Ruamāhanga Schemes

Waiōhine

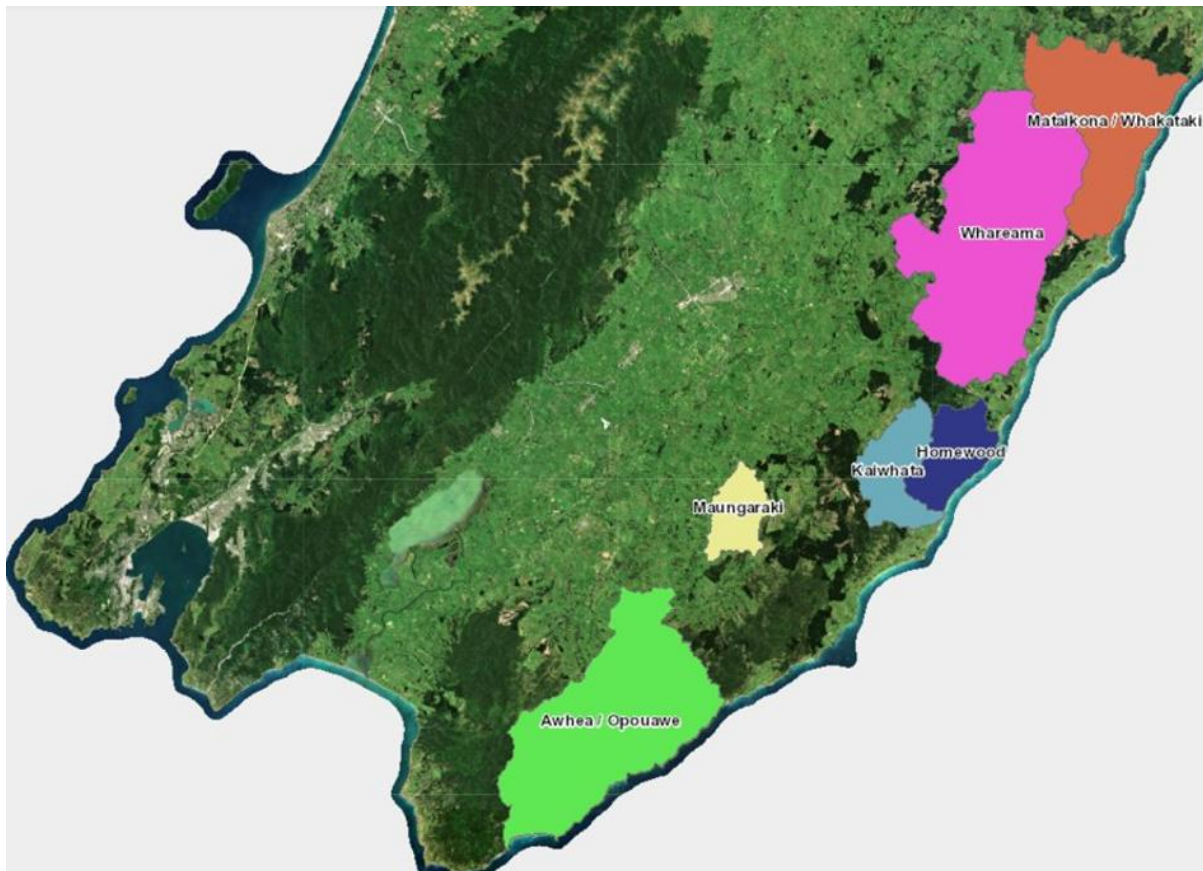
Waiōhine Living
River Plan
(Floodplain
Management Plan)

Lower Wairarapa
Valley
Development
Scheme



Upper
Ruamāhanga
Te Kauru
Floodplain
Management Plan

Wairarapa Coast Schemes



Wairarapa Coast Schemes

From north to south:

- Mataikona/Whakataki
- Whareama
- Kaiwhata
- Homewood
- Maungaraki
- Awhea/Opouawe

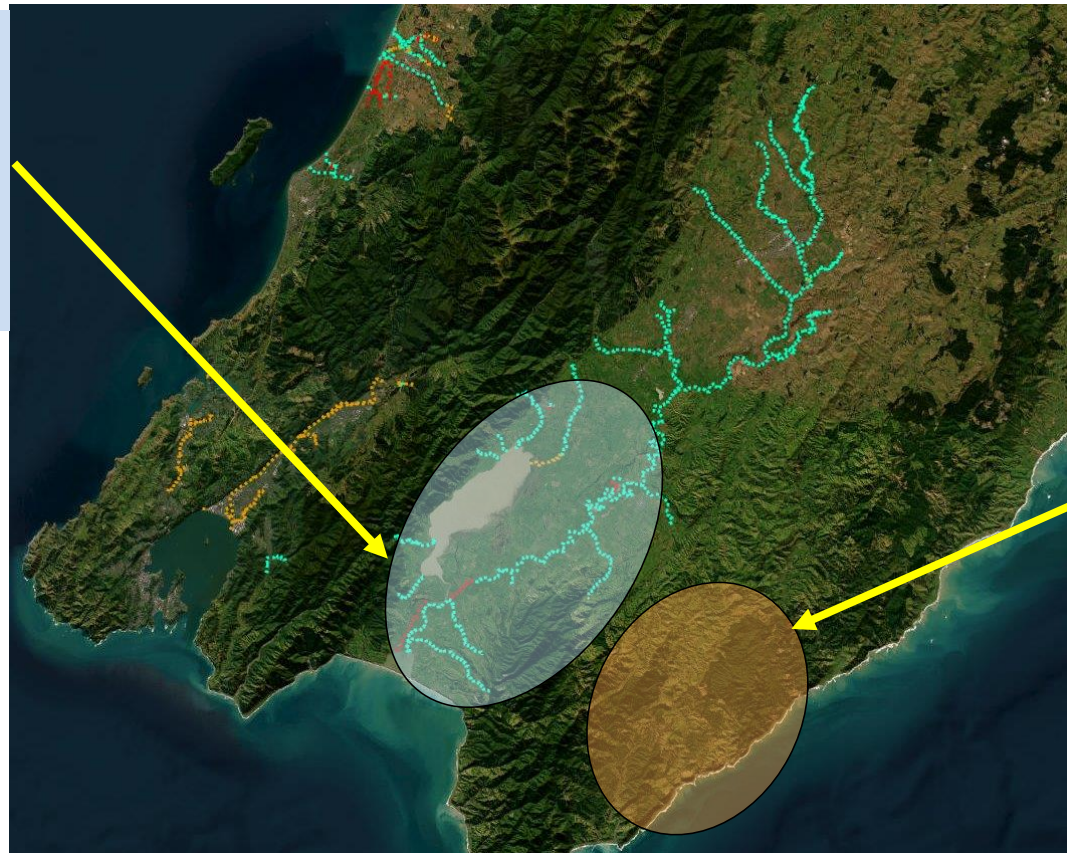
The South Wairarapa paper covers schemes in the SWDC area

Lower Wairarapa Valley Development Scheme

Key context for the South Wairarapa paper

We currently don't have floodplain management plans in these scheme areas.

Levels of service are not fully defined or agreed



Awheha/Opouawe



**Environment and Climate Committee
20 August 2026
Report 26.339**

For Decision

**RUAMĀHANGA RIVER SCHEMES - ANNUAL FLOOD ASSET ASSESSMENT
REPORT 2026**

**Te take mō te pūrongo
Purpose**

1. To advise the Environment and Climate Committee (the Committee) of the overall performance, condition, and risk profile of flood protection and erosion control infrastructure assets within the Ruamāhanga River Schemes, and to confirm that these assets continue to be managed to the agreed Levels of Service through a risk-based asset management approach.

**Whakarāpopototanga Matua
Executive Summary**

2. The 2025/26 Annual Flood Asset Assessment indicates that the Ruamāhanga River Schemes continue to perform in accordance with their established Levels of Service for flood protection and erosion control. The assessment combines asset condition inspections with a nationally recognised risk-based performance assessment to evaluate the condition, resilience and overall performance of the flood protection network.
3. Overall asset condition has improved compared with the previous year. The proportion of assets assessed as being in Poor or Very Poor condition has reduced from 19% in 2025 to 14% in 2026, while 85% of assets remain in Very Good, Good or Moderate condition. This improvement reflects the continued delivery of targeted maintenance and renewal programmes, completion of capital improvement works, and increased operational investment provided through Greater Wellington's Long-Term Plan 2024–34.
4. Asset performance also remains stable. A total of 98% of assessed river reaches continue to be classified as Very Low, Low or Medium risk, providing confidence that the flood protection network continues to perform as intended across the majority of the Ruamāhanga River Schemes. The small number of reaches assessed as High or Very High risk are well understood by officers and continue to be actively managed through operational maintenance, Floodplain Management Plans, technical investigations and targeted capital improvement programmes.
5. The assessment highlights that asset condition and flood risk are not directly correlated. Asset condition provides an indication of an asset's physical state, while flood risk reflects both the likelihood and the consequences of failure. As a

result, assets requiring ongoing maintenance do not necessarily compromise the overall performance of the flood protection system, and some locations will continue to be classified as High or Very High risk because of the significant consequences of flooding, even where assets are well maintained and performing as intended. This approach enables Greater Wellington to prioritise maintenance, renewals and capital investment where they will have the greatest impact on maintaining the intended Levels of Service.

6. The 2026 assessment demonstrates that Greater Wellington continues to apply a risk-based approach to asset management, ensuring available resources are prioritised towards areas where maintenance, renewals and capital investment will achieve the greatest benefit. The findings of this assessment have informed the 2026/27 operational work programme and longer-term investment planning across the Lower Ruamāhanga, Upper Ruamāhanga and Waiōhine River Schemes.
7. Overall, the assessment provides confidence that the Ruamāhanga River Schemes are being effectively managed, that known asset condition and flood risks are well understood, and that appropriate maintenance, renewal and improvement programmes are in place to maintain the agreed Levels of Service and improve the long-term resilience of the flood protection network. [Attachment 6](#) provides a summary presentation of the key findings of this assessment to support the Committee's consideration of this report.

He tūtohu

Recommendations

8. That the Committee:
 - a. **Notes** that the Ruamāhanga River Schemes flood protection and erosion control asset portfolio continues to perform well, with the majority of assets remaining in Very Good to Moderate condition and overall flood risk remaining stable.
 - b. **Notes** that the return to a full asset inspection programme in 2026 has provided a more comprehensive understanding of asset condition and greater confidence in the assessment of network performance.
 - c. **Agrees** that flood protection and erosion control assets within the Ruamāhanga River Schemes have been managed to the agreed Levels of Service during 2025/26.
 - d. **Notes** that identified priority issues are being addressed through operational maintenance programmes, capital improvement works and longer-term asset management and infrastructure planning.

Consideration by Committee

9. The Committee is responsible for overseeing the implementation and delivery of Council's regional resilience priorities, including flood protection, erosion control and river management activities. To fulfil this governance role, the Committee relies on reporting from advisory groups and officers to provide assurance that flood protection and erosion control assets continue to perform effectively and

deliver the agreed Levels of Service, and that identified risks are being appropriately managed.

10. During May 2026, the Upper Ruamāhanga, Lower Ruamāhanga and Waiōhine Advisory Groups each considered their respective Annual Flood Asset Assessment Reports. Each Advisory Group confirmed that flood protection and erosion control infrastructure assets within their schemes have been satisfactorily maintained and that identified condition and performance issues are being addressed through ongoing maintenance, renewal and improvement programmes.
11. This report consolidates the outcomes of those assessments to provide the Committee with an overview of the performance, condition and risk profile of flood protection and erosion control assets across the Ruamāhanga River Schemes.

Te tāhū kōrero

Background

12. Greater Wellington is responsible for managing flood protection and erosion control infrastructure assets, together with associated land and property, across 15 river management schemes throughout the Wellington Region. These assets provide critical protection to communities, businesses, productive land and essential infrastructure by reducing the impacts of flooding and river erosion.
13. The Ruamāhanga River Schemes comprise the Upper Ruamāhanga, Lower Ruamāhanga and Waiōhine River Schemes, collectively containing approximately 3,668 flood protection and erosion control assets with a replacement value of approximately \$359 million¹. These assets include stopbanks, groynes, rock protection, floodgates, culverts, channels and associated structures that function together as an integrated flood protection system.
14. This annual report forms part of Greater Wellington's assurance framework, providing the Committee with confidence that flood protection assets continue to deliver the agreed Levels of Service and identifying where maintenance and capital investment are required to manage future risk.
15. Under the Local Government Act 2002, major flood protection and control works are required to be maintained, repaired and renewed to agreed Levels of Service. The Act defines major flood protection, and control works as schemes that meet at least two of the following criteria:
 - a operating expenditure exceeding \$250,000 in any one year;
 - b capital expenditure exceeding \$1 million in any one year;
 - c asset replacement value exceeding \$10 million; or
 - d directly benefiting a population of more than 5,000 people.
16. The Levels of Service for each scheme are established through Floodplain Management Plans (or equivalent agreements) and generally describe the level of flood protection provided in terms of an Annual Exceedance Probability (AEP).

¹ Asset Revaluation as of 30 June 2024.

These levels vary between schemes to reflect local flood risk, community expectations and investment decisions.

17. Greater Wellington applies a nationally recognised risk-based asset management framework to assess the performance of flood protection systems. The framework considers asset condition, channel performance and the consequences of failure to assess flood risk across river reaches, enabling maintenance, renewal and capital investment to be prioritised where they provide the greatest benefit.
18. During 2026, Greater Wellington returned to a full annual condition inspection programme across all Ruamāhanga River Schemes following the targeted inspection approach undertaken in 2025. This has provided a more comprehensive and consistent assessment of the asset base, improving confidence in asset condition, risk assessments and long-term investment planning.

Current Challenges

19. Greater Wellington continues to operate in an increasingly complex environment, with rising service expectations, ageing infrastructure, climate change impacts and increasing regulatory obligations placing pressure on the delivery of flood protection and erosion control services.
20. Climate change remains one of the most significant long-term challenges for flood protection asset management. More frequent and intense storm events, prolonged high river flows and changing river behaviour increase the demand for reactive maintenance, accelerate asset deterioration and reduce opportunities to complete planned maintenance programmes. These pressures reinforce the need for resilient infrastructure and adaptive long-term investment planning.
21. The flood protection asset portfolio continues to evolve through the delivery of resilience projects, improved asset definition and refinement of the asset management system. While these improvements strengthen network resilience and improve the quality of asset information, they also increase the number and diversity of assets requiring ongoing inspection, maintenance and renewal. Recent enhancements to the Ngātahi Asset Management Information System continue to improve data quality, reporting capability and evidence-based decision making.
22. Greater Wellington continues to embed nature-based river management² approaches where appropriate. While these approaches provide environmental and ecological benefits, they also require more integrated planning and can increase operational complexity through additional vegetation management, ecological monitoring and ongoing maintenance requirements.
23. Delivering flood protection services is becoming increasingly resource intensive. Inflation, rising construction costs, contractor availability and shortages of experienced engineering, operational and asset management professionals continue to place pressure on programme delivery. At the same time, growing community expectations for increased levels of flood resilience must be balanced

² Code of Practice for River Management Activities, pg. 10
(<https://www.gw.govt.nz/assets/Documents/2022/03/Code-of-Practice-for-River-Management-Activities.pdf>)

against affordability, funding availability and the benefits that can be practically achieved. Maintaining organisational capability while responding to these pressures and delivering increasingly complex projects remains an ongoing challenge. Access to central government funding opportunities can play an important role in enabling resilience improvements that may not otherwise be affordable for local communities.

24. Demand for flood protection services continues to increase across the region. As flood events become more frequent and communities experience the impacts of flooding more directly, expectations for higher levels of protection within existing flood schemes are growing. At the same time, Greater Wellington is receiving increasing requests for flood protection and erosion management services in areas outside of established schemes. Balancing these competing demands against available funding, resources and statutory responsibilities remains an ongoing challenge.
25. Regulatory requirements continue to evolve through changes in environmental legislation, health and safety obligations, infrastructure resilience expectations and partnering with mana whenua. These requirements are increasing the breadth of activities that must be considered when planning and delivering maintenance and improvement programmes.
26. The return to a full condition inspection programme during 2026 has significantly improved confidence in the quality and completeness of asset information. While the 2025 targeted inspection programme successfully focused resources on the highest-risk assets, the comprehensive inspection programme undertaken this year provides a stronger baseline for monitoring long-term condition trends, assessing network performance and prioritising future investment across the Ruamāhanga River Schemes.
27. Greater Wellington continues to seek external funding opportunities to accelerate flood resilience improvements across the region. While previous Kānoa funding has enabled significant investment in Ruamāhanga River Schemes flood protection infrastructure, future funding opportunities may require accelerated delivery timeframes, creating additional pressure on programme planning, procurement and resource availability.

Te tātaritanga

Analysis

28. Greater Wellington continues to apply the nationally recognised risk-based framework ([Figure 1](#)) to assess the performance of flood protection and erosion control infrastructure across the Ruamāhanga River Schemes. The framework provides a consistent basis for assessing asset performance, identifying flood risk, and prioritising maintenance and investment.
29. The national risk-based framework continued to underpin asset performance assessments in 2026, evaluating 100 – 500 metre segments along both riverbanks to develop a comprehensive risk profile for the region.

- 30. Originally developed by the National River Managers Special Interest Group in 2015, the framework is widely adopted by river management authorities throughout Aotearoa New Zealand to support consistent and transparent assessment of flood protection schemes.
- 31. The framework considers the likelihood and consequences of failure within discrete river sections, typically between 100–500 metres in length, to prioritise investment and maintenance.
- 32. Probability of failure is assessed through factors such as the intrinsic strength of stopbanks, the channel’s flood-carrying capacity, and the condition of associated infrastructure.
- 33. Consequence of failure relates to potential impacts on people, property, and the environment in the event of a design flood, with risk levels assigned on a scale from ‘Very Low’ to ‘Very High’.
- 34. Applying this methodology also highlights areas where technical confidence is lower, helping direct future investigations and information-gathering activities to reduce uncertainty.
- 35. Flood protection is managed as an integrated system rather than as individual assets in isolation. Accordingly, the framework considers how assets interact to provide the intended level of service across each river scheme and identifies areas where additional investigation or investment may be required.
- 36. The following diagram illustrates the relationship between asset condition, probability, and risk.

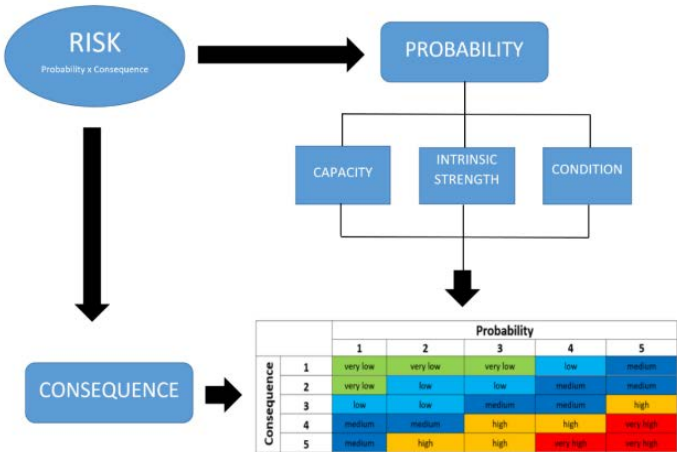


Figure 1: Risk-based framework used for assessing performance of flood protection assets.

Asset Condition

- 37. Asset condition was assessed during the 2026 inspection programme using Greater Wellington's standard condition rating ([Table 1](#)) methodology. Following the targeted inspection programme undertaken in 2025, all assets across the Ruamāhanga River Schemes were inspected during 2026, providing a more comprehensive and consistent assessment of network condition.

Table 1: Condition rating descriptions from the Greater Wellington Condition Rating Guide.

Score	Condition Rating	Definition
1	Very Good	Sound physical condition well maintained. No work required.
2	Good	Generally sound physical condition, showing minor wear or deterioration, well maintained. Minor work may be required.
3	Moderate	Acceptable physical condition but showing some wear or deterioration. Generally maintained well but some work is required to improve the asset condition or make sure it is working well.
4	Poor	Poor physical condition, significant wear or deterioration impacting much of the asset. May not meet level of service.
5	Very Poor	Failed/failure imminent. Major work or replacement required.

38. Routine condition assessments provide essential information for planning maintenance, forecasting renewals and prioritising investment across the flood protection network. While asset condition is an important indicator of performance, condition alone does not determine an asset's criticality or whether agreed Levels of Service are being achieved. These factors are considered alongside flood risk assessments described later in this report.
39. The inspection programme continues to incorporate enhanced quality assurance practices introduced in recent years, including updated condition guidance, inspector training, independent review of condition scores and the use of drones and boats to improve access to difficult locations. These initiatives continue to improve consistency, confidence and repeatability of condition assessments across the Ruamāhanga River Schemes.

Ruamāhanga River Schemes Summary

40. [Figure 2](#) compares the condition of flood protection and erosion control assets across the Ruamāhanga River Schemes over the past three years. The trend shows that, following the deterioration observed in 2025, the overall condition of the asset portfolio has improved during 2026. The proportion of assets assessed as Poor or Very Poor reduced from 19% to 14%, while the proportion of assets in Good condition increased from 49% to 50%.

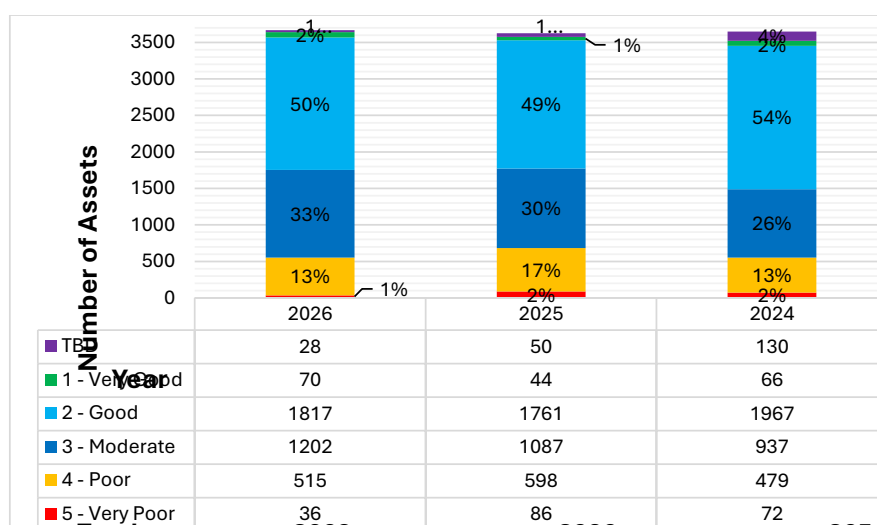


Figure 2: Ruamāhanga River Schemes summary of asset condition by year

41. The improvement reflects the cumulative benefits of ongoing maintenance and renewal activities, targeted vegetation management, replacement of deteriorated assets and continued investment in flood resilience projects. The return to a full inspection programme during 2026 has also provided a more complete understanding of the condition of the asset portfolio, improving confidence in the reported results and supporting more informed maintenance and investment decisions.
42. While the overall trend is positive, the proportion of assets assessed as Moderate condition increased from 30% to 33%. This change reflects an overall redistribution of the condition profile, with fewer assets assessed as Poor or Very Poor and more assets in Very Good, Good and Moderate condition. The results are consistent with the continued focus on maintenance, renewals and targeted improvement works, while also recognising the ongoing effects of natural asset ageing and river processes across the network. Assets in Moderate condition continue to perform their intended function but require ongoing monitoring and planned maintenance to minimise further deterioration and avoid more costly interventions in the future.
43. [Figure 3](#) provides a snapshot of the overall condition of the 3,668-flood protection and erosion control assets within the Ruamāhanga River Schemes during 2026. A summary of condition by asset type is provided [Attachment 1](#).

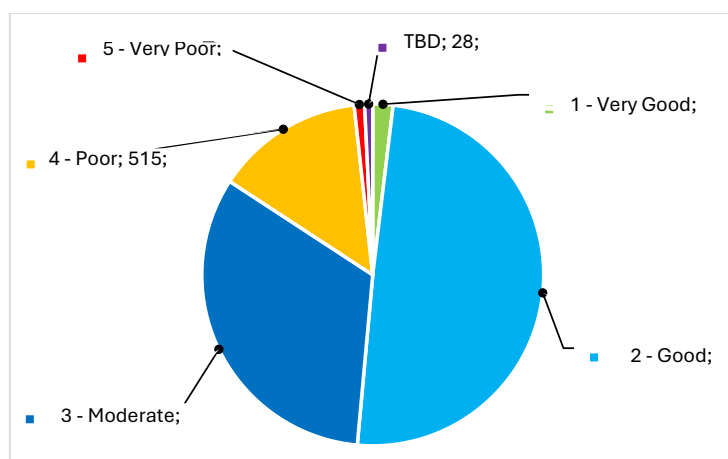


Figure 3: Ruamāhanga River Schemes summary of asset condition 2026

44. Overall, the asset portfolio remains in good operational condition, with 85% of assets assessed as being in Very Good, Good or Moderate condition. Assets rated Good comprise the largest proportion of the network (50%), indicating that most assets remain structurally sound, continue to perform their intended function and are meeting the required Levels of Service.
45. A total of 542 assets (14%) were assessed as Poor or Very Poor. These condition ratings do not necessarily indicate imminent failure or that Levels of Service are not being achieved. Rather, they identify assets requiring increased maintenance, renewal or closer monitoring due to issues such as vegetation encroachment, erosion, scour, corrosion, material loss or rock displacement. In many cases, these assets continue to perform satisfactorily as part of the wider flood protection system and are prioritised for intervention based on the overall risk they present.
46. Assets assessed as Poor or Very Poor are reviewed as part of Greater Wellington's annual maintenance and renewal planning process. Priority is given to assets located within higher-risk river reaches or where deterioration has the greatest potential to affect the agreed Level of Service.
47. Twenty-eight assets (less than 1% of the asset portfolio) were assigned a To Be Determined (TBD) condition rating. These assets could not be fully assessed during the inspection programme because they were inaccessible or obscured by factors such as dense vegetation, sediment deposition, high water levels or other site constraints. A TBD rating does not indicate that an asset is in poor condition; rather, it signifies that there was insufficient information available to confidently assign a condition score. These assets will be re-inspected as conditions allow to ensure the asset inventory remains complete and current.
48. [Table 2](#) summarises the critical asset types assessed as being in Poor or Very Poor condition.

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common issue(s) reported
Culvert	120	13	0	Invasive vegetation, blocked, moved, buried

Floodgate	119	32	3	Overgrown and buried, Corroded, Broken floodgate arms
Groyne	1104	28	19	Loss of material, rocks missing and overgrown
Headwall/ Wingwall	130	23	1	Overgrown and buried, broken and collapsing, Corroding
Retaining wall	7	1	0	Moved, Misaligned, Visible cracking, Graffiti
Riprap	64	8	0	Excessive grass or weed, Rocks missing, washed away, loose
Stopbank	524	300	4	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	2068	405	27	

Table 2: Summary of poor condition by critical asset type – Ruamāhanga River Schemes.

49. A total of 432 critical assets are currently assessed as Poor or Very Poor, representing a reduction from 529 assets identified in these categories in the previous assessment period. Stopbanks account for the largest proportion of these assets, with 304 assessed as Poor or Very Poor, primarily due to vegetation encroachment, erosion, scouring and stock damage. These condition ratings do not necessarily indicate a loss of flood protection performance, rather, they identify assets requiring increased monitoring, maintenance or renewal intervention.
50. Many of the stopbank condition issues identified are managed through ongoing operational programmes, including vegetation management, erosion repairs and routine inspections. Where deterioration has the potential to affect scheme performance, targeted maintenance, renewal or capital works are prioritised based on the asset's location, condition and relationship to the overall flood risk profile of each river reach. This ensures that resources are directed towards areas where intervention provides the greatest benefit in maintaining Levels of Service.
51. Groynes account for 47 Poor or Very Poor assets and continue to experience deterioration associated with rock displacement, material loss, sediment deposition and vegetation growth following high-flow events. These issues are actively managed through routine inspections, rock reinstatement, vegetation management and targeted erosion repairs, with works prioritised based on the asset's role in maintaining river alignment and protecting adjacent infrastructure and communities.
52. Smaller numbers of floodgates, culverts, headwalls, retaining walls and riprap structures also require targeted maintenance to address localised deterioration. These assets are managed through operational maintenance programmes and renewal planning, with priority given to locations where deterioration may affect the performance of the wider flood protection system.
53. While these assets are important components of the flood protection network, the majority are located outside High and Very High risk reaches. Greater Wellington uses a risk-based prioritisation approach to target maintenance. [Attachment 2](#) provides a summary of poor condition assets against the risk profile of each of the Ruamāhanga River Schemes flood protection schemes.

54. Where Poor or Very Poor condition assets coincide with higher-risk areas, they are prioritised within annual maintenance, renewal and capital improvement programmes ([Attachment 3](#)).

Lower Ruamāhanga River Scheme

55. The Lower Ruamāhanga River Scheme contains 2,032 assets, representing approximately 55% of the Ruamāhanga River Schemes asset portfolio and therefore has the greatest influence on the overall Ruamāhanga River Scheme condition profile.
56. Asset condition improved during 2026, with the proportion of assets assessed as Poor or Very Poor reducing from 24% in 2025 to 18% ([Figure 4](#)). This improvement is primarily attributable to ongoing maintenance activities, vegetation management, renewal works and improved asset performance following recent Flood Resilience investments.

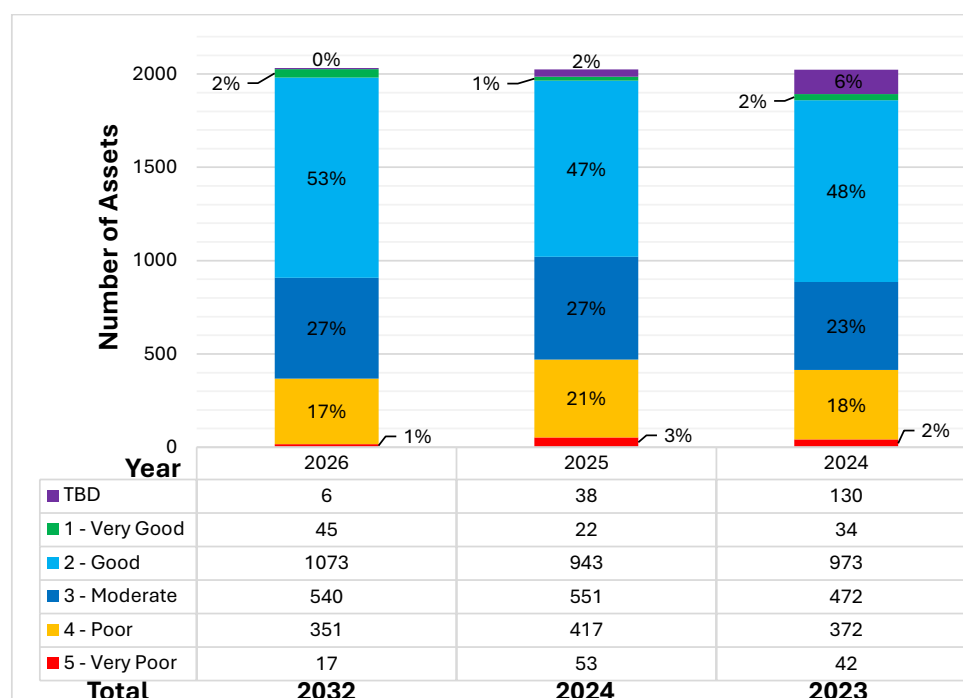


Figure 4: Lower Ruamāhanga River Scheme summary of asset condition by year

57. Assets rated Good increased from 47% to 53%, while the proportion of assets rated Poor reduced from 21% to 17%. This indicates that maintenance programmes are beginning to reverse the deterioration observed over recent years.
58. Despite this improvement, stopbanks ([Table 3](#)) continue to represent the largest maintenance challenge within the scheme, accounting for the majority of Poor condition assets due to vegetation encroachment, erosion and stock damage. Floodgates and headwalls also require ongoing attention to address corrosion, structural deterioration and operational reliability.

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common issue(s) reported
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Culvert	113	12	0	Invasive vegetation, blocked, moved, buried
Floodgate	112	32	2	Overgrown and buried, Corroded, Broken floodgate arms
Groyne	418	9	4	Loss of material, rocks missing and overgrown
Headwall/ Wingwall	125	23	1	Overgrown and buried, broken and collapsing, Corroding
Riprap	43	7	0	Excessive grass or weed, Rocks missing, washed away, loose
Stopbank	389	206	4	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	1200	289	11	

Table 3: Summary of poor condition by critical asset type - Lower Ruamāhanga River Scheme

59. Greater Wellington continues to apply a conservative approach to vegetation management on stopbanks, classifying assets as Poor where vegetation is present within defined proximity thresholds. This ensures alignment with flood risk management policy and consistency in condition trend reporting.
60. A summary of condition by asset type is provided in [Attachment 1](#), with Poor condition assets and their relationship to flood risk shown in [Attachment 2](#).

Upper Ruamāhanga River Scheme

61. The Upper Ruamāhanga River Scheme comprises 1,035 assets and continues to demonstrate the strongest overall condition profile across the Ruamāhanga River Schemes.
62. Overall, 88% of assets remain in Very Good, Good or Moderate condition. The proportion of Poor or Very Poor assets reduced from 14% in 2025 to 10% in 2026 ([Figure 5](#)), reflecting ongoing maintenance activities and improved asset performance.

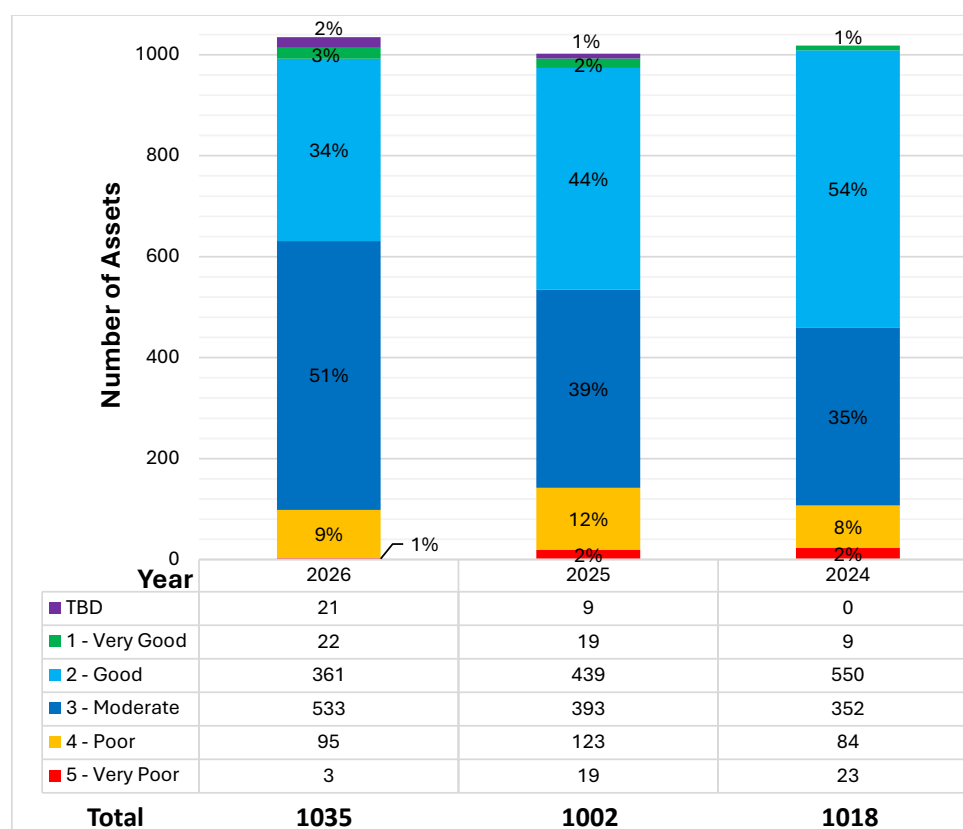


Figure 5: Upper Ruamāhanga River Scheme summary of asset condition by year

63. The increase in Moderate (from 39% to 51%). condition assets, together with a corresponding reduction in Good assets (from 44% to 34%), reflects the ageing of parts of the asset base rather than a significant deterioration in network performance. These assets remain serviceable but require ongoing monitoring and planned maintenance. The return to a full inspection programme has also provided more comprehensive coverage of the asset base compared to the targeted approach last year, capturing a broader range of asset conditions and resulting in a rebalancing of condition ratings across the network. In addition, the increasing frequency and intensity of weather events is likely contributing to incremental wear and degradation across parts of the network, placing additional pressure on asset condition over time.
64. A total of 21 assets (2%) were assigned a “To Be Determined” (TBD) condition rating in 2026. These include 14 debris fences, 4 groynes, and 3 willow assets that could not be fully assessed at the time of inspection due to access or visibility constraints.
65. While a TBD rating reflects incomplete condition data, it does not necessarily indicate poor performance. These assets will be prioritised for reassessment in future inspection cycles.
66. Stopbanks continue to account for most Poor condition assets [Table 4](#) within the scheme, predominantly due to vegetation management requirements, while

isolated groynes and riprap structures require repair following localised erosion and rock displacement. These issues are being addressed through the operational works programme detailed in [Attachment 3](#).

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common issue(s) reported
Groyne	328	8	0	Loss of material, rocks missing and overgrown
Retaining wall	1	1	0	Moved, Misaligned, Visible cracking, Graffiti
Riprap	14	1	0	Excessive grass or weed, Rocks missing, washed away, loose
Stopbank	72	47	0	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	415	57	0	

Table 4: Summary of poor condition by critical asset type - Upper Ruamāhanga River Scheme

67. Greater Wellington continues to apply a conservative approach to vegetation management on stopbanks, classifying assets as Poor where vegetation is present within defined proximity thresholds. This ensures alignment with flood risk management policy and consistency in condition trend reporting.
68. A summary of condition by asset type is provided in [Attachment 1](#), with Poor condition assets and their relationship to flood risk shown in [Attachment 2](#).

Waiōhine River Scheme

69. The Waiōhine River Scheme comprises 601 assets. Overall, the scheme remains in generally good condition, with 85% of assets assessed as Very Good, Good or Moderate ([Figure 5](#)).

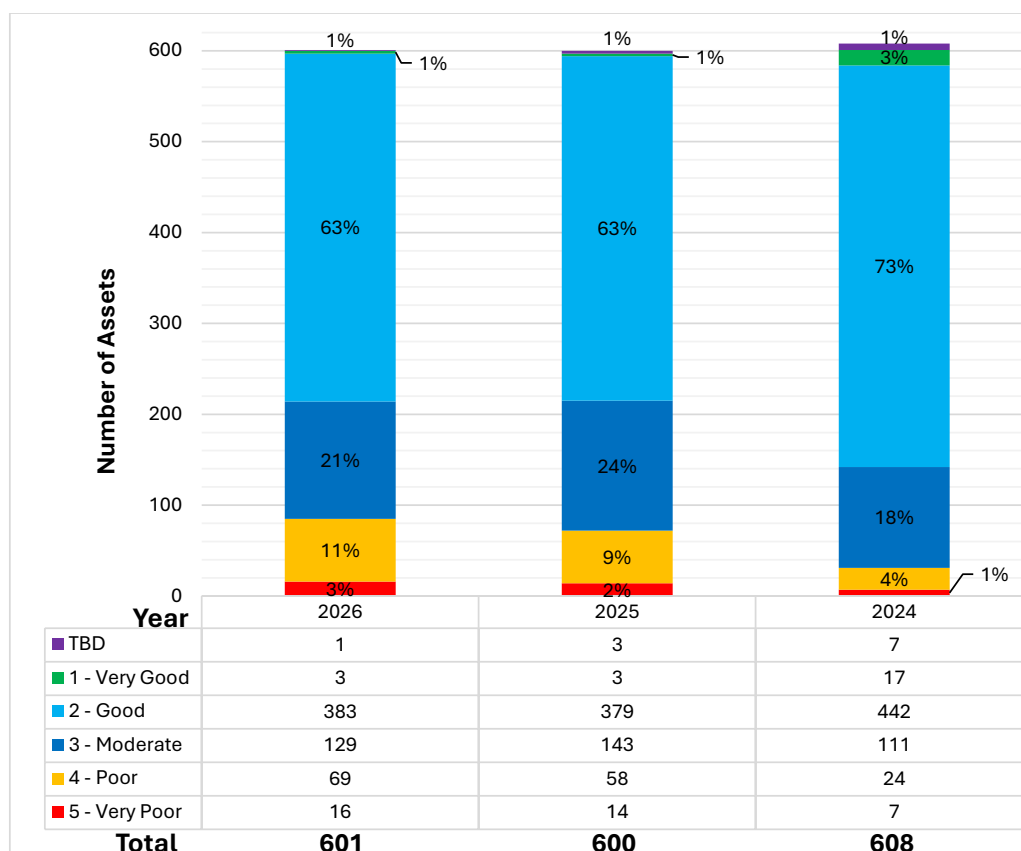


Figure 6: Waiōhine River Scheme summary of asset condition by year

70. Compared with 2025, the proportion of assets assessed as Poor or Very Poor increased slightly from 11% to 14%. This increase is primarily associated with groynes (Table 5) affected by to loss and displacement of rock material during high-flow events, along with burial and vegetation growth over time. For stopbanks where vegetation management thresholds resulted in lower condition ratings using a conservative approach to vegetation management, where assets are classified as Poor when trees or invasive vegetation are present near the stopbank toe.

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common Issue(s) Reported
Culvert	2	1	0	Invasive vegetation, blocked, moved, buried
Floodgate	2	0	1	Overgrown and buried, Corroded, Broken floodgate arms
Groyne	368	11	15	Loss of material, rocks missing and overgrown
Stopbank	63	47	0	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	435	59	16	

Table 5: Summary of poor condition by critical asset type - Waiōhine River Scheme

71. In addition, the return to full inspection coverage this year, compared to the more targeted approach last year, has provided a more complete assessment of the asset base, contributing to the increase in identified Poor and Very Poor assets
72. Although condition has declined slightly, the majority of affected assets are located outside the highest risk reaches and continue to function as intended within the wider flood protection system. Targeted maintenance activities are programmed to address those assets that present the greatest risk ([Attachment 3](#)).
73. A summary of condition by asset type is provided in [Attachment 1](#), with Poor condition assets and their relationship to flood risk shown in [Attachment 2](#).

Asset Performance and Risk

74. While asset condition provides an indication of the physical state of individual assets, flood protection performance is ultimately assessed using Greater Wellington's risk-based asset management framework. This framework considers the combined effect of asset condition, channel performance, hydraulic capacity and the consequences of failure to assess whether each river reach continues to provide its intended Level of Service.
75. During 2026, a total of 834 river reaches across the Ruamāhanga River Schemes were assessed using the national risk-based framework ([Figure 7](#)). Each reach was assigned a risk score ranging from Very Low to Very High, enabling maintenance and capital investment to be prioritised according to the likelihood and consequence of flood protection system failure.

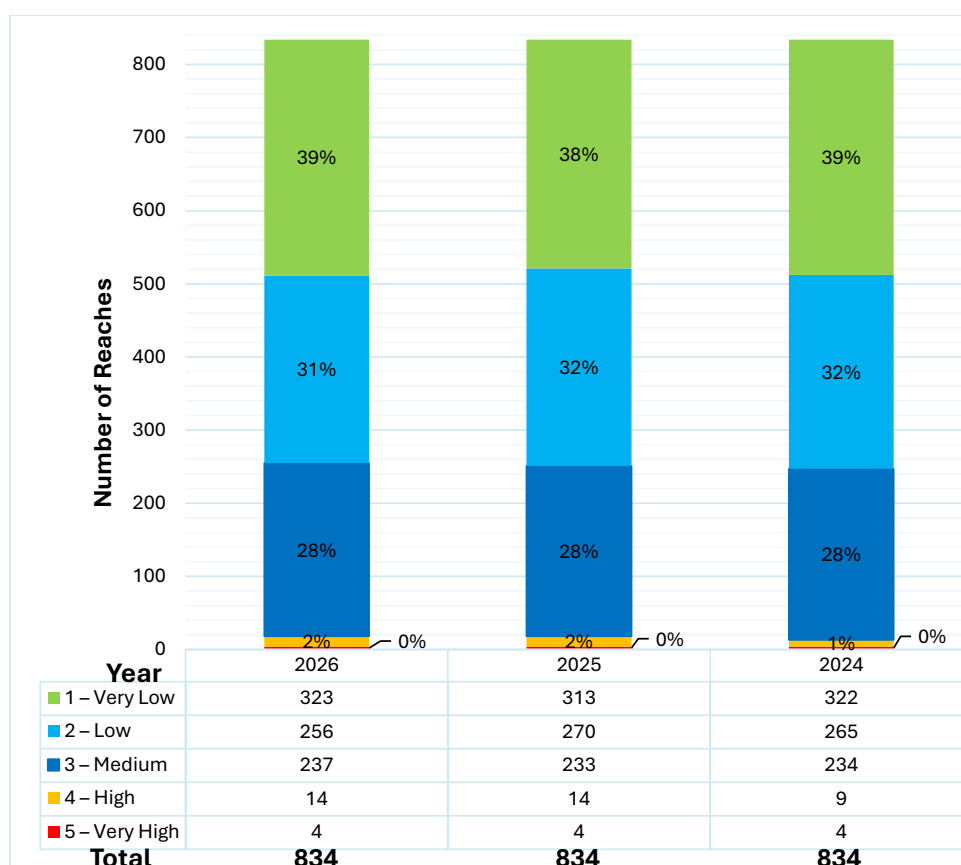


Figure 7: Summary of segments by risk scores across the Ruamāhanga River Schemes.

76. Overall, the 2026 assessment confirms that the Ruamāhanga River Schemes continue to be managed effectively. While some areas require ongoing intervention due to ageing infrastructure, erosion pressures and changing river behaviour, identified risks are understood and are being addressed through a combination of planned maintenance, technical investigations and targeted improvement works.
77. The number of High-risk reaches remained unchanged at 14 reaches (2%), while the number of Very High-risk reaches also remained unchanged at four reaches. The stability of these higher-risk categories demonstrates that the maintenance, renewal and improvement programmes are generally keeping pace with ongoing asset deterioration and preventing a broader increase in network risk.
78. The stable risk profile reflects the fact that flood protection performance depends on the operation of the asset system as a whole rather than the condition of individual assets. While some assets continue to deteriorate over time, many are located within lower-consequence areas or are supported by adjacent assets, meaning that localised deterioration does not necessarily translate into an increased flood risk.
79. River reaches assessed as High or Very High risk continue to receive priority for detailed investigation, routine monitoring, maintenance and capital improvement works. These reaches are reviewed annually to ensure investment is directed to

areas where it will provide the greatest reduction in flood risk and the greatest benefit to communities.

80. The return to a full condition inspection programme during 2026 has further strengthened confidence in the asset performance assessment by providing a more complete and consistent dataset across the entire asset network. This improves the reliability of future trend analysis and supports evidence-based investment planning.
81. The spatial distribution of risk across the Ruamāhanga River Schemes is provided in [Attachment 4](#), with individual High and Very High risk reaches and their associated management responses detailed in [Attachment 5](#).
82. Overall, the 2026 assessment confirms that the Ruamāhanga River Schemes continue to be managed effectively. While some areas require ongoing intervention due to ageing infrastructure, erosion pressures and changing river behaviour, identified risks are understood and are being addressed through a combination of planned maintenance, technical investigations and targeted improvement works.
83. It is important to note that the objective of maintenance and improvement programmes is not always to reduce the assessed risk category. Risk is determined by both the likelihood of failure and the consequences should failure occur. In some locations, particularly where flood protection assets safeguard urban communities, critical infrastructure or other high-value assets, the consequence of failure will remain high regardless of maintenance activities.
84. In these areas, routine maintenance, renewals and targeted capital improvements are undertaken to maintain asset performance, preserve the agreed Level of Service and reduce the likelihood of failure. While these activities may not result in a lower overall risk classification, they are essential for preventing deterioration, extending asset life and ensuring the flood protection system continues to perform as intended.
85. High and Very High-risk reaches are therefore not necessarily indicative of unacceptable asset performance. Rather, they identify locations where Greater Wellington maintains increased operational awareness, undertakes more frequent inspections, prioritises maintenance and capital investment, and applies enhanced monitoring during and following significant rainfall and flood events. This risk-based approach ensures resources are directed to areas where the potential consequences of failure are greatest.

Management Response

86. The 2026 asset condition and risk assessments have informed Greater Wellington's maintenance, renewal and improvement programmes across the Ruamāhanga River Schemes. Areas identified as having elevated flood and erosion risk continue to be actively managed through a combination of Floodplain Management Plans (FMPs), targeted technical investigations, capital improvement projects and operational maintenance programmes
87. High and Very High-risk areas identified through the 2026 risk assessment process are well understood by officers and are incorporated into Activity Management

Planning and Long-Term Planning processes. Maintenance and improvement works are prioritised using a risk-based approach, ensuring resources are directed towards assets and river reaches where intervention will provide the greatest reduction in flood and erosion risk.

88. The delivery of Flood Resilience Tranche 1 (FRT1) projects has continued to improve resilience across the Ruamāhanga River Schemes, with completed works now incorporated into the asset management system where applicable. The return to a full inspection programme in 2026 has also improved confidence in the completeness and reliability of asset condition and performance information.
89. While capital improvement projects target identified deficiencies, the majority of flood risk is managed through ongoing operational maintenance. Routine activities such as vegetation management, erosion repairs, rock reinstatement, stopbank maintenance and post-flood inspections remain fundamental to maintaining Levels of Service and preventing assets from deteriorating into more significant failures requiring major capital investment.

Lower Ruamāhanga River Scheme

90. The Lower Ruamāhanga River Scheme contains the largest proportion of Ruamāhanga River Schemes flood protection assets and continues to provide a critical role in protecting communities, infrastructure and productive land. The 2026 risk assessment did not identify any High or Very High-risk reaches within the scheme.
91. While no High or Very High-risk reaches were identified, ongoing maintenance remains important due to the size and age of the asset network. Stopbanks, floodgates, groynes and associated erosion protection structures continue to be managed through routine operational programmes, targeted repairs and vegetation management activities.
92. Condition issues identified through the 2026 assessment, particularly those relating to stopbank vegetation, erosion, stock damage and deterioration of erosion control structures, have been incorporated into maintenance planning. Poor condition assets continue to be prioritised where deterioration has the greatest potential impact on scheme performance.
93. Operational maintenance programmes ([Attachment 3](#)) continue to prioritise works based on risk, with vegetation management, stopbank repairs, erosion control and asset renewals scheduled according to the likelihood and consequence of failure. This approach ensures available resources are focused on maintaining Levels of Service across the scheme.
94. A summary of Poor and Very Poor condition assets within the Lower Ruamāhanga River Scheme is provided in [Attachment 1](#), with the relationship between asset condition and assessed risk provided in [Attachment 2](#).

Upper Ruamāhanga River Scheme

95. The highest-risk areas within the Upper Ruamāhanga River Scheme, identified through the 2026 risk assessment process, primarily due to overtopping potential, asset condition, and erosion hazards, continue to be actively managed through

Floodplain Management Plans, targeted investigations and capital works programmes. These responses are incorporated into current Activity Management Planning and Long-Term Planning processes.

96. Areas assessed as High or Very High risk are shown in [Attachment 4](#) and [Attachment 5](#) and are summarised below

Waipoua River – Masterton Urban Area

97. The Waipoua River remains a key focus area, with modelling indicating potential overtopping during a 1% Annual Exceedance Probability (AEP) event. Development of the preferred flood risk management option is continuing, with design details for the stopbank adjacent to Mawley Park and the downstream left bank area near SH2 being refined in collaboration with Masterton District Council.

98. Flood Resilience Tranche 1 works have addressed priority erosion locations:

- FRT1 Site 3: SH2 Left bank works (cross sections 6–8), including construction of a 45 m rock revetment, have been completed.
- FRT1 Site 4: Waipoua Industrial Site - Akura Road Right bank works (cross sections 10–12), including five groynes and a 15 m rock revetment, have been completed.

These assets have been incorporated into the asset management system and were included in the 2026 condition inspection programme, improving confidence in the asset inventory and condition information.

Waingawa River – Masterton Water Supply Pipeline

99. The Te Kāuru FMP continues to guide management of erosion risks affecting the Masterton District Council water supply pipeline. Flood Resilience Tranche 1 works have addressed localised erosion risk through:

- FRT1 Site 7: Masterton Raw Water Supply - Construction of a rock groyne, completed on 4 August 2025.

The newly constructed asset will be incorporated into the asset management system as part of ongoing asset data improvements.

Ruamāhanga River – Mt Bruce Scheme / Rathkeale College

100. The Ruamāhanga River continues to present a flood and erosion risk at Rathkeale College, where the existing stopbank is located close to the active river channel. There remains a risk of erosion, stopbank failure and upstream bypass flooding affecting school buildings.
101. This location remains identified as a priority project under the Te Kāuru FMP. Engagement with landowners and stakeholders is continuing to determine a preferred long-term solution for managing flood and erosion risk.
102. In addition to the capital projects outlined above, annual operational work programmes ([Attachment 3](#)) continue to prioritise maintenance within High and Very High-risk reaches. Routine inspections, vegetation management, erosion repairs and asset renewals are undertaken to maintain the performance of critical assets and reduce the likelihood of deterioration affecting Levels of Service.

Waiōhine River Scheme

103. The highest-risk areas within the Waiōhine River Scheme, identified through the 2026 risk assessment process, continue to be managed through the Waiōhine River Plan, targeted investigations and capital works programmes. These responses are reflected in Activity Management Planning and Long-Term Planning processes.
104. Areas assessed as High risk are shown in [Attachment 4](#) and [Attachment 5](#) and are summarised below.

Waiōhine River – Fuller’s Bend (XS 20–21, right bank)

105. The Fuller’s Bend reach has been addressed through Flood Resilience Tranche 1 (FRT1), with rock protection works completed to reduce erosion risk at this location. The completed works have been incorporated into the asset management system and captured through the 2026 condition assessment programme.
106. The works are expected to improve bank stability and reduce ongoing erosion risk. Continued monitoring will be undertaken to confirm performance and determine whether any further intervention is required.

Waiōhine River – Downstream of Rail Bridge (XS 32–36, right bank)

107. The High-risk reach downstream of the rail bridge continues to be addressed through the Waiōhine River Plan. A proposed flood risk management option involving stopbank construction is currently being assessed, including consideration of design, consenting requirements and implementation pathways.
108. Operational maintenance ([Attachment 3](#)) continues to prioritise the management of erosion protection assets and stopbanks within the identified High-risk reaches. Routine inspections and maintenance activities are targeted to preserve asset performance, monitor changing river behaviour and inform future improvement works.
109. Overall, the 2026 assessment demonstrates that the Ruamāhanga River Schemes continue to be effectively managed to achieve their intended Levels of Service. Identified risks are well understood and are being addressed through a combination of planned maintenance, technical investigations, targeted improvement works and longer-term capital investment. These programmes enable Greater Wellington to proactively manage the ongoing pressures associated with river processes, environmental conditions and the natural ageing of assets, ensuring the long-term resilience and performance of the flood protection network.

Ngā hua ahumoni

Financial implications

110. The proposed recommendations have no financial implications.

Ngā Take e hāngai ana te iwi Māori

Implications for Māori

111. Greater Wellington is required to manage land and water in accordance with statutory obligations, including giving effect to *Te Mana o te Wai* and considering the principles of *Te Tiriti o Waitangi* in the development and delivery of strategies, plans, programmes and operational activities.
112. The management of flood protection and erosion control assets has important implications for Māori, particularly where flood management activities influence the health and character of rivers and their relationship with mana whenua. While flood protection infrastructure plays a vital role in protecting communities and infrastructure, the use of stopbanks, rock protection and other engineered interventions continue to be identified by mana whenua as having ongoing cultural impacts on their relationship with tūpuna awa.
113. The return of Wairarapa Moana to mana whenua ownership, together with the establishment of the Wairarapa Moana Statutory Board, has strengthened the importance of partnership in asset management. Greater Wellington continues to work collaboratively with iwi and the Statutory Board on matters relating to flood protection assets, including infrastructure associated with the Wairarapa Moana system.
114. Greater Wellington continues to implement its River Management Code of Practice, which supports greater integration of mātauranga Māori into river management activities and promotes approaches that balance flood risk management with environmental, cultural and community outcomes. This includes consideration of nature-based solutions where appropriate and practical.
115. Engagement with mana whenua also informs the planning and delivery of maintenance, renewal and capital improvement programmes, helping ensure that flood risk management is undertaken in a manner that recognises cultural values while continuing to provide the agreed Levels of Service for communities.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

116. The matters discussed in this report have been considered in accordance with Greater Wellington's Climate Change Consideration Guide, which provides a framework for incorporating climate change into planning, asset management and decision-making.
117. Flood protection and erosion control assets across the Ruamāhanga River Schemes have been developed progressively over many decades. During this time, climate science and projections have continued to evolve, improving our understanding of the long-term impacts of climate change on rainfall, flooding, river behaviour and coastal processes.
118. Earlier flood protection schemes were designed using the best available information at the time. More recent flood modelling, infrastructure design and Floodplain Management Plans apply the latest national climate change guidance,

including allowances for increased rainfall intensity, changing flood frequencies and sea level rise where applicable. This ensures that new assets and major upgrades are designed to remain effective under future climate conditions.

119. Climate change is expected to increase the frequency and intensity of extreme rainfall events, placing greater pressure on flood protection infrastructure and increasing maintenance requirements. Greater Wellington continues to monitor asset condition, river performance and flood risk so that maintenance, renewals and future capital investment can be adapted as climate risks evolve.
120. The risk-based asset management framework described in this report supports climate adaptation by identifying those assets and river reaches most vulnerable to future flood and erosion hazards. This enables investment to be prioritised towards areas where it will provide the greatest long-term benefit for communities, infrastructure and the natural environment.
121. In addition to engineered flood protection works, Greater Wellington continues to integrate nature-based approaches where appropriate, including riparian planting, river corridor restoration and other measures that improve ecological health while contributing to long-term flood resilience. These approaches complement traditional engineering solutions and support the Council's wider climate adaptation and environmental objectives.

Ngā tikanga whakatau

Decision-making process

122. The matters requiring decision in this report have been considered by officers against the requirements of Part 6 of the Local Government Act 2002.

Te hiranga

Significance

123. Officers have considered the significance of this matter, as defined by Part 6 of the Local Government Act 2002, with reference to Council's Significance and Engagement Policy and Greater Wellington's Decision-making Guidelines. Officers recommend that this matter is of low significance, given its administrative and reporting nature.

Te whakatūtakitaki

Engagement

124. Due to the low significance of this matter, no engagement was considered necessary. Internal consultation was limited to officers of Greater Wellington Environment Group.

Ngā āpitihanga Attachments

Number	Title
1	Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026 - Summary of Condition by Asset Type 2026
2	Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026 - Risk Vs Poor Condition 2026
3	Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026 - Proposed Work Programme 2026
4	Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026 - Risk Assessment Maps 2026
5	Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026 - High and Very High Risks and Their Remediation 2026
6	Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026 - Presentation

Ngā kaiwaitohu Signatories

Writer	Rolayo Ackely - Senior Engineer, Assets and Performance
Approvers	Steven Fargher - Team Leader, Assets and Performance Jacky Cox - Manager, Infrastructure - Assets and Support Jack Mace - Director- Delivery Fathima Iftikar - Group Manager Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council's roles or with Committee's terms of reference</i> The Environment and Climate Committee is responsible for overseeing the implementation and delivery of Council's regional resilience priorities, including flood protection, erosion control and river management activities.
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> This report supports delivery of the Long-Term Plan 2024–34 by demonstrating how flood protection and erosion control assets are managed to achieve agreed Levels of Service. It contributes to the Council's non-financial performance measures for major flood protection and control works under the Local Government Act 2002 and provides supporting evidence for Audit New Zealand. The report also supports Greater Wellington's strategic priorities for regional resilience, climate adaptation and sustainable asset management.
<i>Internal consultation</i> Internal consultation has been undertaken with officers across the Environment Group responsible for asset management, flood operations and river management.
<i>Risks and impacts - legal / health and safety etc.</i> The majority of flood protection and erosion control assets remain in Very Good to Moderate condition and continue to provide the intended Levels of Service. High and Very High-risk reaches identified through the annual risk assessment are well understood and are actively managed through routine maintenance, technical investigations and capital improvement programmes. While some locations will continue to retain higher risk classifications because of the potential consequences of failure, ongoing monitoring, targeted maintenance and operational preparedness ensure these risks are appropriately managed and that priority is given to protecting communities, critical infrastructure and the environment.

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Attachment to Report 26.339

Ruamāhanga River Schemes - Summary of Condition by Asset Type 2026 - Wairarapa River Schemes

Ruamāhanga River Schemes - Summary of Condition by Asset Type 2026							
Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Barrage Gate	0	6	0	0	0	0	6
Blockline	0	1	0	0	0	0	1
Building	0	1	0	0	0	0	1
Channel	10	262	191	41	0	0	504
Culvert	1	59	45	13	0	2	120
Debris arrestor	0	5	2	0	0	0	7
Debris fence	0	33	51	14	3	14	115
Demolition line	0	0	0	1	0	0	1
Diversion Cut	0	2	0	0	0	0	2
Drain/modified channel	0	1	0	0	0	0	1
Fence	1	23	7	1	0	0	32
Floodgate	0	41	40	32	3	3	119
Floodwall	0	1	0	0	0	0	1
Gate	1	3	0	0	1	0	5
Groyne	11	717	323	28	19	6	1104
Headwall/Wingwall	1	56	49	23	1	0	130
Native planting	1	8	1	1	0	0	11
Retaining wall	0	5	1	1	0	0	7
Riprap	4	34	18	8	0	0	64
Rock Mattress	0	2	0	0	0	0	2
Sign	10	14	1	0	2	0	27
Spillway	0	6	0	1	0	0	7
Stopbank	1	123	96	300	4	0	524
Weir	1	12	3	4	1	0	21
Willow	28	402	374	47	2	3	856
Total	70	1817	1202	515	36	28	3668

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Attachment to Report 26.339

Lower Ruamāhanga River Scheme - Summary of Condition by Asset Type 2026

Lower Ruamāhanga River Scheme - Summary of Condition by Asset Type 2026							
Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Barrage Gate	0	6	0	0	0	0	6
Blockline	0	1	0	0	0	0	1
Building	0	1	0	0	0	0	1
Channel	10	133	97	28	0	0	268
Culvert	1	55	43	12	0	2	113
Debris arrestor	0	4	1	0	0	0	5
Debris fence	0	8	14	5	1	0	28
Demolition line	0	0	0	1	0	0	1
Diversion Cut	0	2	0	0	0	0	2
Drain/modified channel	0	1	0	0	0	0	1
Fence	1	22	7	1	0	0	31
Floodgate	0	37	38	32	2	3	112
Floodwall	0	1	0	0	0	0	1
Gate	1	2	0	0	1	0	4
Groyne	0	283	111	9	4	1	408
Headwall/Wingwall	1	52	48	23	1	0	125
Native planting	1	7	0	0	0	0	8
Retaining wall	0	5	1	0	0	0	6
Riprap	0	26	10	7	0	0	43
Rock Mattress	0	2	0	0	0	0	2
Sign	1	11	1	0	2	0	15
Spillway	0	6	0	1	0	0	7
Stopbank	0	112	67	206	4	0	389
Weir	1	12	1	0	0	0	14
Willow	28	284	101	26	2	0	441
Total	45	1073	540	351	17	6	2032

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Attachment to Report 26.339

Upper Ruamāhanga River Scheme - Summary of Condition by Asset Type 2026

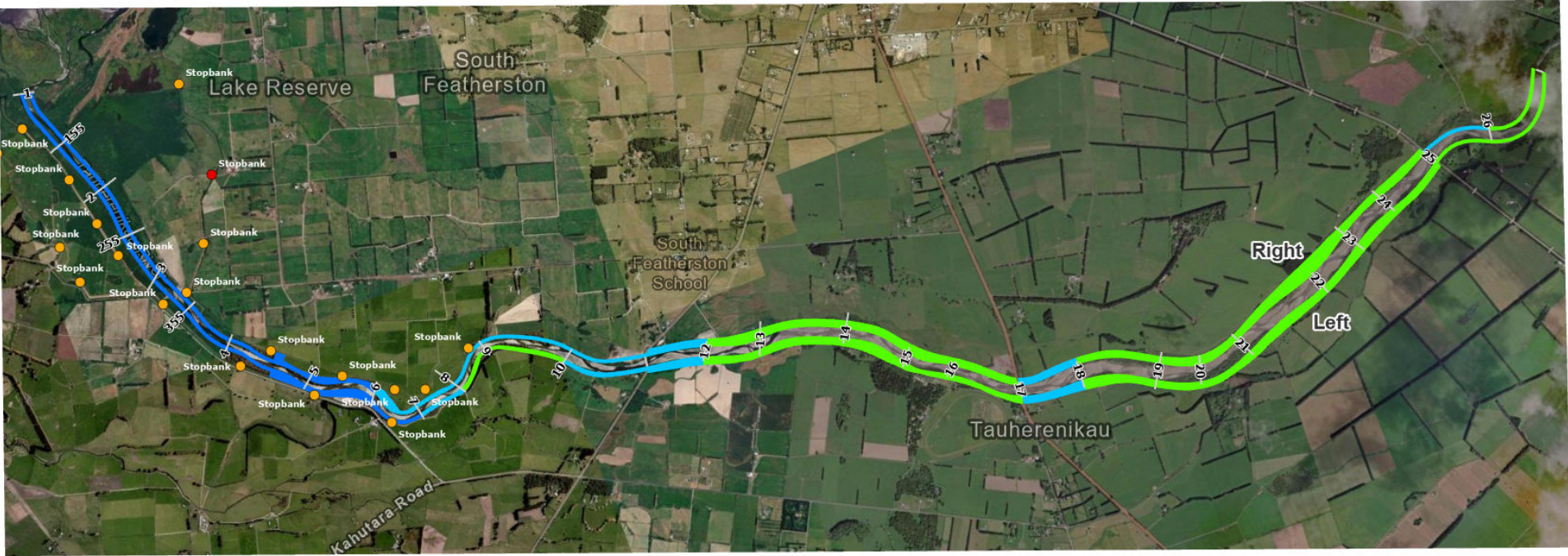
Upper Ruamāhanga River Scheme - Summary of Condition by Asset Type 2026							
Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Channel	0	81	82	12	0	0	175
Culvert	0	3	2	0	0	0	5
Debris arrestor	0	0	1	0	0	0	1
Debris fence	0	16	37	9	2	14	78
Floodgate	0	3	2	0	0	0	5
Groyne	11	123	182	8	0	4	328
Headwall/Wingwall	0	3	1	0	0	0	4
Native planting	0	1	1	0	0	0	2
Retaining wall	0	0	0	1	0	0	1
Riprap	2	5	6	1	0	0	14
Sign	9	3	0	0	0	0	12
Stopbank	0	8	17	47	0	0	72
Weir	0	0	2	4	1	0	7
Willow	0	115	200	13	0	3	331
Total	22	361	533	95	3	21	1035

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Waiōhine River Scheme - Summary of Condition by Asset Type 2026

Waiōhine River Scheme - Summary of Condition by Asset Type 2026							
Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Channel	0	48	12	1	0	0	61
Culvert	0	1	0	1	0	0	2
Debris arrestor	0	1	0	0	0	0	1
Debris fence	0	9	0	0	0	0	9
Fence	0	1	0	0	0	0	1
Floodgate	0	1	0	0	1	0	2
Gate	0	1	0	0	0	0	1
Groyne	0	311	30	11	15	1	368
Headwall/Wingwall	0	1	0	0	0	0	1
Native planting	0	0	0	1	0	0	1
Riprap	2	3	2		0	0	7
Stopbank	1	3	12	47	0	0	63
Willow	0	3	73	8	0	0	84
Total	3	383	129	69	16	1	601



2026 Asset Performance Risk Assessment & Poor Assets
Tauwharenikau



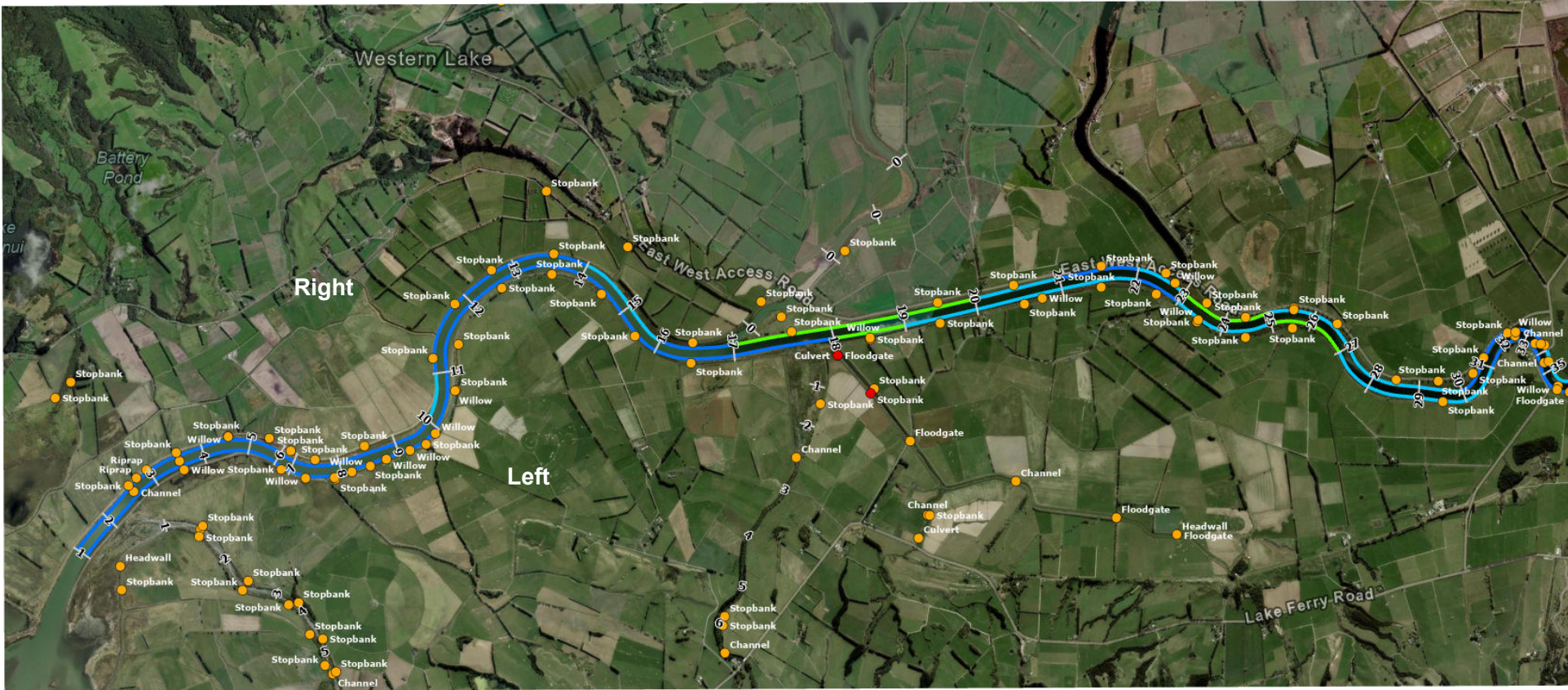
Legend

- CrossSections (30)
- Poor Condition Assets
 - Poor
 - Very Poor
- Very Low (29)
- Low (12)
- Medium (17)
- High (0)
- Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:45,000

NIWA, South Wairarapa DC, Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

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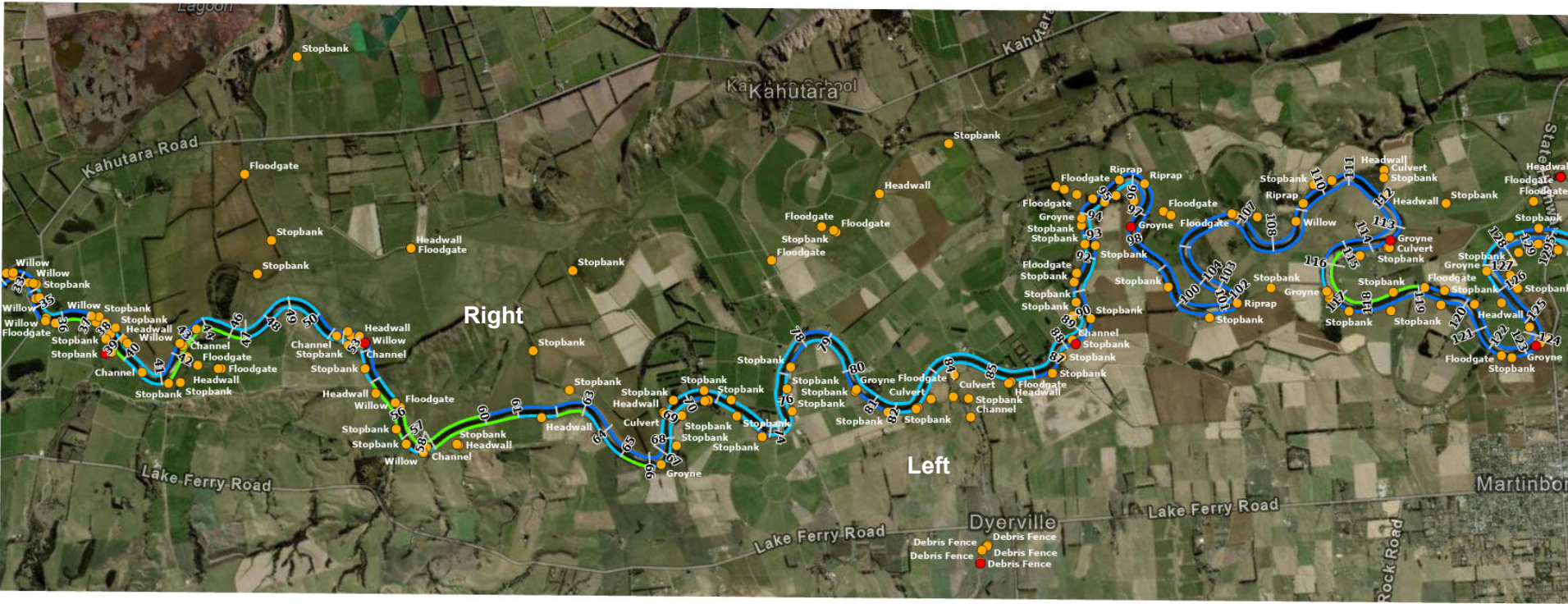
2026 Asset Performance Risk Assessment & Poor Assets

Lower Ruamahanga (Onoke - Tuhitarata)

Legend

- CrossSections (51)
- Poor Condition Assets
 - Poor
 - Very Poor
- High (0)
- Low (21)
- Medium (40)
- Very High (0)
- Very Low (8)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:00 am
Scale at A4:	1:52,000





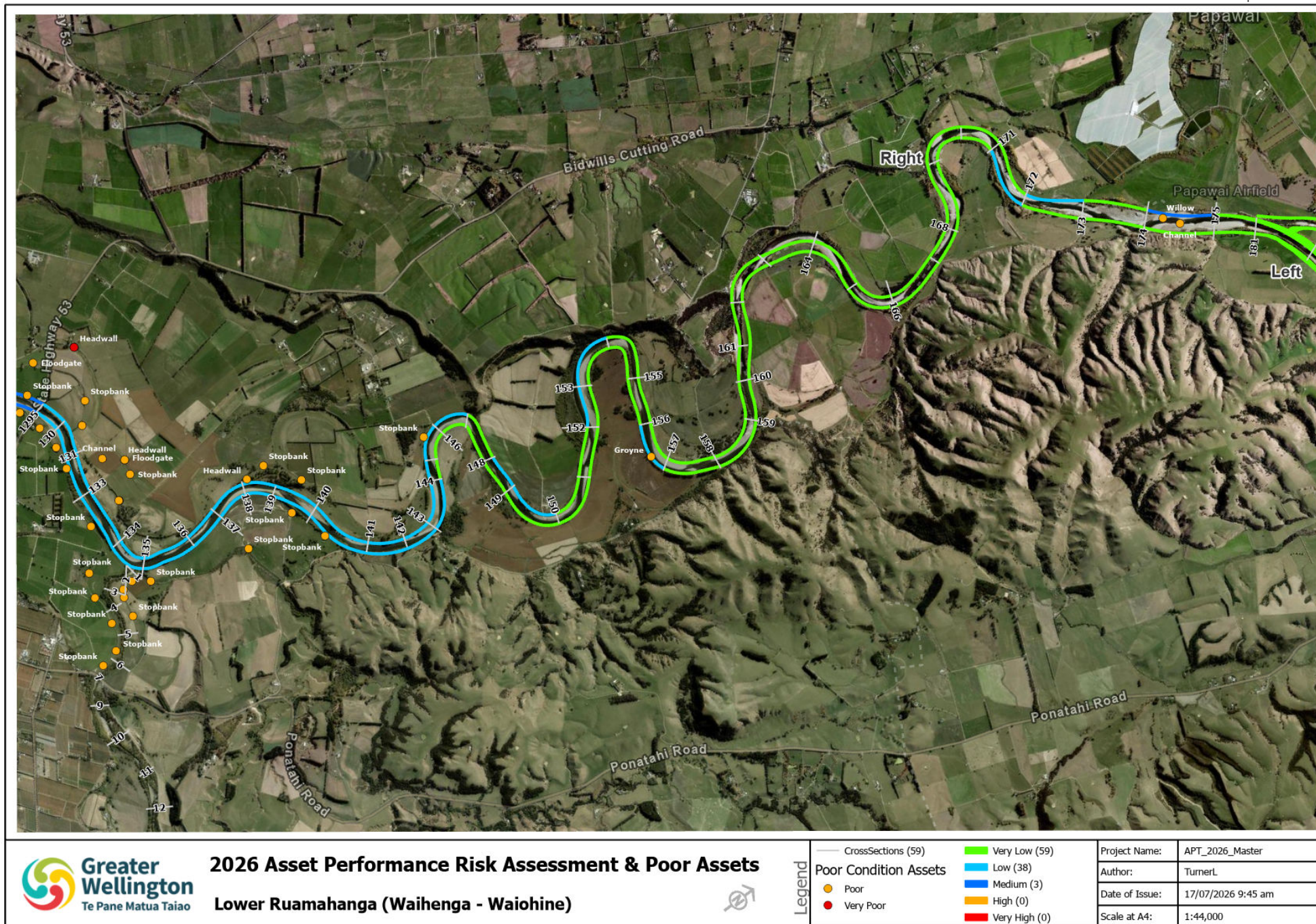
2026 Asset Performance Risk Assessment & Poor Assets

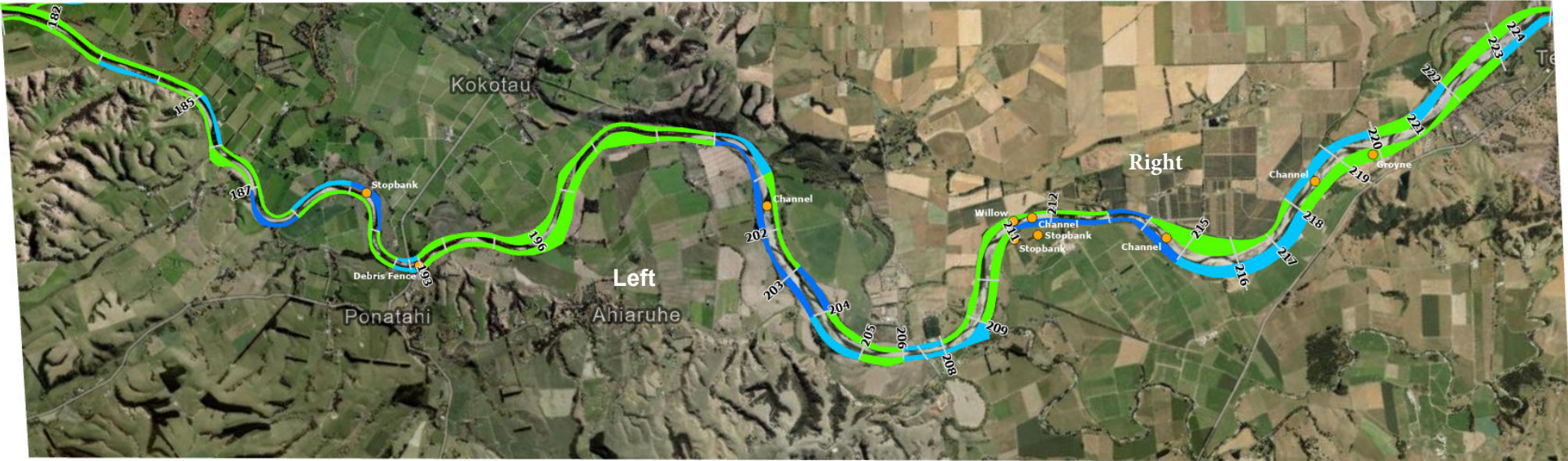
Lower Ruamahanga (Tuhitarata - Waihenga)

Legend

— CrossSections (99)	High (0)
Poor Condition Assets	Low (74)
● Poor	Medium (100)
● Very Poor	Very High (0)
	Very Low (22)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:00 am
Scale at A4:	1:64,000







2026 Asset Performance Risk Assessment & Poor Assets
Upper Ruamahanga (Gladstone)

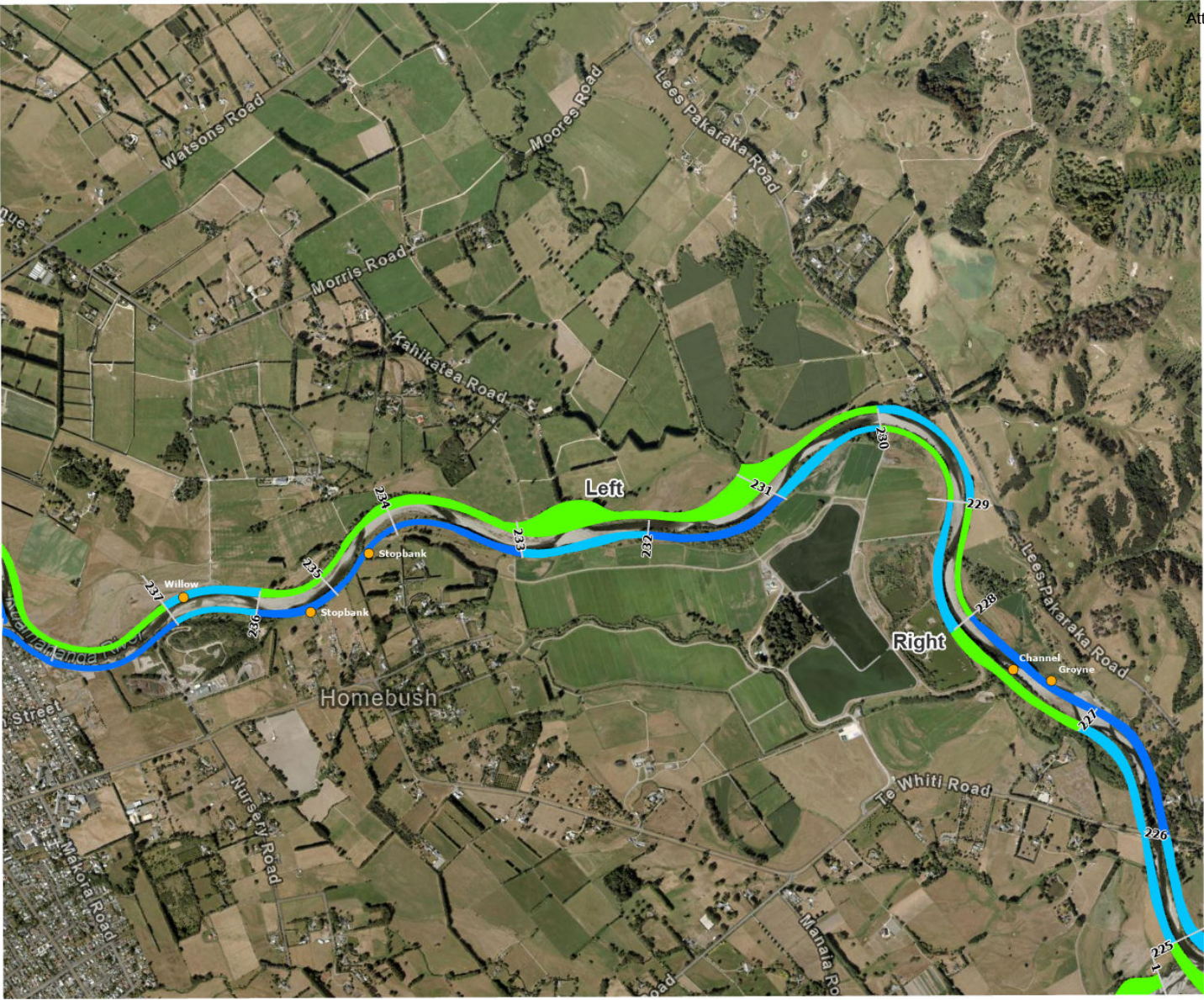
Legend

- CrossSections (46)
- Poor Condition Assets
 - Poor
 - Very Poor
- High (0)
- Low (25)
- Medium (12)
- Very High (0)
- Very Low (57)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:00 am
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Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Carterton DC, NIWA, Earthstar Geographics

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2026 Asset Performance Risk Assessment & Poor Assets
Upper Ruamahanga (Te Ore Ore)



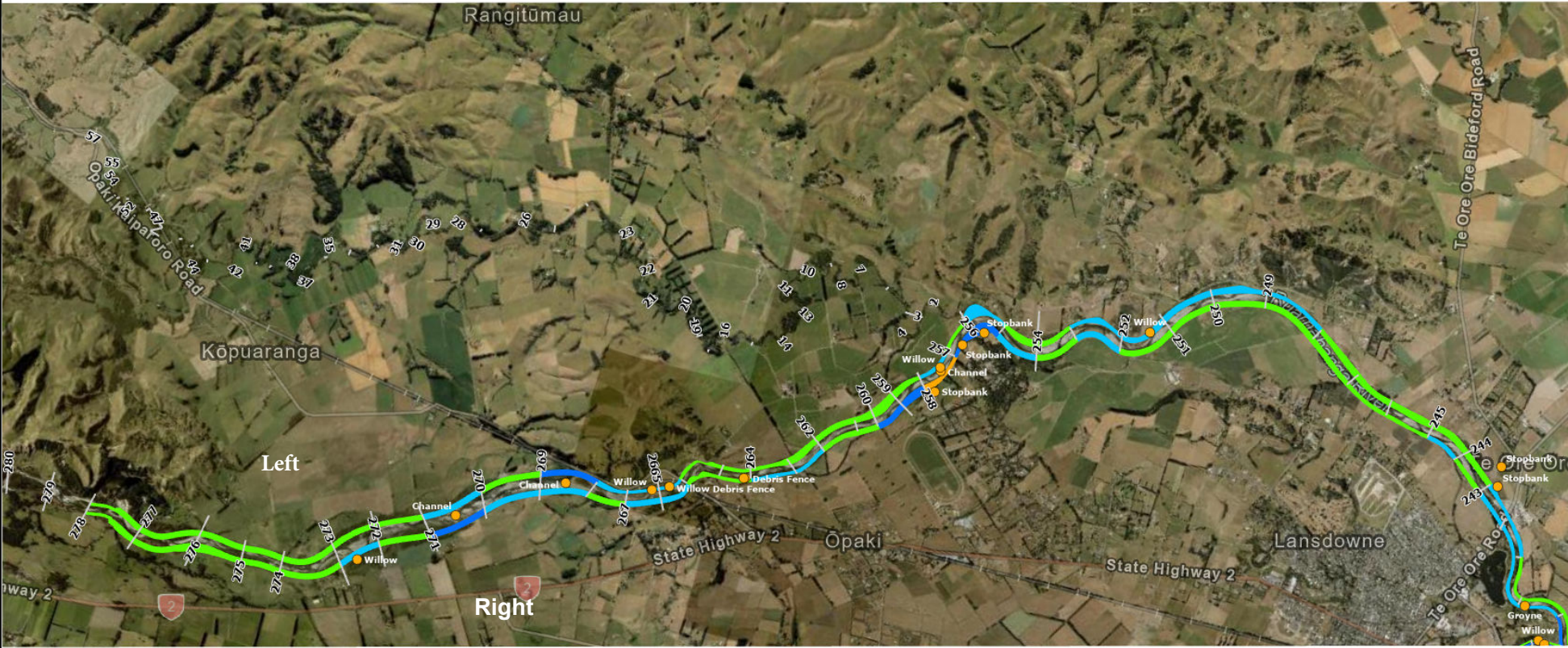
Legend

— CrossSections (16)	Very Low (14)
Poor Condition Assets	Low (10)
● Poor	Medium (9)
● Very Poor	High (0)
	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:25,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Masterton DC, NIWA

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2026 Asset Performance Risk Assessment & Poor Assets

Upper Ruamahanga (Mt Bruce)

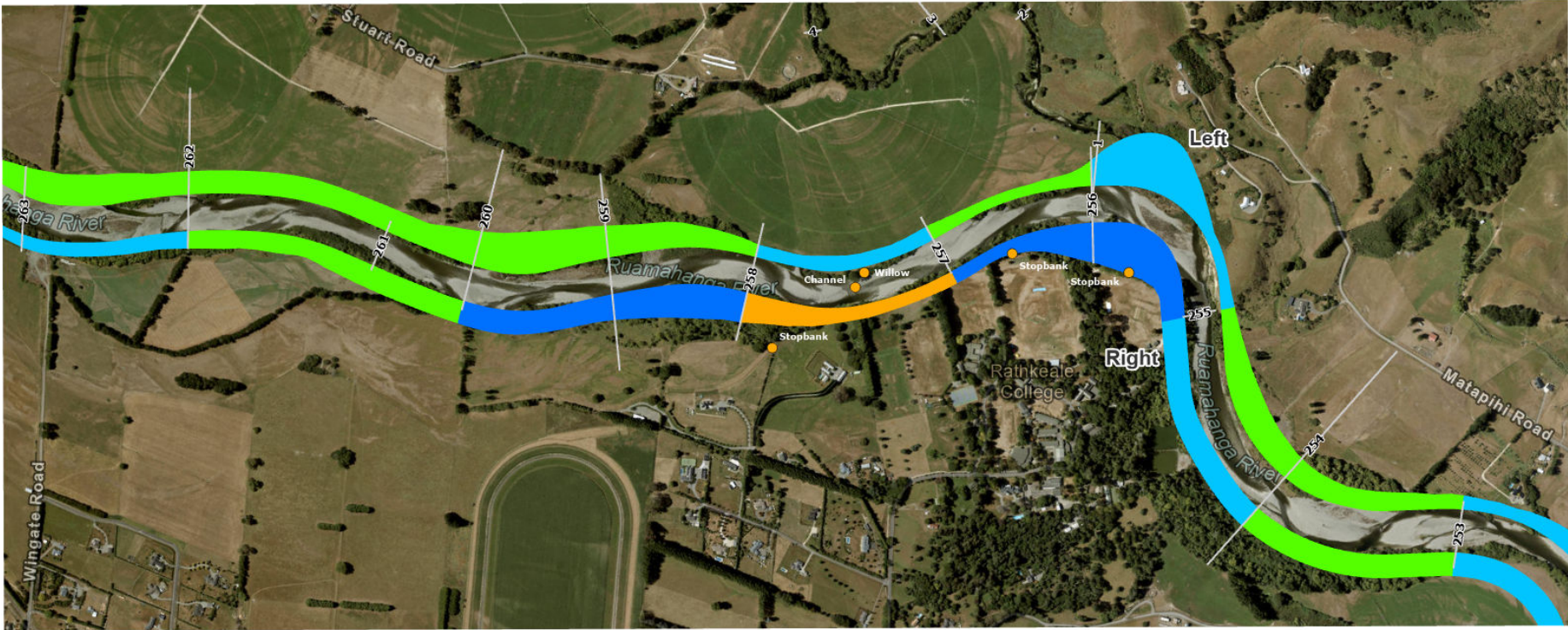
Legend

- CrossSections (102)
- Poor
- Very Poor
- High (1)
- Low (27)
- Medium (9)
- Very High (0)
- Very Low (49)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:00 am
Scale at A4:	1:58,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Masterton DC, NIWA, Earthstar Geographics

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2026 Asset Performance Risk Assessment & Poor Assets
Upper Ruamahanga (Mt Bruce) - Rathkeale



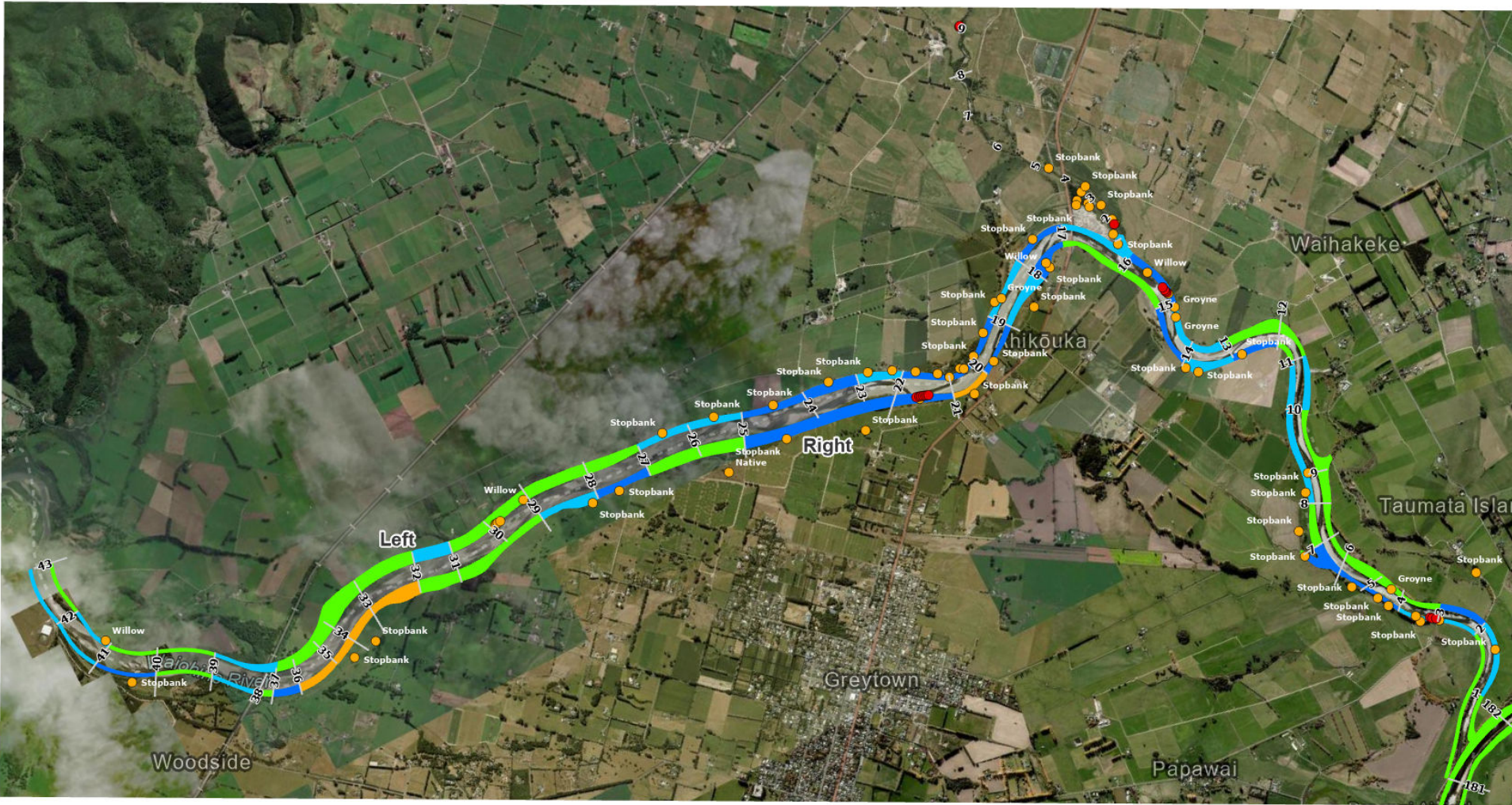
Legend

— CrossSections (15)	Very Low (12)
Poor Condition Assets	Low (7)
● Poor	Medium (4)
● Very Poor	High (1)
	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:13,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Masterton DC, NIWA

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2026 Asset Performance Risk Assessment & Poor Assets
Waiohine



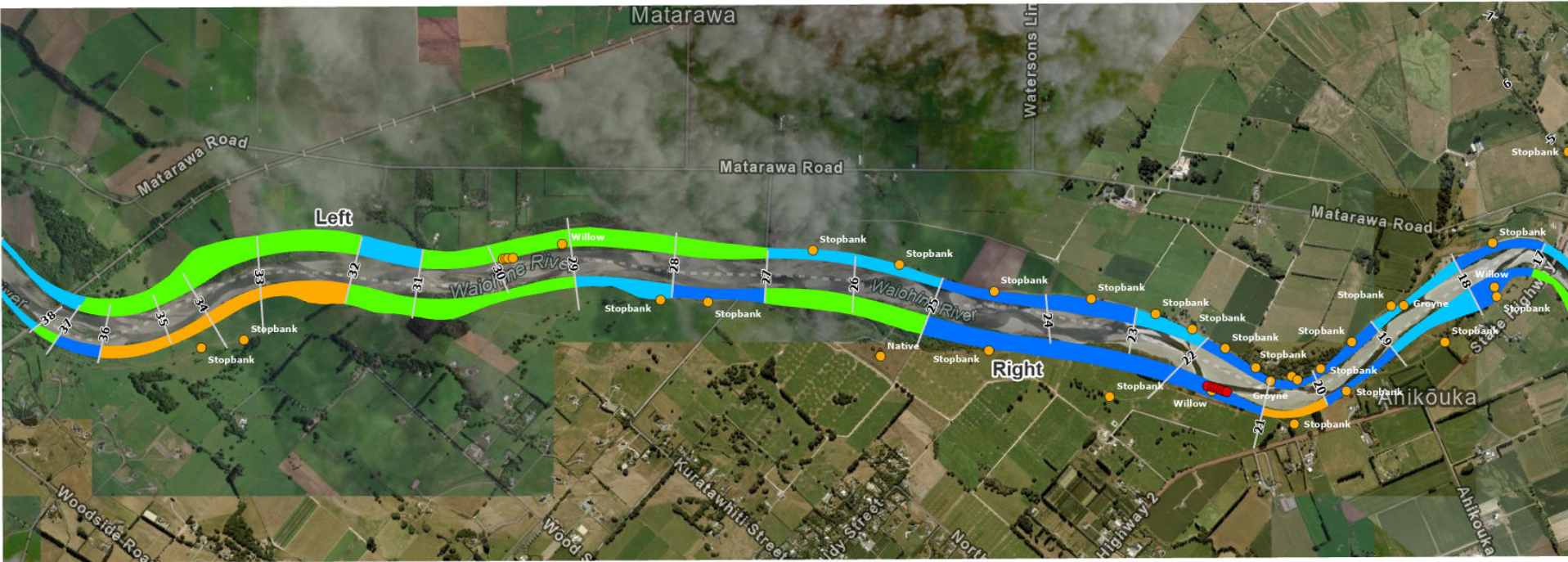
Legend

— CrossSections (54)	Very Low (41)
Poor Condition Assets	Low (24)
● Poor	Medium (22)
● Very Poor	High (5)
	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:41,000

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2026 Asset Performance Risk Assessment & Poor Assets

Waiohine - Rail Bridge & Fullers Bend

Legend

- CrossSections (26)
- Poor Condition Assets
 - Poor
 - Very Poor
- Very Low (17)
- Low (11)
- Medium (14)
- High (5)
- Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:26,000





2026 Asset Performance Risk Assessment & Poor Assets
Waingawa

Legend

CrossSections (30)

Poor Condition Assets

Poor

Very Poor

High (2)

Low (16)

Medium (4)

Very High (0)

Very Low (38)

Project Name:

Author:

Date of Issue:

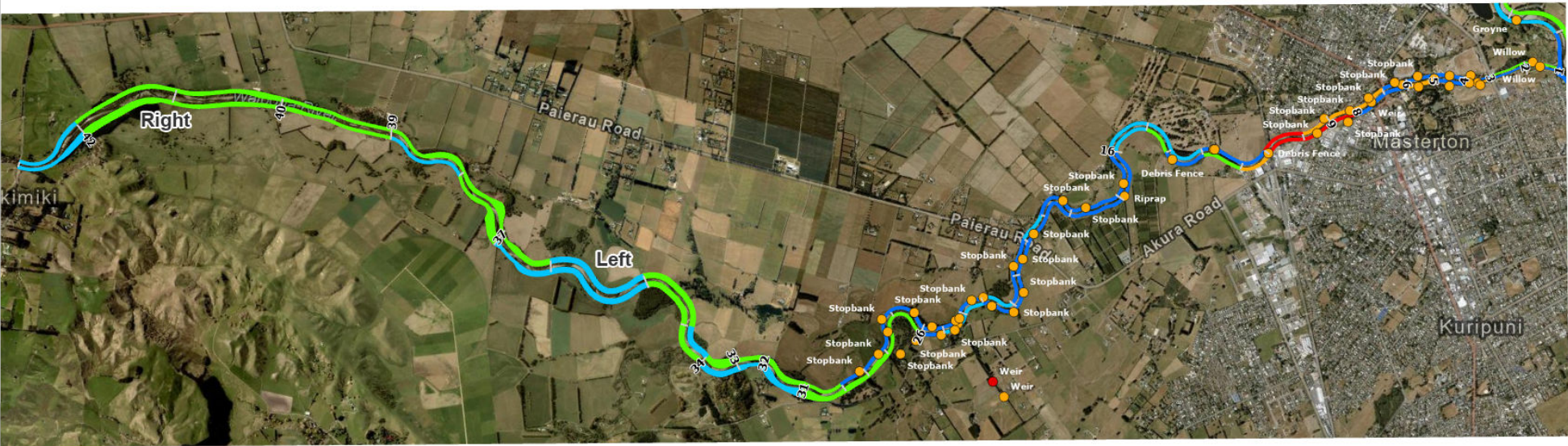
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TurnerL

6/05/2026 9:01 am

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2026 Asset Performance Risk Assessment & Poor Assets
Waipoua

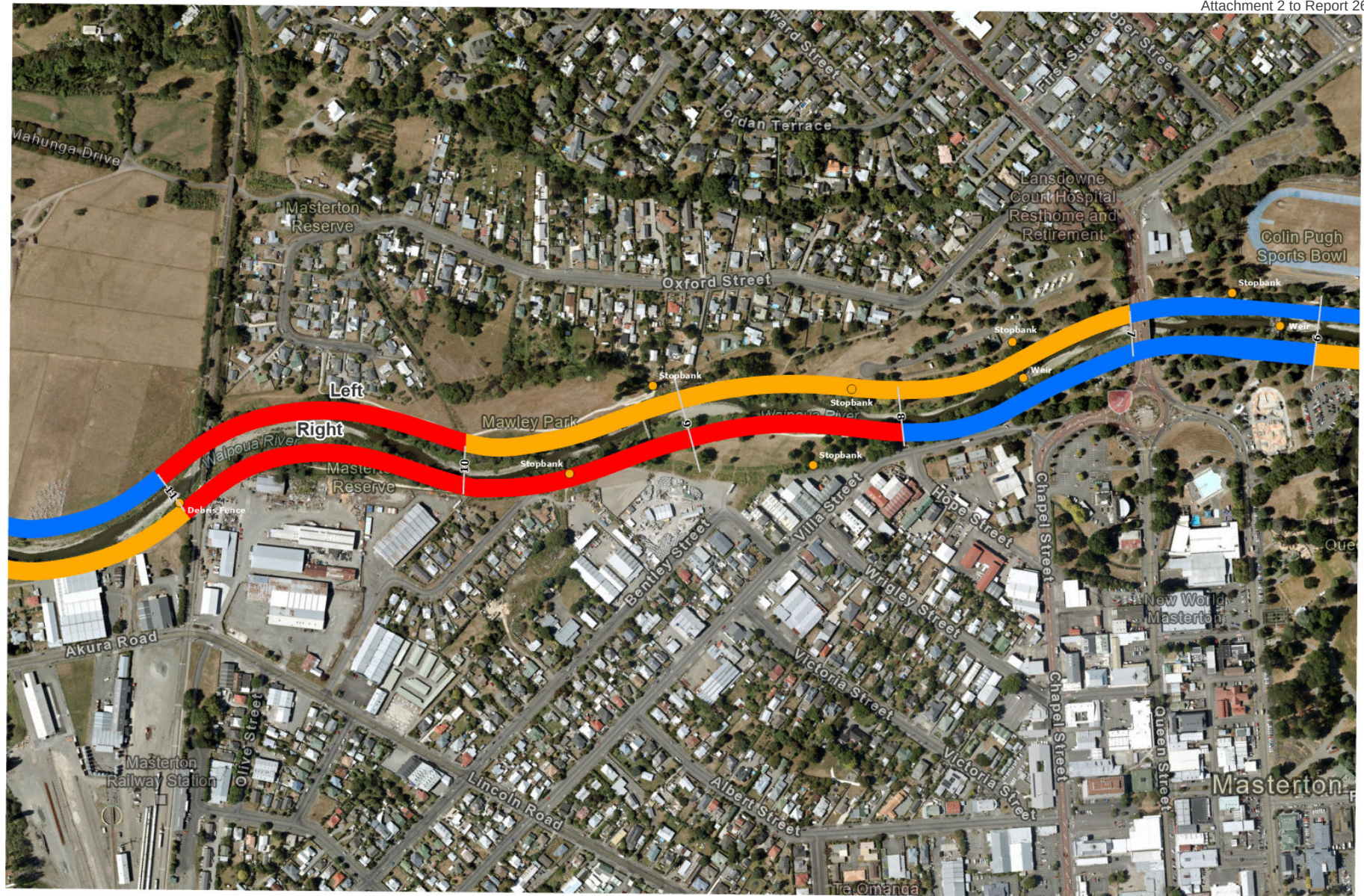
Legend

— CrossSections (46)	Very Low (29)
Poor Condition Assets	Low (20)
● Poor	Medium (33)
● Very Poor	High (6)
	Very High (4)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:48,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Masterton DC, NIWA, Earthstar Geographics

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2026 Asset Performance Risk Assessment & Poor Assets

Waipoua - Masterton Reaches



Legend

— CrossSections (6)	Very Low (0)
Poor Condition Assets	Low (0)
● Poor	Medium (5)
● Very Poor	High (5)
	Very High (4)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:6,000



2026 Asset Performance Risk Assessment & Poor Assets

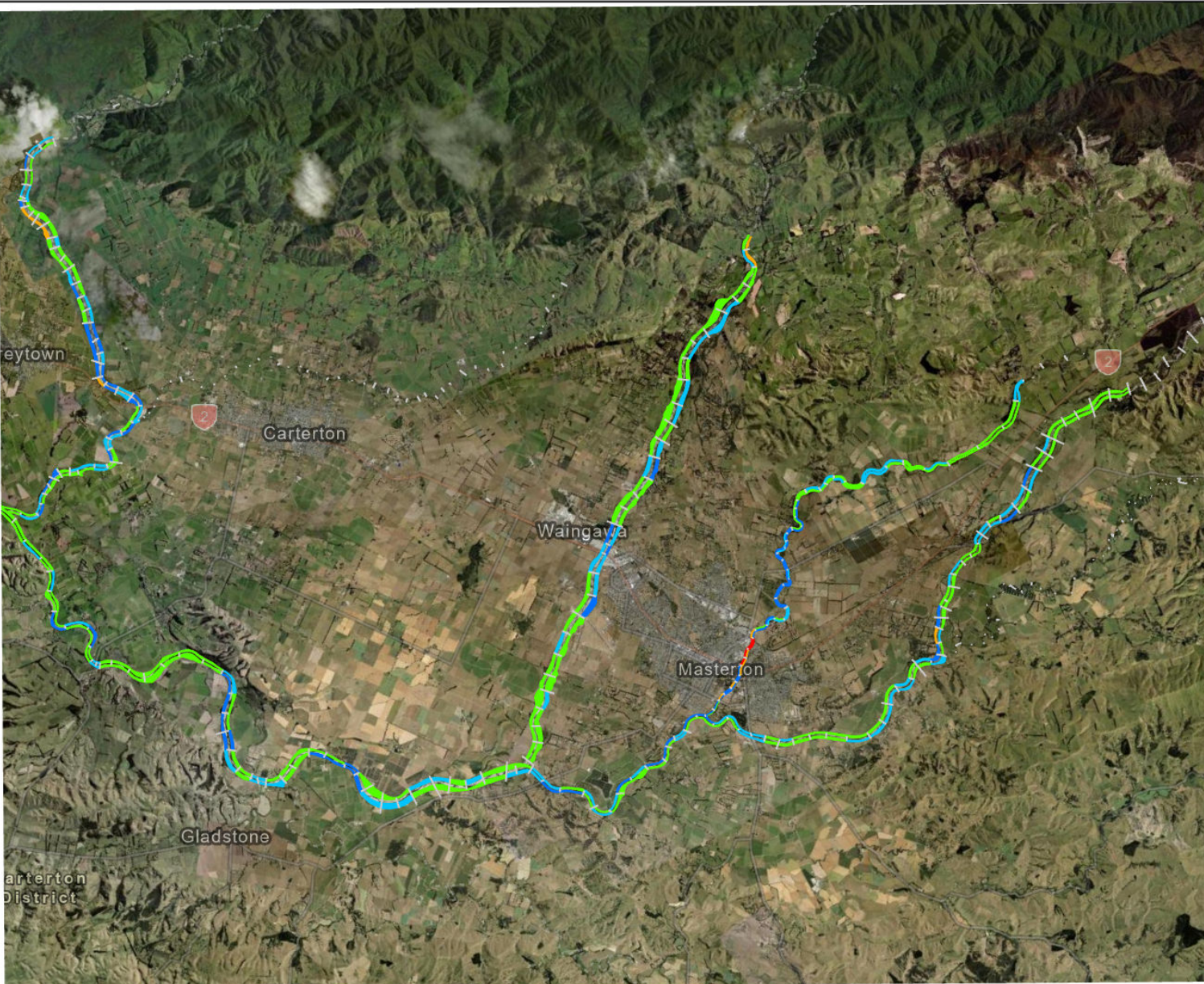
Lower Wairarapa



Legend

— CrossSections (270)	Very Low (116)
Low (140)	Medium (151)
High (0)	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:45 am
Scale at A4:	1:145,000





2026 Asset Performance Risk Assessment & Poor Assets
Upper Wairarapa

CrossSections (328)

Very Low (210)

Low (116)

Medium (84)

High (14)

Very High (4)

Project Name:

Author:

Date of Issue:

Scale at A4:

APT_2026_Master

TurnerL

17/07/2026 9:45 am

1:160,000

Legend



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Attachment 3 to Report 26.339

Ruamāhanga River Schemes Flood Asset Proposed Work Programme **(as of July 2026)**

Lower Ruamāhanga River Schemes				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets¹
Lower Ruamāhanga River - Ōnoke to Tuhitarata	SR 0-5	Repair of wavelap erosion and reinstatement of stopbank and berm batters	Medium	4 - 5
	SL 6-13	Repair of wavelap erosion and reinstatement of stopbank and berm batters	Medium	4 - 5
	Lake Ōnoke	Mechanical opening	N/A	N/A
	Barrage Gates	New gate rope installation	N/A	N/A
	Various	Stopbank mowing and mulching	Various	Various
	Various	Willow maintenance	Various	Various
Lower Ruamāhanga River - Tuhitarata to Waihenga	SR 34-35	Poplar tree removal from berm.	Low	3
	SR 36-37	Bank erosion repair approx. 30m. Second site slightly upstream in XS37 if budget allows.	Medium	4
	SL 40	Pole plant to provide buffer to stopbank and mitigate further erosion.	Low	4
		Lower berm opposite erosion site.		
	SR 41-44	Remove gravel on inside bend and redistribute to groynes. (lwi co-design).	Medium	4
		Plant willow between groynes and natives in behind.		
		Vegetation management for better flow over berm opposite erosion site.		
	SR 112-113	Gravel extraction on beach inside bend.	Medium	3 - 4
		Localised planting to stabilise erosion.		

¹ The Condition of Assets score represents the modified condition score for the reach rather than any individual asset. It incorporates a data confidence adjustment and may therefore be lower than the condition rating of some individual assets within the reach.

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Attachment 3 to Report 26.339

Ruamāhanga River Schemes Flood Asset Proposed Work Programme **(as of July 2026)**

Lower Ruamāhanga River Schemes				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets
	SL 123	Bank erosion repair approx. 30m.	Medium	4
		Groyne Repair		
	SL128	Gravel extraction (dry beach)	Medium	3
	Various	Stopbank vegetation management	Various	Various
	Various	Willow maintenance	Various	Various
Lower Ruamāhanga River - Waihenga to Waiohine	SR 134-135	Tawaha sill repairs	Low	2 - 3
	SL 156	Gravel redistribution form inside bend to groynes on outside bend	Low	4
	Various	Stopbank vegetation management	Various	Various
	Various	Stopbank vegetation management	Various	Various
	Various	Willow maintenance	Various	Various
Tauwharenikau River	SL 5	Erosion repairs	Medium	3
		Gravel groyne construction		
	SL 15	Edge protection / groynes at landfill site	Very Low	2
	Various	Willow/planting management	Various	Various
	Various	Beach vegetation clearance	Various	Various
	Various	Gravel extraction	Various	Various
Turanganui River	SL 1-2	Stopbank repairs	N/A	3 – 4
	SR/L 5	Channel realignment		4
	SR 7	Stopbank toe erosion repairs and layering		4
	SR 8	Stopbank repairs		4
	SR/L 9-18	Vegetation removal/clearance		Various
	SR/L 19-24	Bank erosion repairs		Various
		Gravel groyne construction and maintenance		

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Ruamāhanga River Schemes Flood Asset Proposed Work Programme **(as of July 2026)**

Lower Ruamāhanga River Schemes				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets
	Various	Willow and natives planting		Various
		Channel recontouring		
		Gravel extraction		
Tauanui River	SR/L 2	Channel recontouring	N/A	Various
		Gravel groyne construction		
		Willow planting		
	SR/L 2-7	Vegetation management within channel		
		Debris clearance		
	SR/L 7+	Gravel groyne construction and repairs		
		Willow layering and edge protection		
		Channel recontouring		
Huangaia River	SR 0 - 1	Erosion repairs and layering	N/A	4
	SR 7-10	Debris cleanup		3
		Tree Planting		3
	SR 15	Erosion repairs and layering		3
	SR/L 19	Channel recontouring		3
		Bank erosion repairs		3
	SL 20	Rail iron removal		3
	Various	Gravel extraction		Various
Donald's Creek	Various	Trimming overhanging branches. Removing any fallen trees/ branches across the watercourse. General vegetation control along the channel	N/A	Various
Abbotts Creek				
Pigeon Bush				
Cross Creek				
Manganui				

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Attachment 3 to Report 26.339

Ruamāhanga River Schemes Flood Asset Proposed Work Programme
(as of July 2026)

Lower Ruamāhanga River Schemes				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets
General Items	Various	Floodgate Maintenance	Various	Various
		Pest Control		

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Attachment 3 to Report 26.339

Ruamāhanga River Schemes Flood Asset Proposed Work Programme **(as of July 2026)**

Upper Ruamāhanga River Schemes				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets¹
Upper Ruamāhanga River - Mount Bruce	SL 250	Native planting maintenance	Low	3
	SR 257	Beach Re-contour Channel	High	4
	SL 257	Willow Planting	Low	4
		Beach Re-contour Channel		
	SL 258	Willow cabling at Wyeths	Very Low	3
	SR 264	Repairs to Iron Rail 2 Structures	Very Low	3
		Removal of Rails in channel at XS 264		
	SR/L 268	Beach Re-contour Channel	Low - Medium	4
	SR/L 270	Beach Re-contour Channel	Low - Medium	4
	SL 272	Willow Planting	Very Low	3
	SR 272	Removal of Rails in channel at XS 272	Low	4
	SR 274	Trim back regrowth under powerlines and poison willows	Very Low	3
	SL 277	Planting poles and natives in slip face	Very Low	3
Upper Ruamāhanga River - Te Ore Ore	SL 227	Beach Recontour and Planting	Medium	5
	SR 227	Rock Groyne Maintenance	Very Low	3
		Beach Recontour and Planting		
	SR 235	Stopbank Maintenance	Medium	3
	SR 236	Willow Layering and cabling	Low	3
	SL 236	Willow Maintenance	Very Low	3
		Erosion to Outer Line		
	SR 238	Rock Groyne Maintenance	Medium	3
	SR 239	Rock Groyne Maintenance	Low	2

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Attachment 3 to Report 26.339

Ruamāhanga River Schemes Flood Asset Proposed Work Programme **(as of July 2026)**

Upper Ruamāhanga River Schemes				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets¹
Upper Ruamāhanga River – Gladstone		Native planting maintenance		
	SL 239	Native planting maintenance	Very Low	3
	SR 189	Remove large trees at slump	Medium	3
		Stopbank Maintenance Large tree removal		
	SL 192	Debris Fence Maintenance	Low	3
	SR 201	Vegetation issues in channel	Very Low	3
	SR 211	Erosion to Outer Line	Very Low	3
	SR 214	Vegetation issues in channel	Very Low	3
	SR 210	Stopbank Maintenance Large tree removal	Very Low	2
	SL 211	Stopbank Maintenance Large tree removal	Medium	4
Waipoua River	SR 218	Vegetation issues in channel	Low	4
	SL 219	Rock Groyne Maintenance	Very Low	3
	SL 1	Willow Maintenance	Very Low	3
	SL 3	Willow Maintenance	Medium	4
	SR 9	Remove iron rails, stopbank maintenance	Very High	3
	SR 11	Remove iron rails, stopbank maintenance	High	3
	SL 13	Rock Groyne Maintenance	Low	3
	SR 14	Remove iron rails	Very Low	3
	SR 24	Erosion to right bank	Low	4
Waingawa River	SL 24	Willow Maintenance	Medium	4
	Various	Large trees in stopbank footprint	Various	Various
	SL 8	Replant of missing willow	Very Low	3
	SL 18	Replant of missing willow	Low	3
		Stopbank Maintenance		

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Attachment 3 to Report 26.339

Ruamāhanga River Schemes Flood Asset Proposed Work Programme
(as of July 2026)

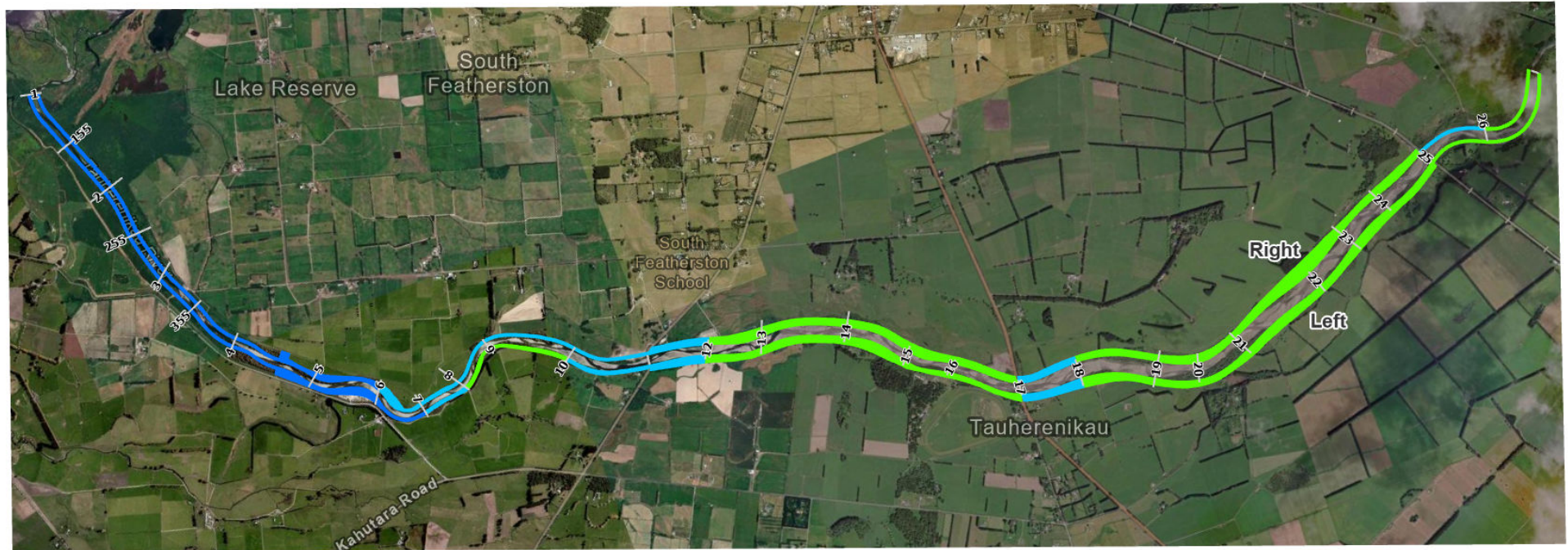
Upper Ruamāhanga River Schemes				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets ¹
	SR 18	Erosion to outer buffer line	Very Low	3
	SL 20	Stopbank Maintenance	Low	3

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Attachment 3 to Report 26.339

Ruamāhanga River Schemes Flood Asset Proposed Work Programme
(as of July 2026)

Waiōhine River Scheme				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets¹
Waiōhine River	SR 2	Willow Pole Planting	Low	4
	SL 2	Floodgate repairs	Medium	4
	SL 3	Willow Pole Planting	Very Low	3
	Various	Rock Groyne Maintenance - Restack eleven Condition 4 Groynes & five Condition 5 groynes	Various	4
	SL 15	Willow Pole Planting	Medium	5
		Rock Groyne Maintenance		
	SL 17	Willow Pole Planting	Medium	3
	SR 20	Stopbank maintenance, Willow Pole Planting	High	3
	SR 21	Stopbank maintenance, Willow Pole Planting	Medium	4
	SR 22	Native Planting Maintenance	Medium	3
	Various	Stopbank Maintenance	Various	Various
	Various	Stopbank Mulching	Various	Various



Tauwharenikau APT Map

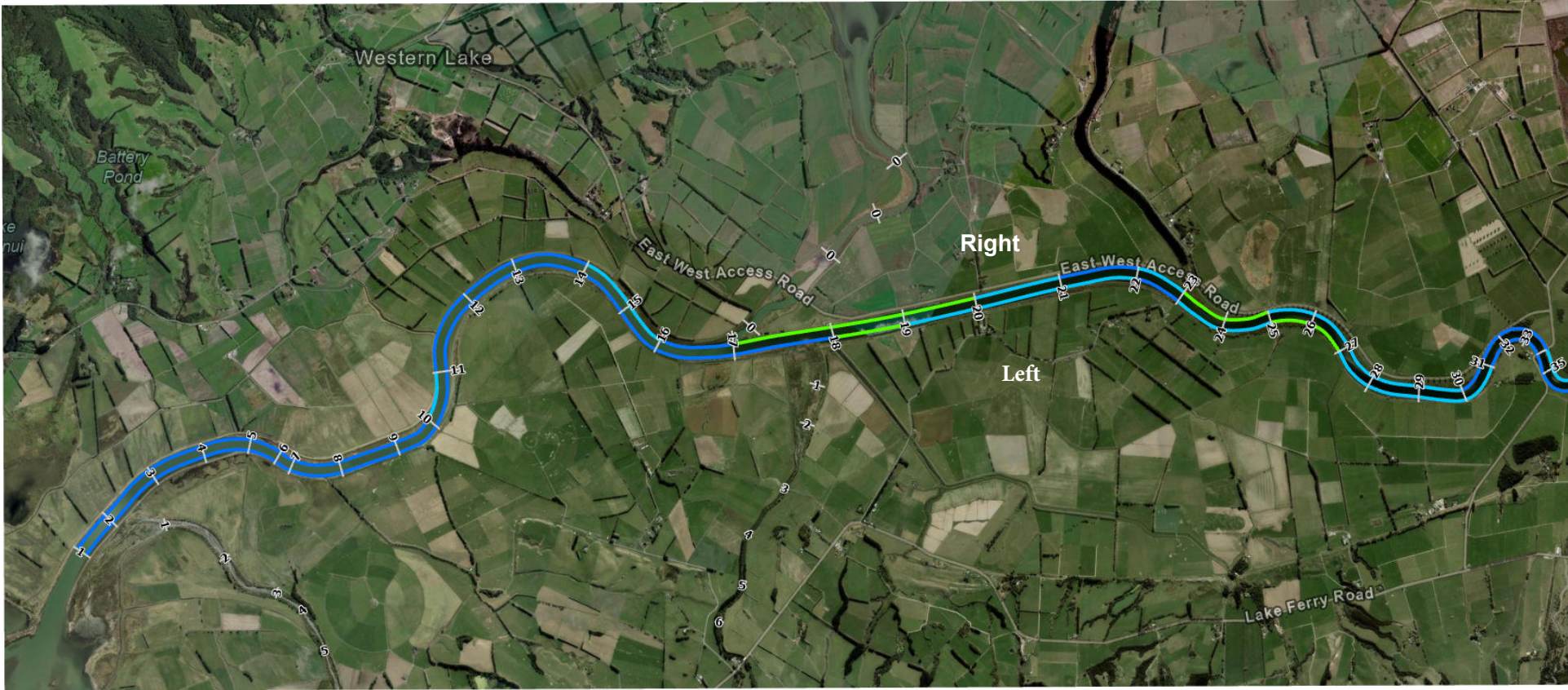
2026 Asset Performance Tool Risk Assessment



Legend

— CrossSections (30)	Very Low (29)
	Low (12)
	Medium (17)
	High (0)
	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:41 am
Scale at A4:	1:45,000





Lower Ruamahanga (Onoke - Tuhitarata) APT Map

2026 Asset Performance Tool Risk Assessment

Legend

- CrossSections (51)
- High (0)
- Low (21)
- Medium (40)
- Very High (0)
- Very Low (8)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:08 am
Scale at A4:	1:52,000



Lower Ruamahanga (Tuhitarata - Waihenga) APT Map

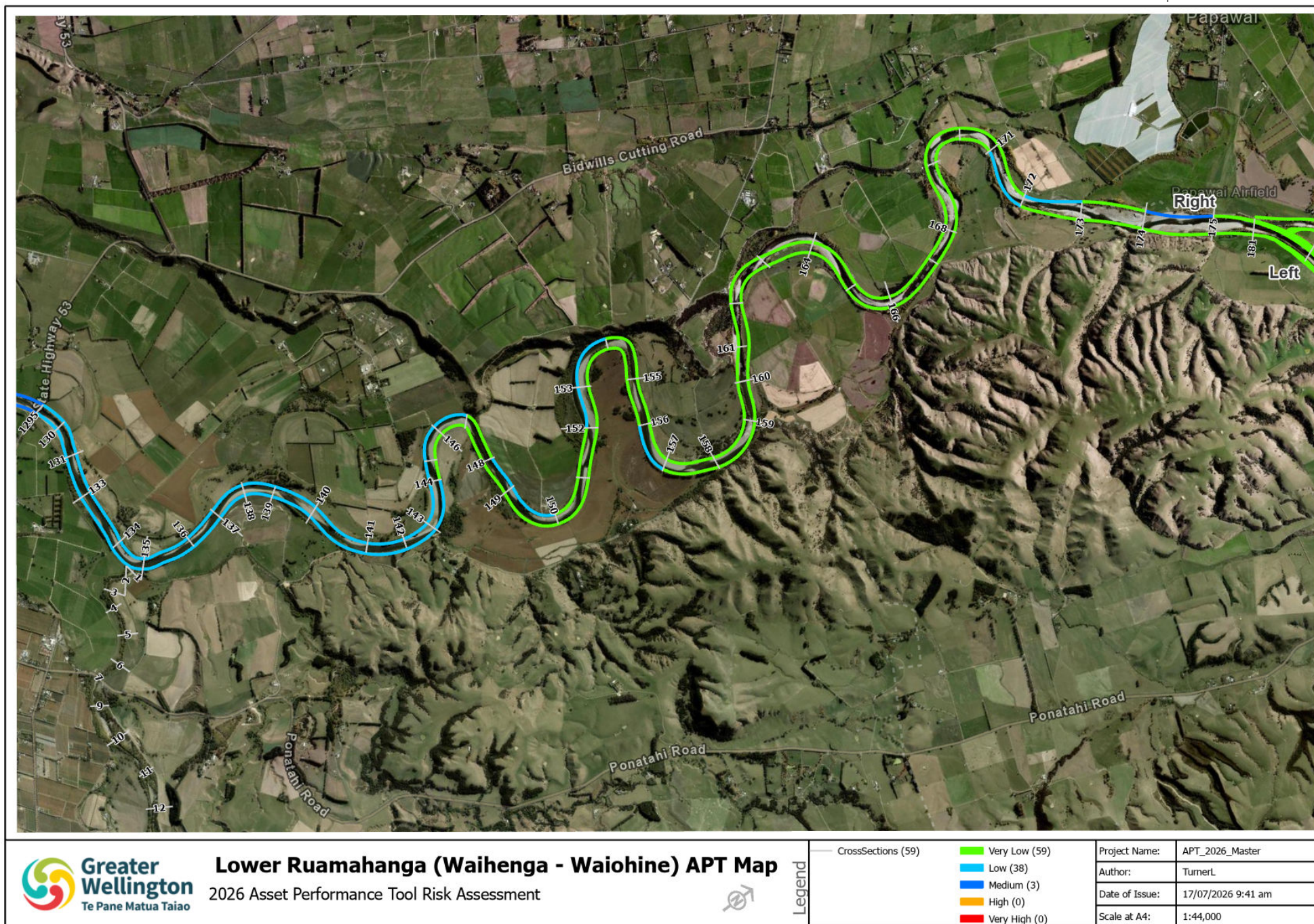
2026 Asset Performance Tool Risk Assessment

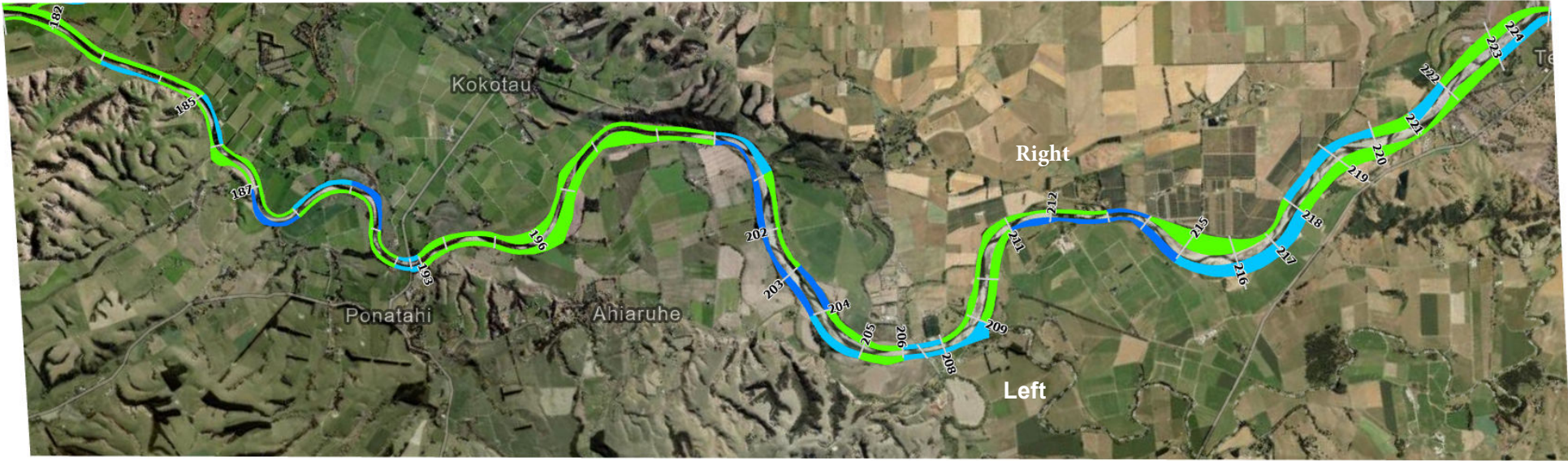


Legend

— CrossSections (99)	High (0)
	Low (74)
	Medium (100)
	Very High (0)
	Very Low (22)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:08 am
Scale at A4:	1:64,000







Upper Ruamahanga (Gladstone) APT Map
2026 Asset Performance Tool Risk Assessment



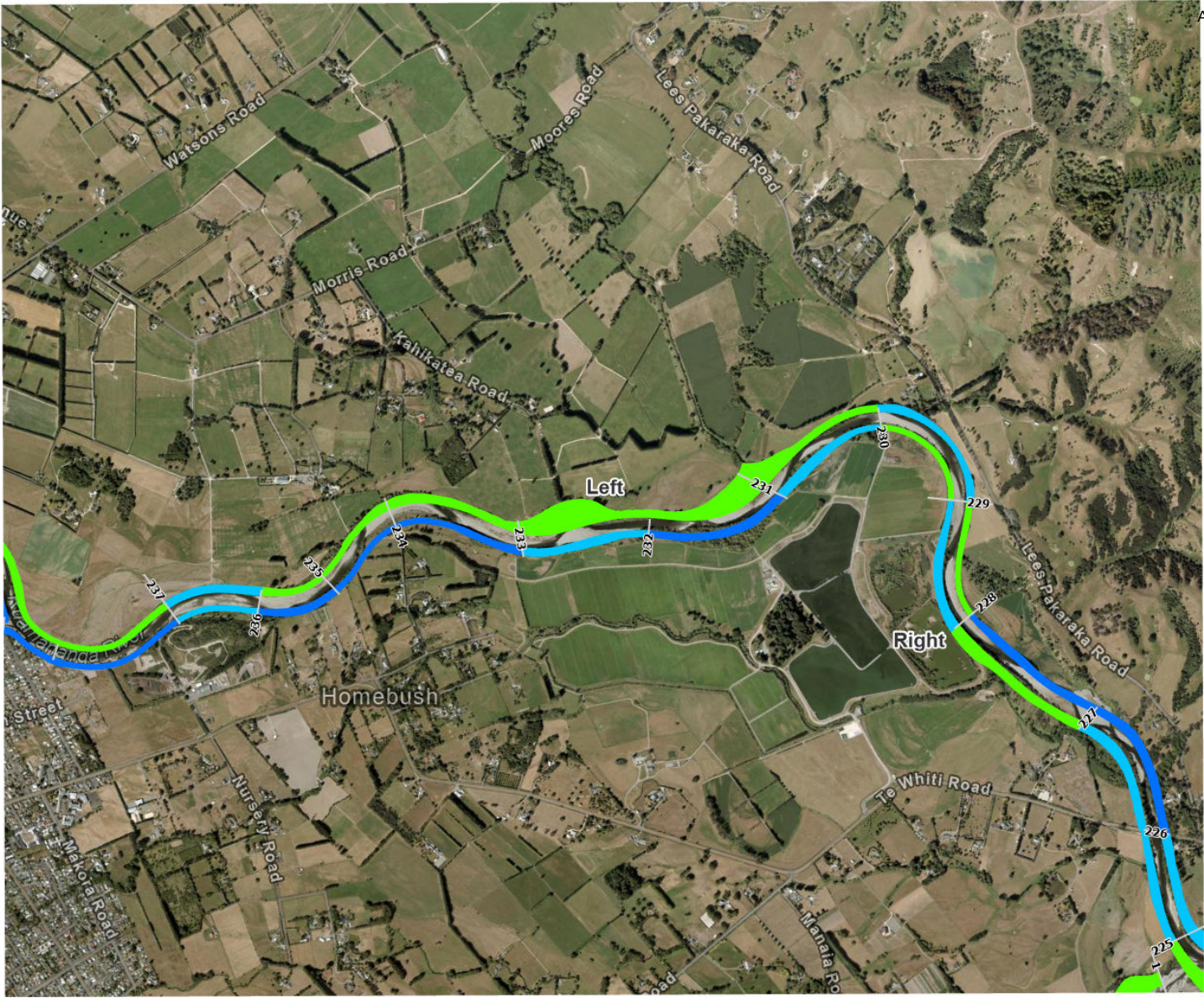
Legend

- CrossSections (46)
- High (0)
- Low (25)
- Medium (12)
- Very High (0)
- Very Low (57)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:08 am
Scale at A4:	1:62,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Carterton DC, NIWA, Earthstar Geographics

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Upper Ruamahanga (Te Ore Ore) APT Map
2026 Asset Performance Tool Risk Assessment



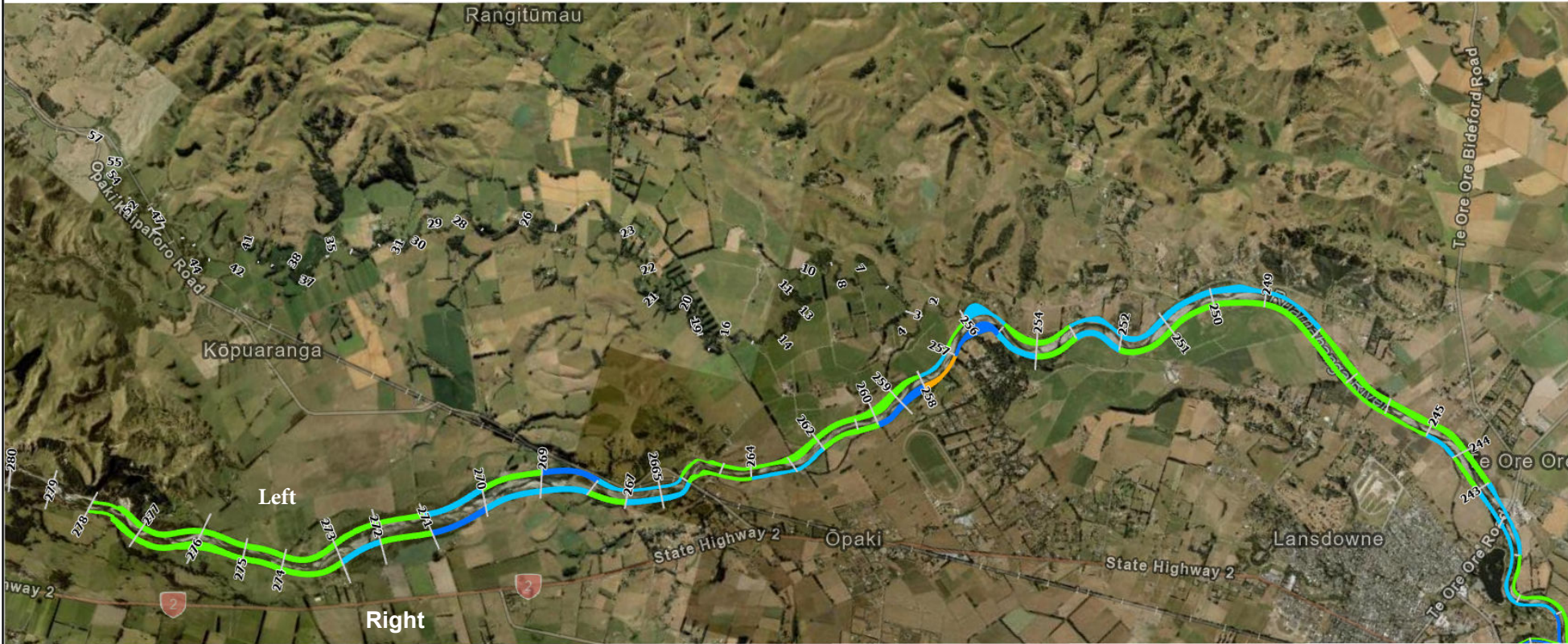
Legend

— CrossSections (16)	Very Low (14)
	Low (10)
	Medium (9)
	High (0)
	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:41 am
Scale at A4:	1:25,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Masterton DC, NIWA

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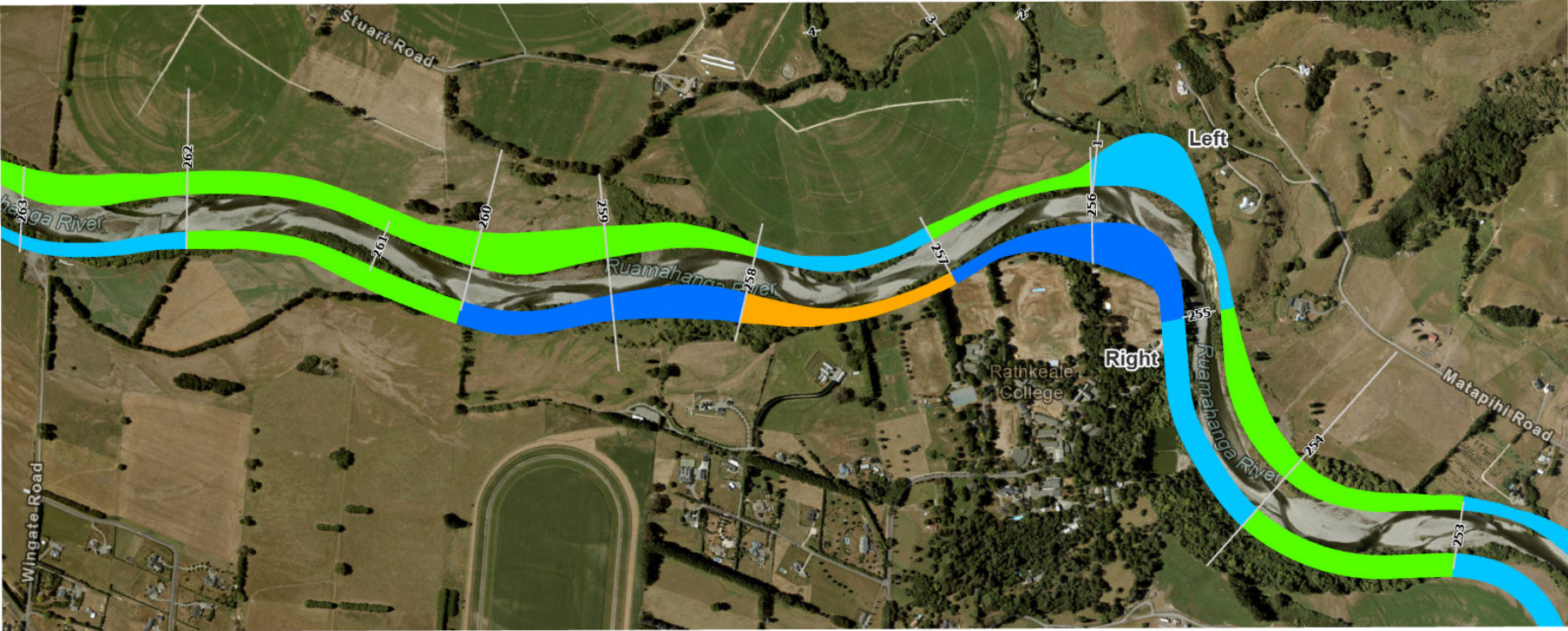
Upper Ruamahanga (Mt Bruce) APT Map
2026 Asset Performance Tool Risk Assessment



Legend

CrossSections (102)	High (1)
	Low (27)
	Medium (9)
	Very High (0)
	Very Low (49)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	6/05/2026 9:08 am
Scale at A4:	1:58,000





Upper Ruamahanga (Mt Bruce) - Rathkeale APT Map

2026 Asset Performance Tool Risk Assessment

Legend

- CrossSections (15)
- Very Low (12)
- Low (7)
- Medium (4)
- High (1)
- Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:41 am
Scale at A4:	1:13,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Masterton DC, NIWA

Path: X:\CM-FloodProtection-Wgtn\GIS\AssetManagement\Projects\APT\2026 APT\APT_2026_Master.aprx



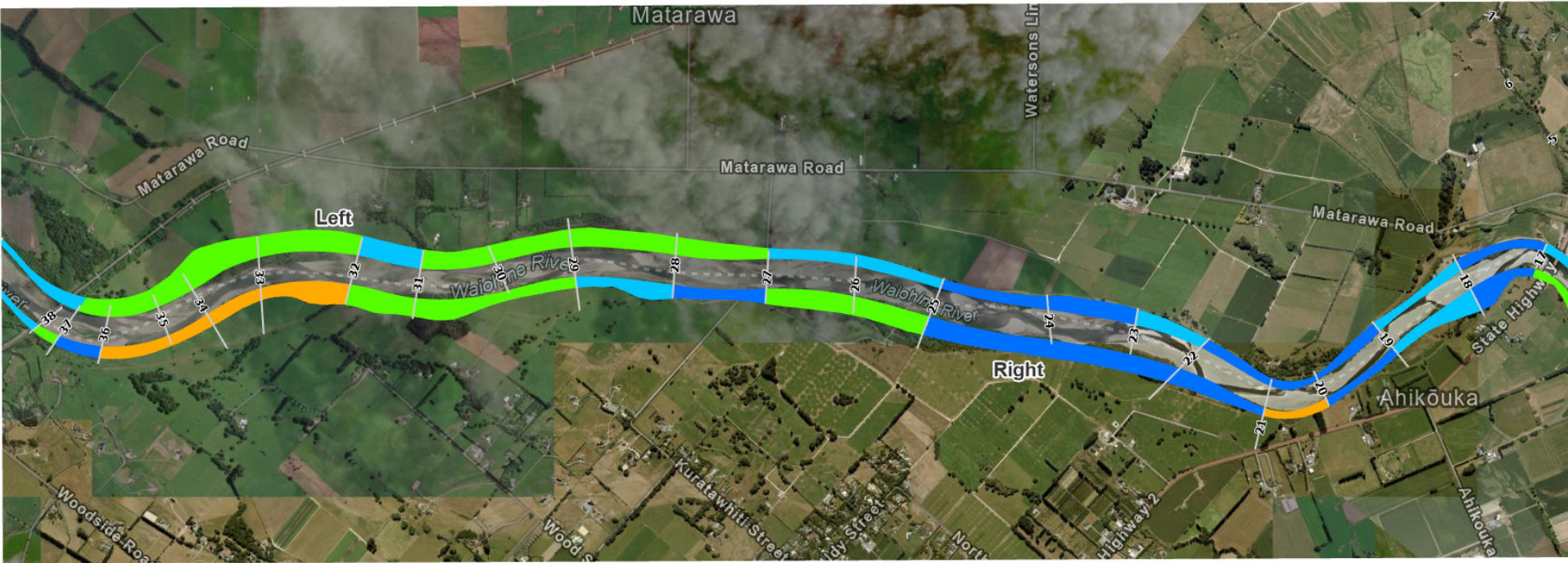
Waiohine APT Map
2026 Asset Performance Tool Risk Assessment



Legend

CrossSections (54)	Very Low (41)
	Low (24)
	Medium (22)
	High (5)
	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:41 am
Scale at A4:	1:41,000





Waiohine - Rail Bridge & Fullers Bend APT Map
2026 Asset Performance Tool Risk Assessment

Legend

CrossSections (26)

Very Low (17)

Low (11)

Medium (14)

High (5)

Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:41 am
Scale at A4:	1:26,000



Waingawa APT Map

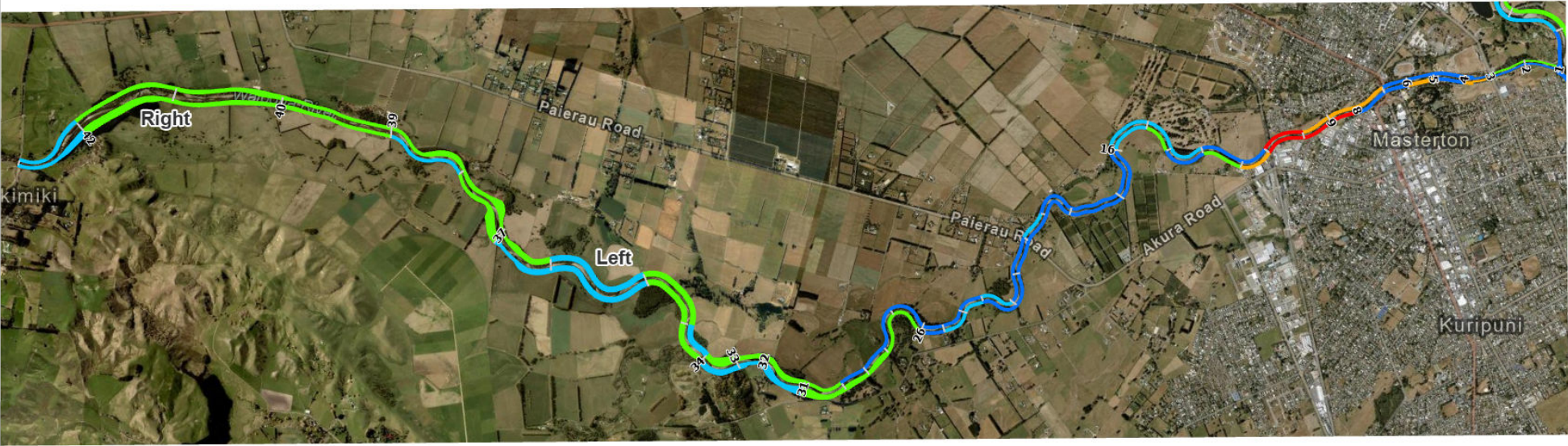
2026 Asset Performance Tool Risk Assessment



Legend

— CrossSections (30)	Very Low (38)
	Low (16)
	Medium (4)
	High (2)
	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:42 am
Scale at A4:	1:60,000





Waipoua APT Map

2026 Asset Performance Tool Risk Assessment

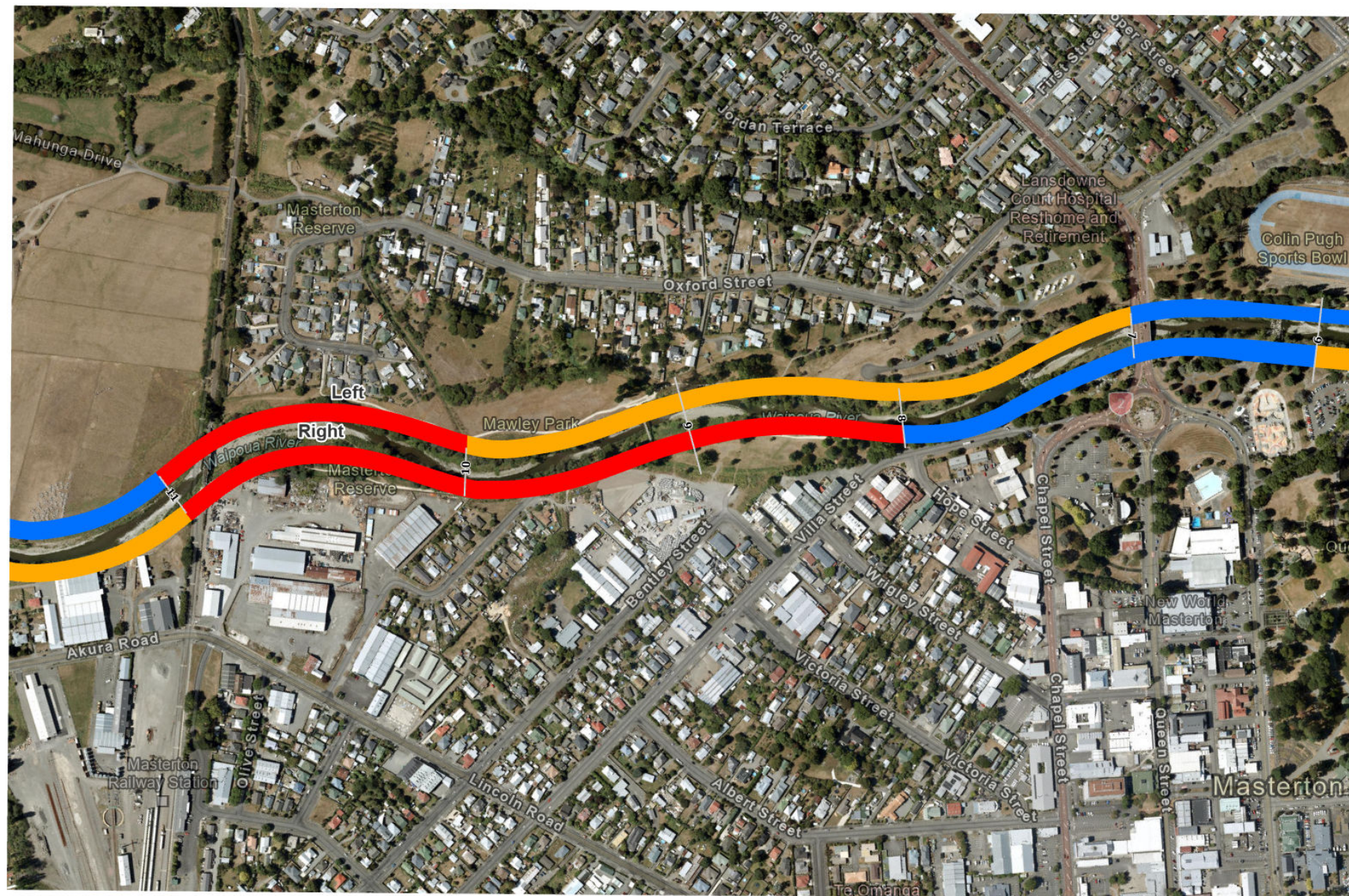
Legend

- CrossSections (46)
- Very Low (29)
- Low (20)
- Medium (33)
- High (6)
- Very High (4)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:42 am
Scale at A4:	1:48,000

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Masterton DC, NIWA, Earthstar Geographics

Path: X:\CM-FloodProtection-Wgtn\GIS\AssetManagement\Projects\APT\2026 APT\APT_2026_Master.aprx



Waipoua - Masterton Reaches APT Map

2026 Asset Performance Tool Risk Assessment



Legend

— CrossSections (6)	Very Low (0)
	Low (0)
	Medium (5)
	High (5)
	Very High (4)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:42 am
Scale at A4:	1:6,000



Lower Wairarapa APT Map

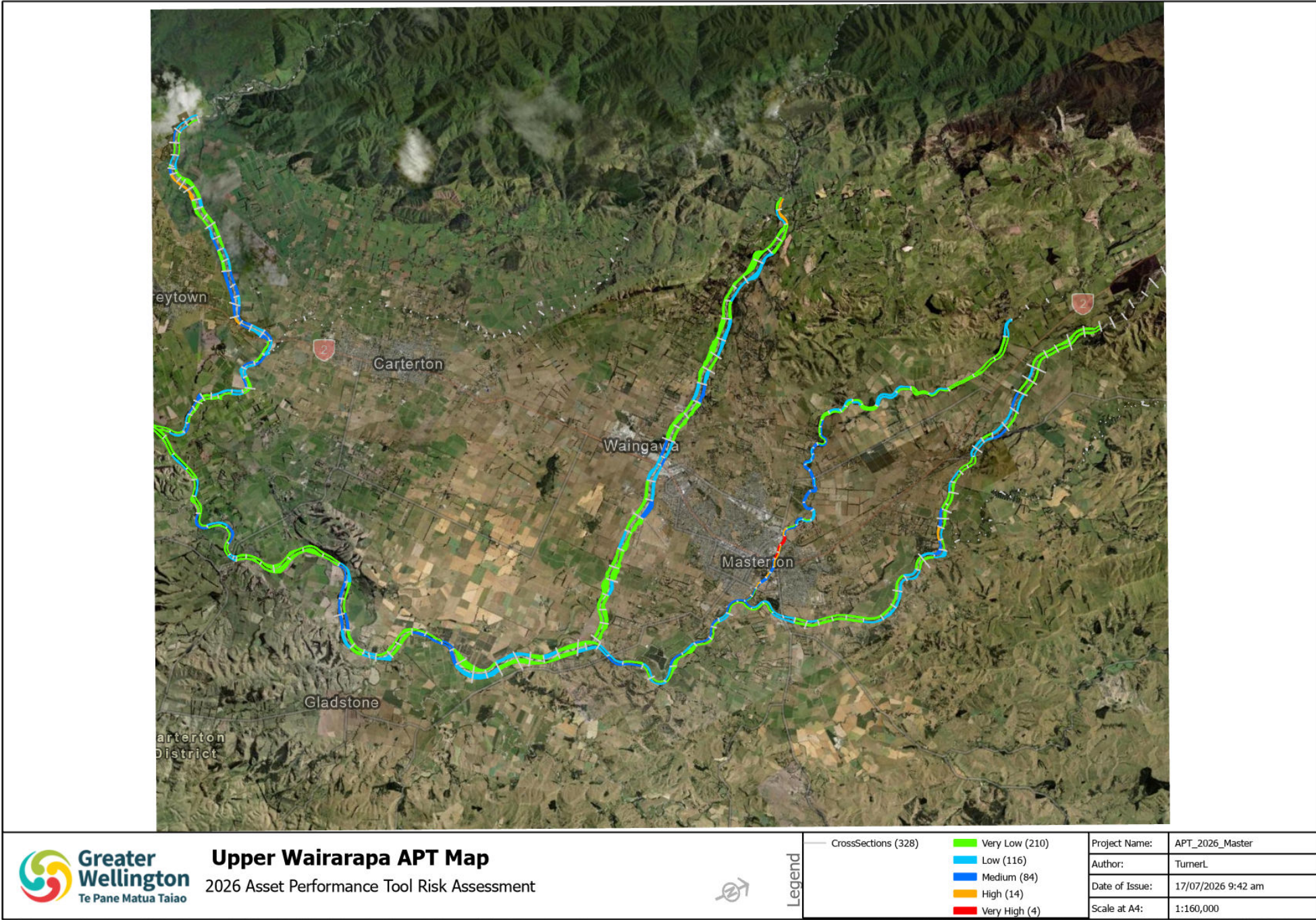
2026 Asset Performance Tool Risk Assessment



Legend

— CrossSections (270)	Very Low (116)
Low (140)	Medium (151)
High (0)	Very High (0)

Project Name:	APT_2026_Master
Author:	TurnerL
Date of Issue:	17/07/2026 9:42 am
Scale at A4:	1:145,000



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Attachment 5 to Report 26.339

Upper Ruamāhanga River Scheme Flood Asset High & Very High Risks and Their Remediation 2026

Upper Ruamāhanga River Schemes										
Scheme	Location, XS, Bank	Failure Mode(s)	Description	Capacity ¹	Intrinsic Strength ²	Condition of Assets ³	Probability of Failure	Consequence of Failure	Risk	Remediation 2026
Te Kāuru, Waipoua	Urban Reach, 3 - 4 Right Bank, 5 - 6 Right Bank, 7 - 10 Both Bank, 11 - 12 Right Bank	Consequence; Capacity; Intrinsic Strength; Condition	Stopbank predicted to overtop in the 1% AEP design event.	4 & 5	3 & 5	3 & 4	5	3 - 5	High – Very High	Details of the concept design for the stopbank adjacent to Mawley Park, and the area downstream of SH2 on the left bank are being confirmed and discussed with Masterton District Council.
			Stopbanks in this area have poor intrinsic strength and condition.							Projects under Flood Resilience Tranche 1 (FRT1) are addressing left bank protection at SH2 and right bank protection at the Waipoua Industrial site. Project works have been completed and captured in the asset management system.
			Some assets within XS have condition issues							Operations Work Program – works to control pest plants and removal of some dead trees. Routine maintenance until addressed as above.

¹ The *Capacity* score represents the modified capacity score for the reach. It incorporates a data confidence adjustment to the probability of overtopping and may therefore be lower than the underlying score.

² The *Intrinsic Strength* score represents the modified intrinsic strength score for the reach. It incorporates a data confidence adjustment to the highest of the foundation softening, bank instability, and seepage scores, and may therefore be lower than the underlying score.

³ The *Condition of Assets* score represents the modified condition score for the reach rather than any individual asset. It incorporates a data confidence adjustment and may therefore be lower than the condition rating of some individual assets within the reach.

XS – Cross Section/s

D/S – Downstream

AEP - Annual Exceedance Probability

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Attachment 5 to Report 26.339

Upper Ruamāhanga River Scheme Flood Asset High & Very High Risks and Their Remediation 2026

Upper Ruamāhanga River Schemes										
Scheme	Location, XS, Bank	Failure Mode(s)	Description	Capacity ¹	Intrinsic Strength ²	Condition of Assets ³	Probability of Failure	Consequence of Failure	Risk	Remediation 2026
Te Kāuru, Waingawa	MDC water supply pipeline, 29-31, Left bank	Consequence; Erosion/Condition; Capacity	Risk of erosion to MDC water supply pipeline during 1% AEP event.	4	-	2 & 3	4	4	High	Projects under Flood Resilience Tranche 1 (FRT1) are addressing erosion around the MDC water supply pipeline. Site 7 rock protection works have been completed.
			Some assets within XS have condition issues							Operations Work Program – works to control pest plants and removal of some dead trees. Routine maintenance until addressed as above.
Te Kāuru, Mount Bruce	Rathkeale College, 257, Right bank	Erosion/Condition; Intrinsic strength	Risk of erosion to stopbank due to proximity to river.	4	5	4	5	3	High	This was identified in the Te Kāuru FMP as a major project. Further consultation and engagement with landowners are required to agree an option to address the risk to the Rathkeale stopbank.
			Has some condition issues							Operations Work Program – Large Trees in and near stopbank, awaiting decision on future SB alignment. BAU maintenance to continue

XS – Cross Section/s

D/S – Downstream

AEP - Annual Exceedance Probability

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Attachment 5 to Report 26.339

Waiōhine River Scheme Flood Asset High & Very High Risks and Their Remediation

2026

Waiōhine River Scheme										
Scheme	Location, XS, Bank	Failure Mode(s)	Description	Capacity ¹	Intrinsic Strength ²	Condition of Assets ³	Probability of Failure	Consequence of Failure	Risk	Remediation 2026
Waiōhine	Fullers bend, 20 - 21, Right bank	Erosion/ Capacity; Condition	Risk of erosion to Fullers Bend from 1% AEP event.	5	3	3	5	3	High	Projects under Flood Resilience Tranche 1 (FRT1) are addressing erosion issues on Fullers Bend, rock protection works have been completed and captured within the asset management system.
			Stopbank predicted to overtop in the 1% AEP design event							This will be addressed through the Waiohine River Plan.
			Some assets within XS have condition Issues							Operations Work Program – Stopbanks rated poor due to excessive grass and poplar on stopbank, maintenance works have been programmed into 26/27 work programme.

XS – Cross Section/s

D/S – Downstream

AEP - Annual Exceedance Probability

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Attachment 5 to Report 26.339

Waiōhine River Scheme Flood Asset High & Very High Risks and Their Remediation

2026

Waiōhine River Scheme										
Scheme	Location, XS, Bank	Failure Mode(s)	Description	Capacity ¹	Intrinsic Strength ²	Condition of Assets ³	Probability of Failure	Consequence of Failure	Risk	Remediation 2026
	D/S of rail bridge, XS 32 - 36, Right bank	Consequence; Capacity; Condition	During 1% AEP event water spills out river towards Greytown.	2	2 & 3	2 & 3	3	4		This will be addressed through the Waiohine River Plan. Proposed project of constructing stopbanks to remediate this issue is currently being assessed.
			Some assets within XS have condition issues							Operations Work Program - Stopbanks rated poor due to excessive grass and scrub on stopbank, maintenance works have been programmed into 26/27 work programme.

XS – Cross Section/s

D/S – Downstream

AEP - Annual Exceedance Probability

Environment and Climate Committee Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026 - Presentation

20th August 2026

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Part 1: Greater Wellington's Flood Asset Management Process

Flood Risk Management – What are our obligations under the Local Government Act?

Attachment 6 to Report 26.339

- In 2014, the Local Government Act was amended to include a 30-year Infrastructure Strategy which ensures that core activities, of which flood protection and control works, is one and are managed appropriately.
- All major flood protection and control assets are required to be maintained, repaired and renewed as specified by the Local Government Act.
- Major flood protection and control works are required to provide ongoing flood protection as part of a flood protection scheme up to a defined maximum flood event (the Level of Service).
- This is defined in the Floodplain Management Plan (or equivalent agreement) for the scheme and is often described in terms of an Annual Exceedance Probability.

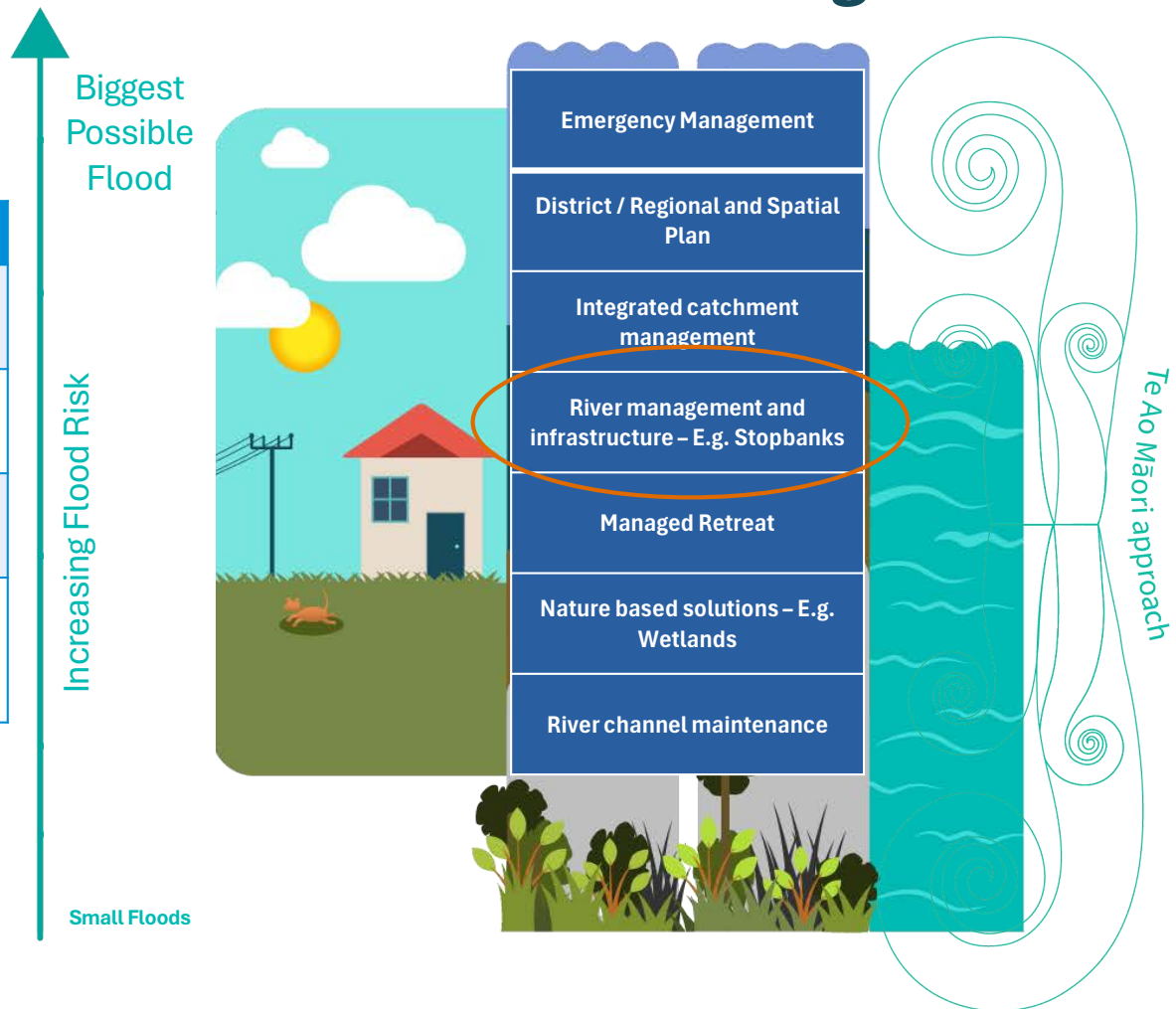


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Attachment 6 to Report 26.339

Flood risk management

Greater Wellington's Principles of Flood Risk Management
Principle 1: Avoid building in areas at high risk of flood hazard
Principle 2: Only consider new flood protection infrastructure where existing development is at risk
Principle 3: Establish standards of flood protection relative to the degree of risk
Principle 4: Plan for climate change in assessing the degree of flood hazard risk and in determining an appropriate response

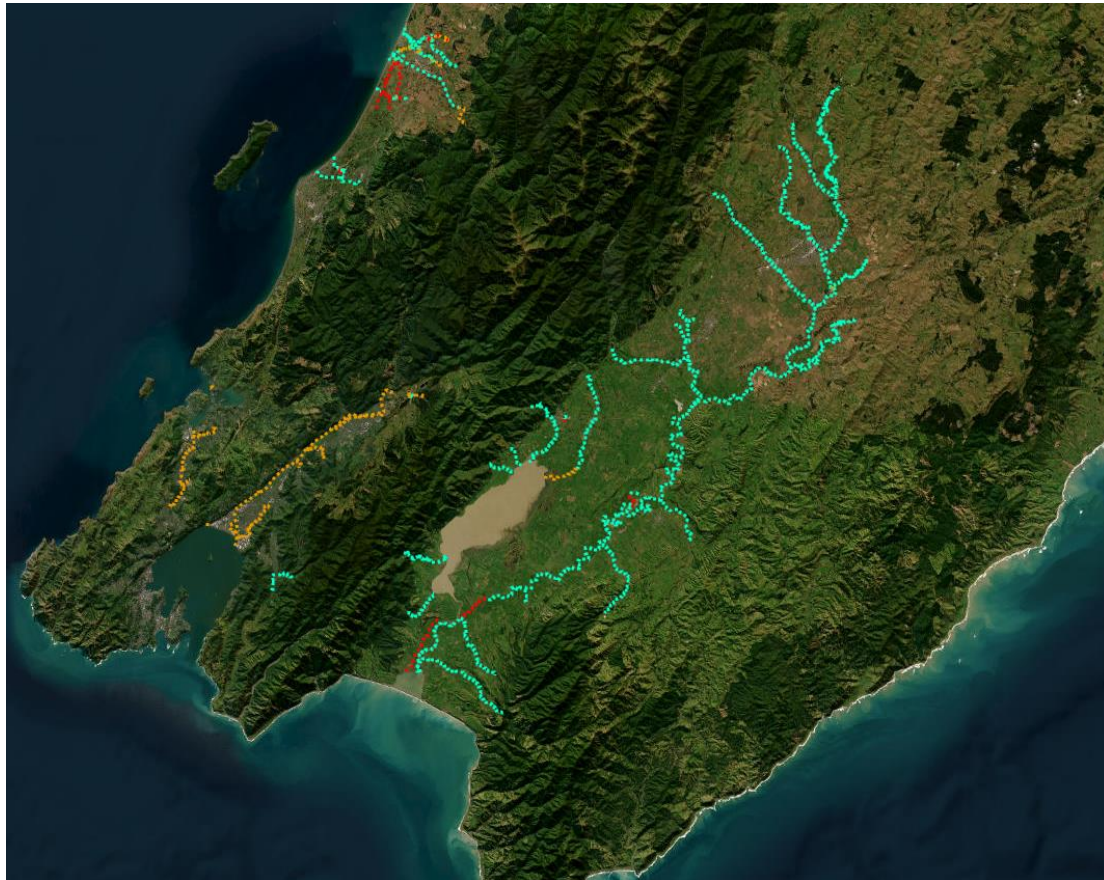


Flood Risk Management - Purpose

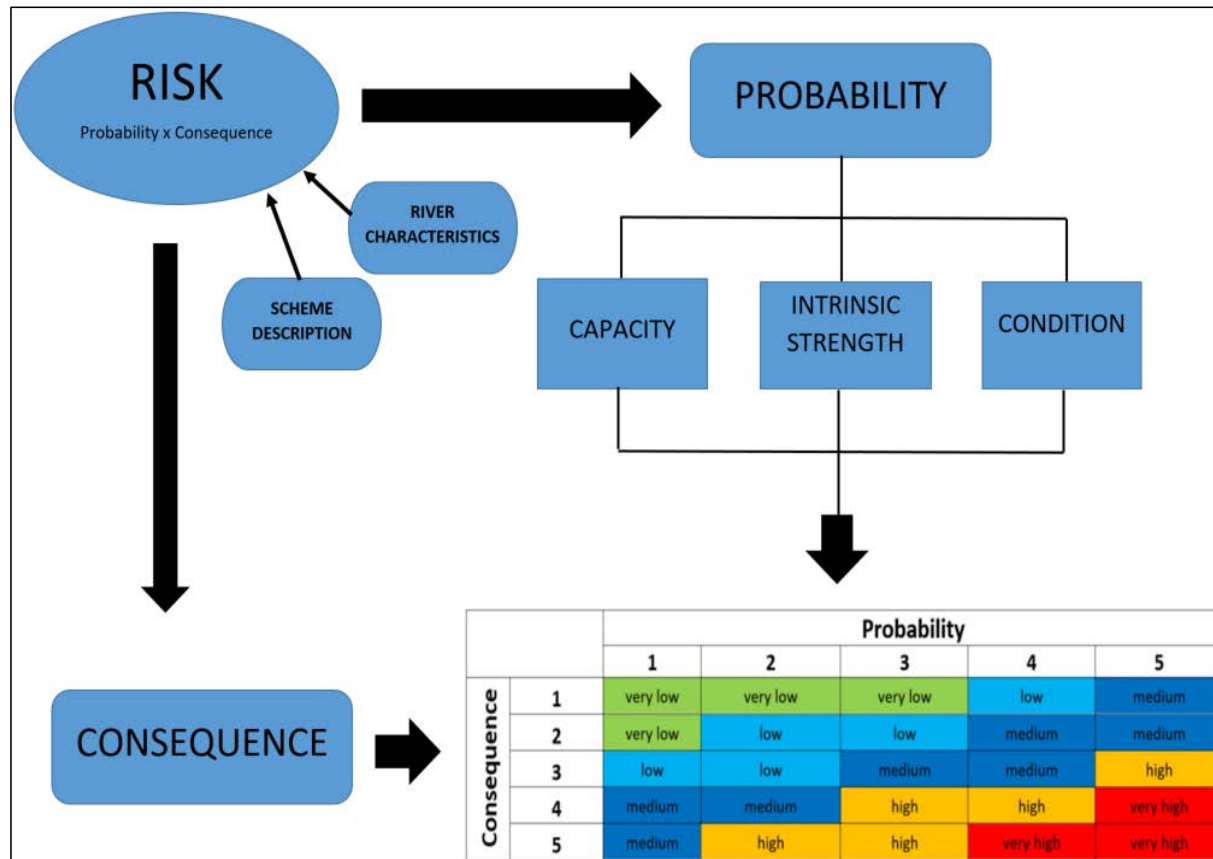
Measure

Major flood protection and control works are maintained, repaired and renewed to the key standards defined in relevant planning documents

Flood Risk Management – Major Flood Protection Schemes

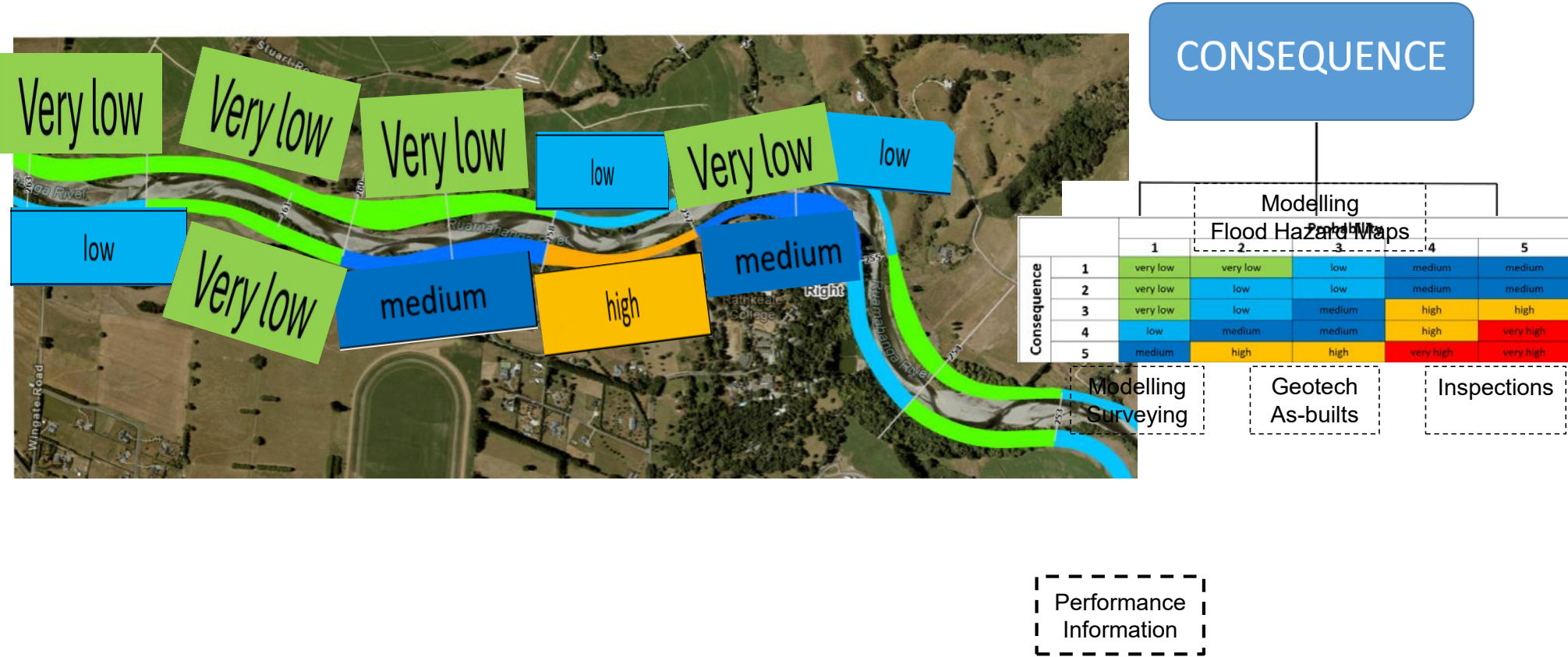


How do we assess the risk?

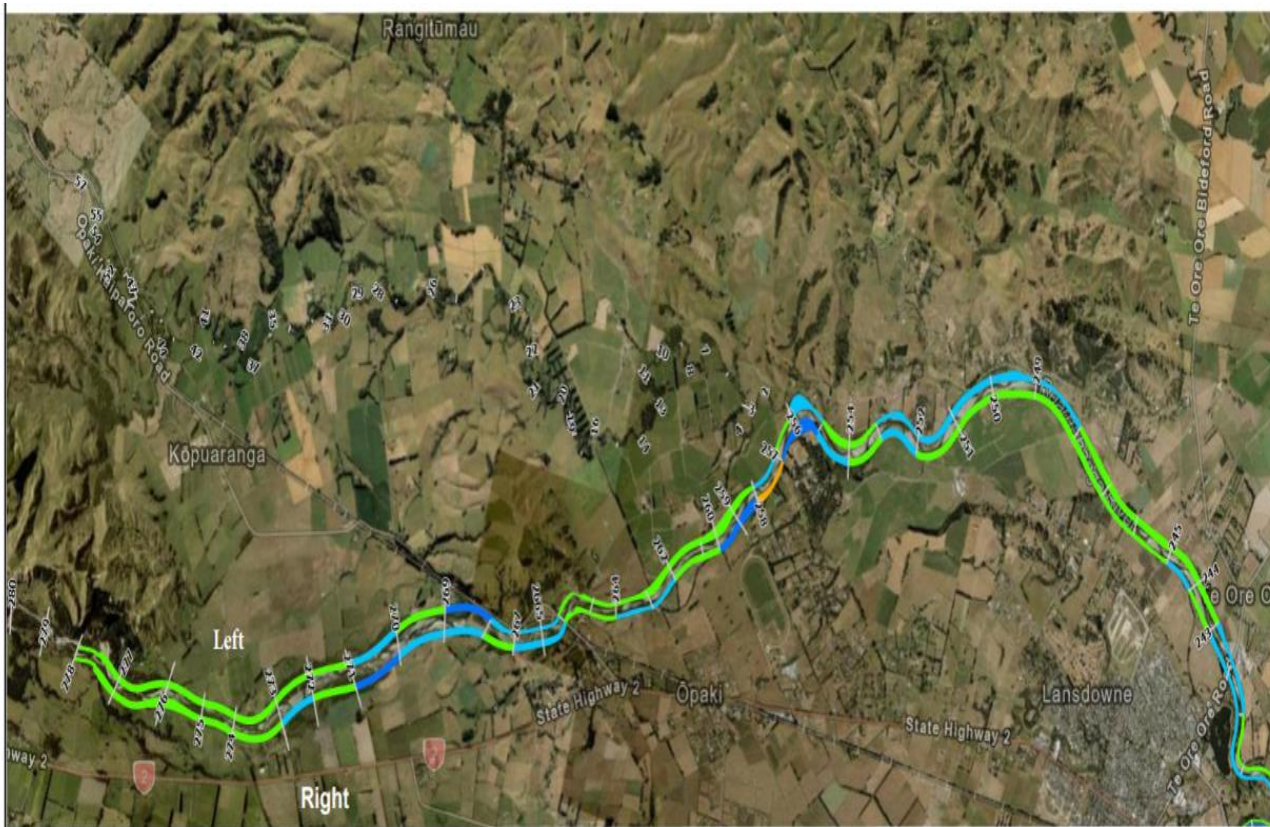


Example: Upper Ruamāhanga (Mt Bruce) River Scheme

Asset Risk Assessment



Risk Assessment: Why do we need it?

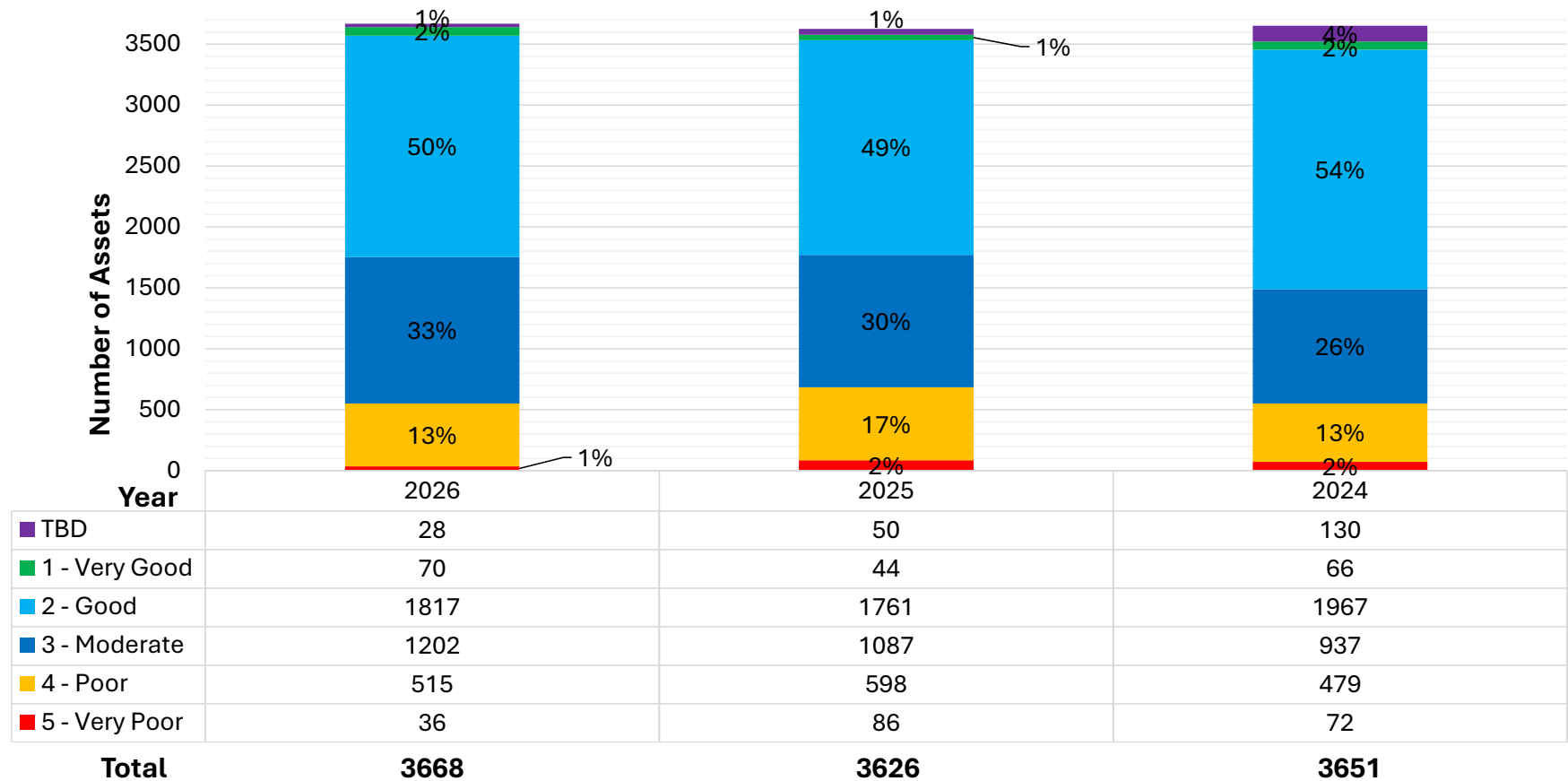


BENEFITS

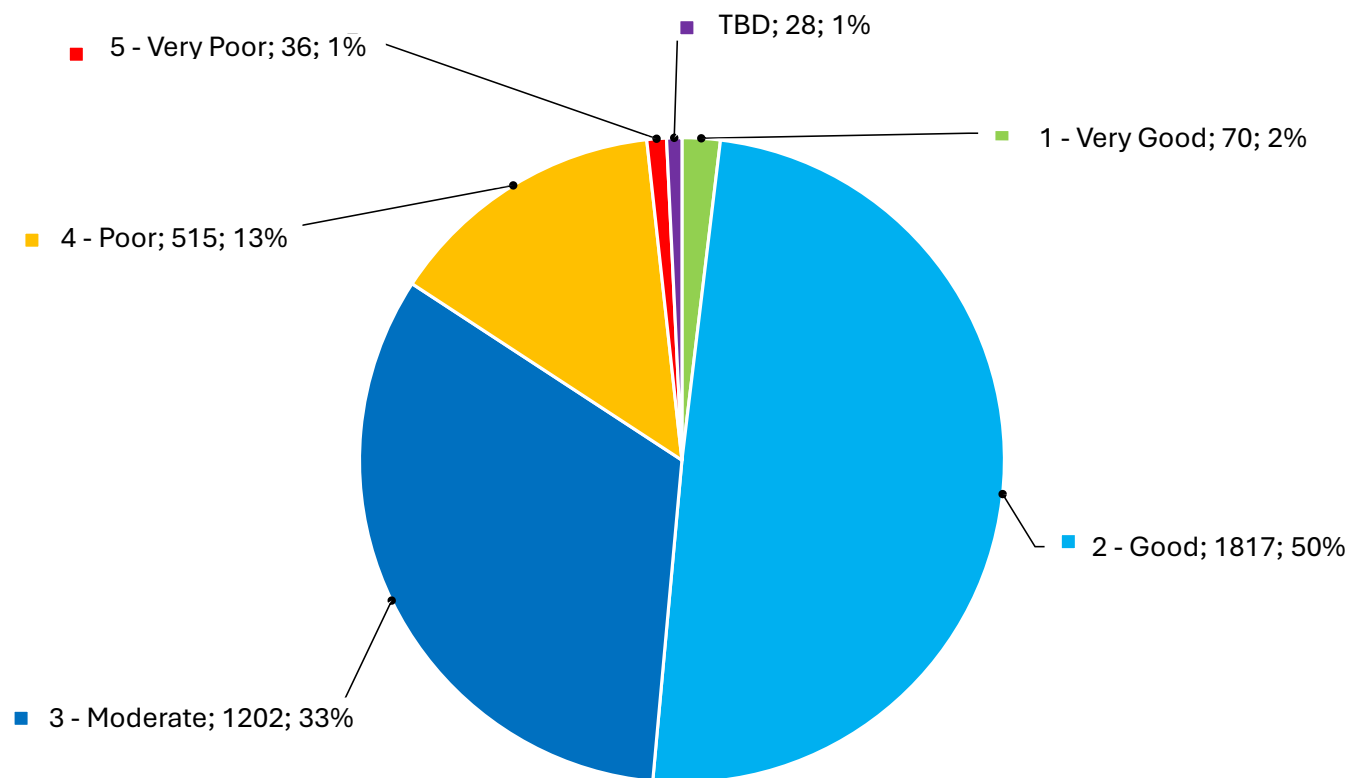
- Risk communication
- Work program prioritisation
- Identifies potential failure modes
- Identifies critical assets
- Identifies missing information

Part 2: Ruamāhanga River Schemes - Annual Flood Asset Assessment Report 2026

Ruamāhanga River Schemes - Summary Of Condition By Year



Ruamāhanga River Schemes - 2026 Condition Summary



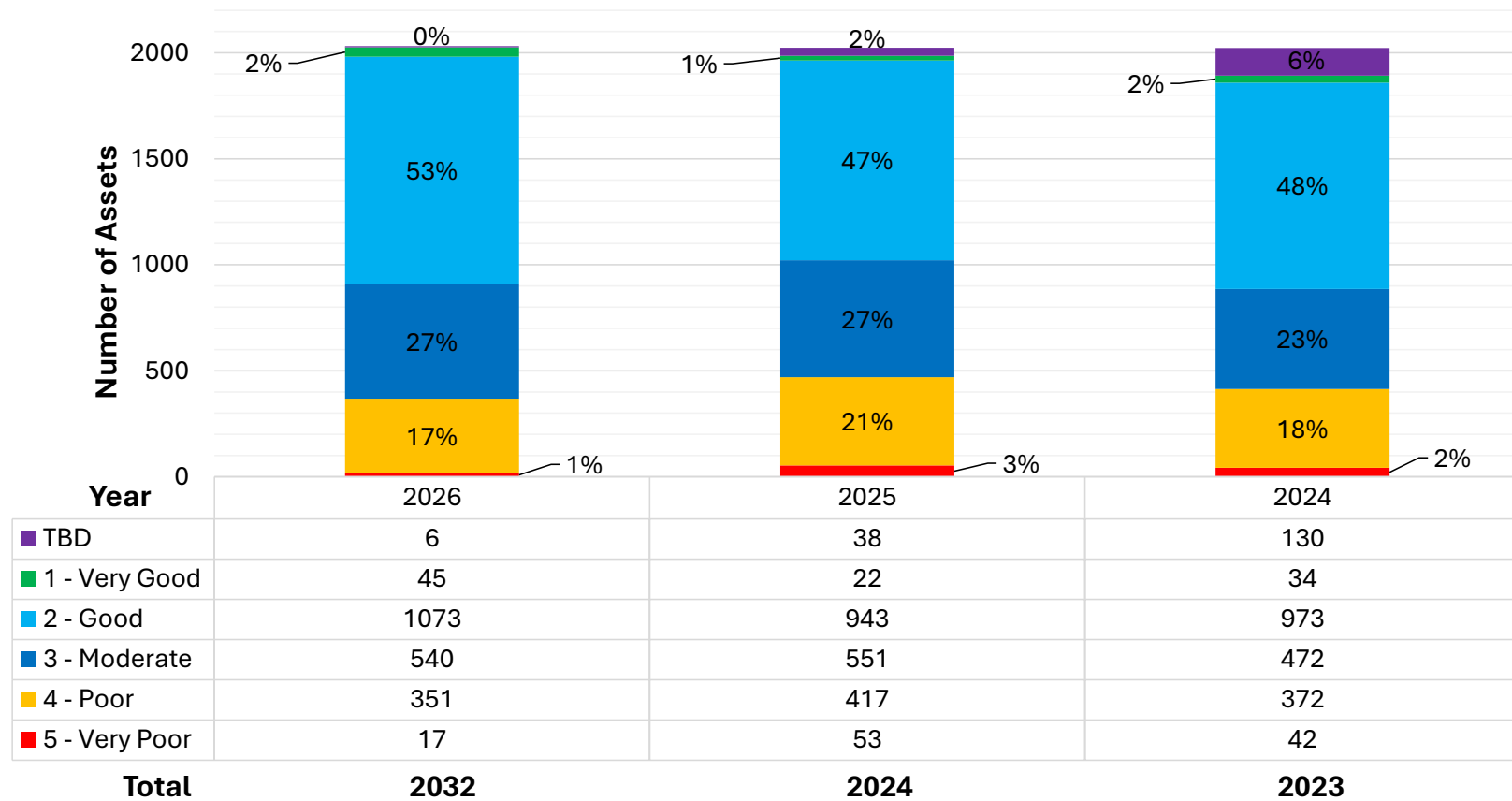
Ruamāhanga River Schemes - 2026 Condition by Asset Type

Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Barrage Gate	0	6	0	0	0	0	6
Blockline	0	1	0	0	0	0	1
Building	0	1	0	0	0	0	1
Channel	10	262	191	41	0	0	504
Culvert	1	59	45	13	0	2	120
Debris arrestor	0	5	2	0	0	0	7
Debris fence	0	33	51	14	3	14	115
Demolition line	0	0	0	1	0	0	1
Diversion Cut	0	2	0	0	0	0	2
Drain/modified channel	0	1	0	0	0	0	1
Fence	1	23	7	1	0	0	32
Floodgate	0	41	40	32	3	3	119
Floodwall	0	1	0	0	0	0	1
Gate	1	3	0	0	1	0	5
Groyne	11	717	323	28	19	6	1104
Headwall/Wingwall	1	56	49	23	1	0	130
Native planting	1	8	1	1	0	0	11
Retaining wall	0	5	1	1	0	0	7
Riprap	4	34	18	8	0	0	64
Rock Mattress	0	2	0	0	0	0	2
Sign	10	14	1	0	2	0	27
Spillway	0	6	0	1	0	0	7
Stopbank	1	123	96	300	4	0	524
Weir	1	12	3	4	1	0	21
Willow	28	402	374	47	2	3	856
Total	70	1817	1202	515	36	28	3668

Ruamāhanga River Schemes – 2026 Condition by Critical Asset Type

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common issue(s) reported
Culvert	120	13	0	Invasive vegetation, blocked, moved, buried
Floodgate	119	32	3	Overgrown and buried, Corroded, Broken floodgate arms
Groyne	1104	28	19	Loss of material, rocks missing and overgrown
Headwall/ Wingwall	130	23	1	Overgrown and buried, broken and collapsing, Corroding
Retaining wall	7	1	0	Moved, Misaligned, Visible cracking, Graffiti
Riprap	64	8	0	Excessive grass or weed, Rocks missing, washed away, loose
Stopbank	524	300	4	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	2068	405	27	

Lower Ruamāhanga River Scheme - Summary Of Condition By Year



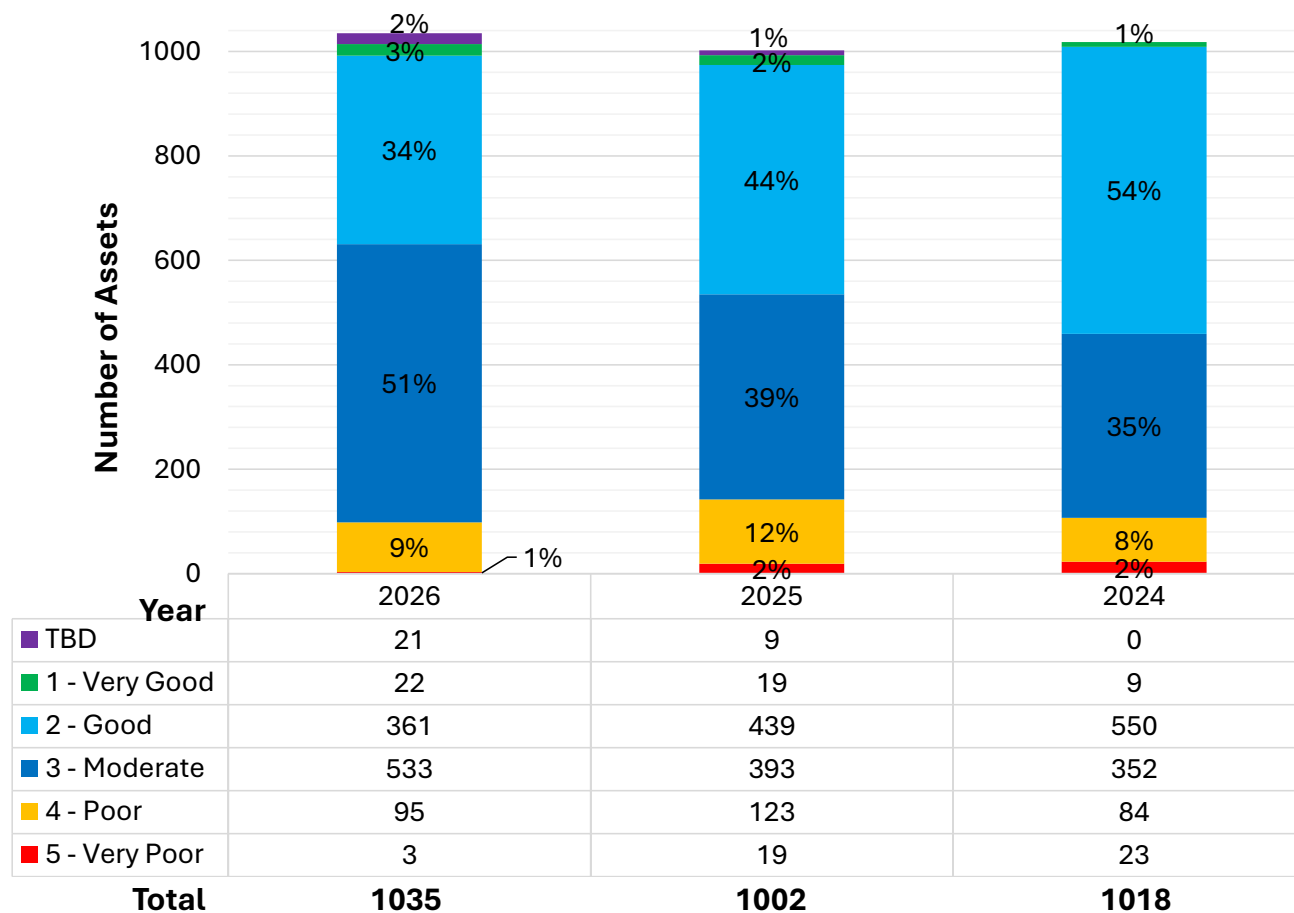
Lower Ruamāhanga River Scheme - 2026 Condition by Asset Type

Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Barrage Gate	0	6	0	0	0	0	6
Blockline	0	1	0	0	0	0	1
Building	0	1	0	0	0	0	1
Channel	10	133	97	28	0	0	268
Culvert	1	55	43	12	0	2	113
Debris arrestor	0	4	1	0	0	0	5
Debris fence	0	8	14	5	1	0	28
Demolition line	0	0	0	1	0	0	1
Diversion Cut	0	2	0	0	0	0	2
Drain/modified channel	0	1	0	0	0	0	1
Fence	1	22	7	1	0	0	31
Floodgate	0	37	38	32	2	3	112
Floodwall	0	1	0	0	0	0	1
Gate	1	2	0	0	1	0	4
Groyne	0	283	111	9	4	1	408
Headwall/Wingwall	1	52	48	23	1	0	125
Native planting	1	7	0	0	0	0	8
Retaining wall	0	5	1	0	0	0	6
Riprap	0	26	10	7	0	0	43
Rock Mattress	0	2	0	0	0	0	2
Sign	1	11	1	0	2	0	15
Spillway	0	6	0	1	0	0	7
Stopbank	0	112	67	206	4	0	389
Weir	1	12	1	0	0	0	14
Willow	28	284	101	26	2	0	441
Total	45	1073	540	351	17	6	2032

Lower Ruamāhanga River Scheme - 2026 Condition by Critical Asset Type

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common issue(s) reported
Culvert	113	12	0	Invasive vegetation, blocked, moved, buried
Floodgate	112	32	2	Overgrown and buried, Corroded, Broken floodgate arms
Groyne	418	9	4	Loss of material, rocks missing and overgrown
Headwall/ Wingwall	125	23	1	Overgrown and buried, broken and collapsing, Corroding
Riprap	43	7	0	Excessive grass or weed, Rocks missing, washed away, loose
Stopbank	389	206	4	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	1200	289	11	

Upper Ruamāhanga River Scheme - Summary Of Condition By Year



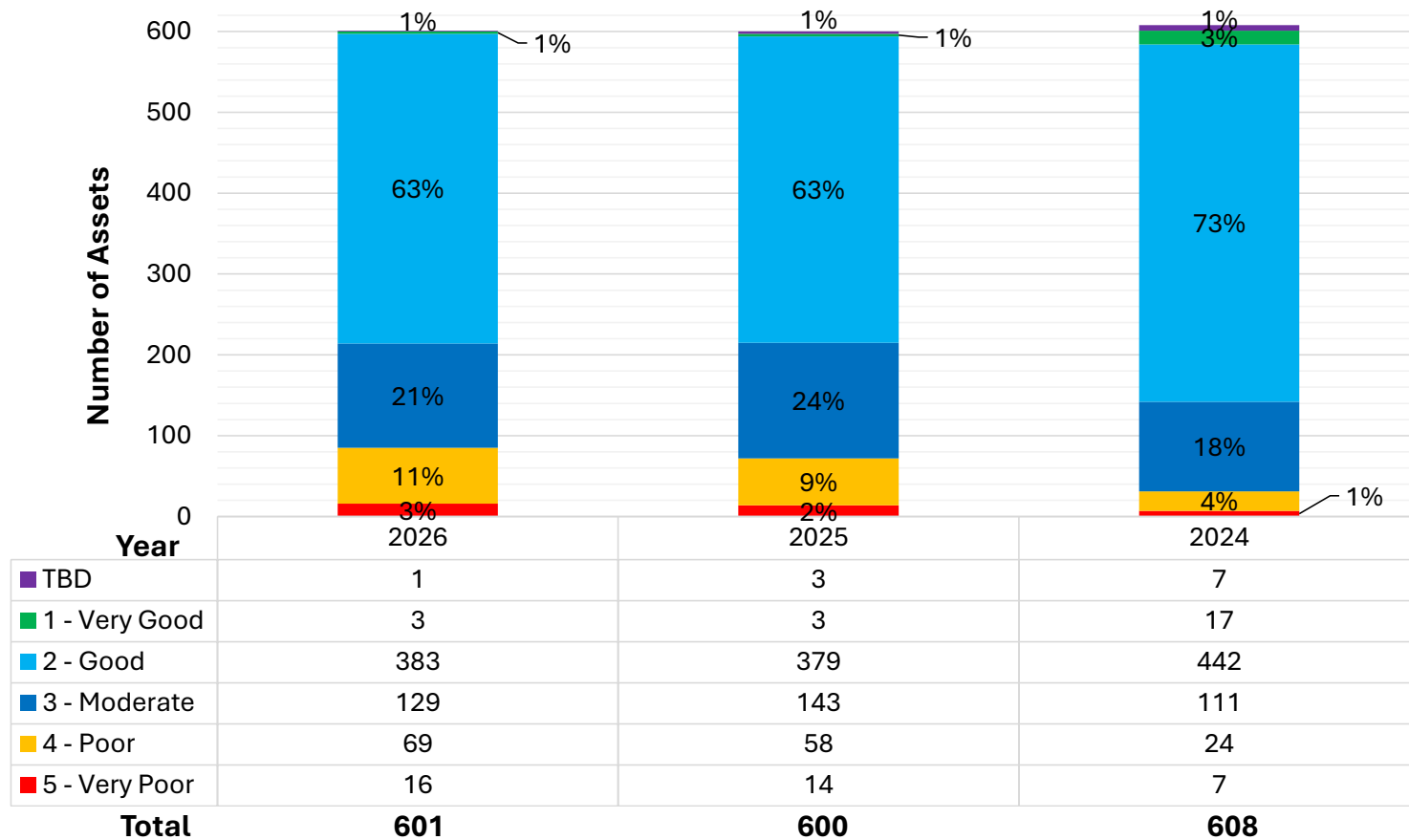
Upper Ruamāhanga River Scheme - 2026 Condition by Asset Type

Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Channel	0	81	82	12	0	0	175
Culvert	0	3	2	0	0	0	5
Debris arrestor	0	0	1	0	0	0	1
Debris fence	0	16	37	9	2	14	78
Floodgate	0	3	2	0	0	0	5
Groyne	11	123	182	8	0	4	328
Headwall/Wingwall	0	3	1	0	0	0	4
Native planting	0	1	1	0	0	0	2
Retaining wall	0	0	0	1	0	0	1
Riprap	2	5	6	1	0	0	14
Sign	9	3	0	0	0	0	12
Stopbank	0	8	17	47	0	0	72
Weir	0	0	2	4	1	0	7
Willow	0	115	200	13	0	3	331
Total	22	361	533	95	3	21	1035

Upper Ruamāhanga River Scheme – 2026 Condition by Critical Asset Type

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common issue(s) reported
Groyne	328	8	0	Loss of material, rocks missing and overgrown
Retaining wall	1	1	0	Moved, Misaligned, Visible cracking, Graffiti
Riprap	14	1	0	Excessive grass or weed, Rocks missing, washed away, loose
Stopbank	72	47	0	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	415	57	0	

Waiōhine River Scheme - Summary Of Condition By Year



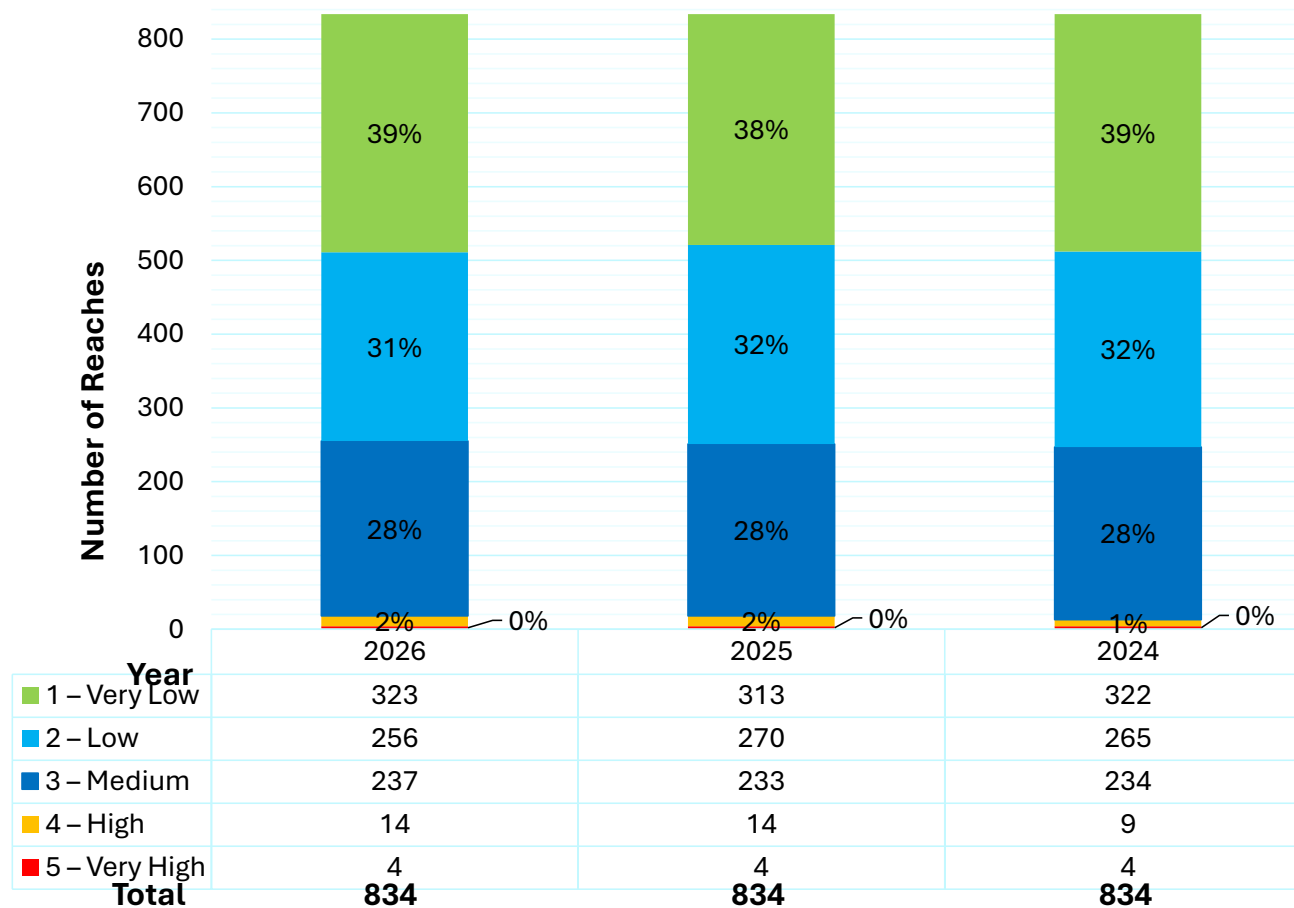
Waiōhine River Scheme - 2026 Condition by Asset Type

Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	TBD	Total
Channel	0	48	12	1	0	0	61
Culvert	0	1	0	1	0	0	2
Debris arrestor	0	1	0	0	0	0	1
Debris fence	0	9	0	0	0	0	9
Fence	0	1	0	0	0	0	1
Floodgate	0	1	0	0	1	0	2
Gate	0	1	0	0	0	0	1
Groyne	0	311	30	11	15	1	368
Headwall/Wingwall	0	1	0	0	0	0	1
Native planting	0	0	0	1	0	0	1
Riprap	2	3	2		0	0	7
Stopbank	1	3	12	47	0	0	63
Willow	0	3	73	8	0	0	84
Total	3	383	129	69	16	1	601

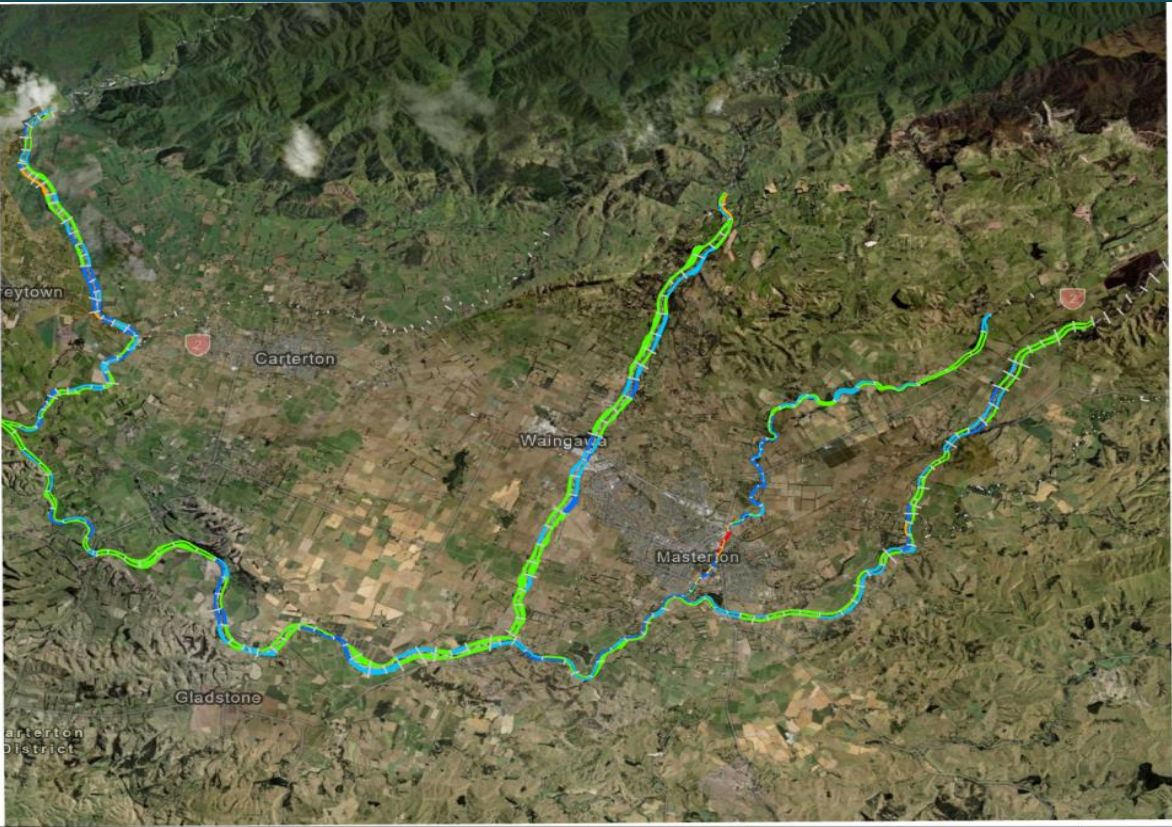
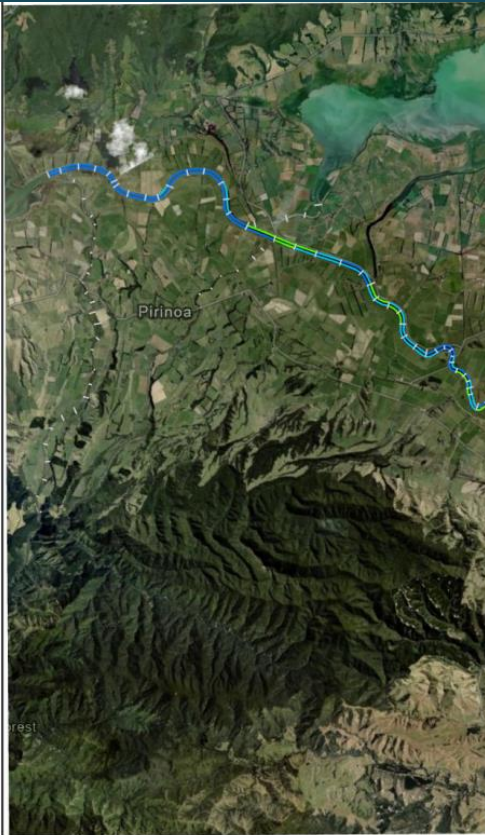
Waiōhine River Scheme – 2026 Condition by Critical Asset Type

Asset Type	Total Number	4 - Poor	5 - Very Poor	Common Issue(s) Reported
Culvert	2	1	0	Invasive vegetation, blocked, moved, buried
Floodgate	2	0	1	Overgrown and buried, Corroded, Broken floodgate arms
Groyne	368	11	15	Loss of material, rocks missing and overgrown
Stopbank	63	47	0	Invasive weeds, trees, Scouring, Erosion, Stock Damage
Total	435	59	16	

Ruamāhanga River Schemes – 2026 Asset Performance and Risk



Ruamāhanga River Schemes – 2026 Asset Risk Maps



2026 Asset Performance Risk
Lower Wairarapa



2026 Asset Performance Risk Assessment & Poor Assets
Upper Wairarapa

Legend	CrossSections (328)	Very Low (210)	Project Name:	APT_2026_Master
		Low (116)	Author:	TurnerL
		Medium (84)	Date of Issue:	17/07/2026 9:45 am
		High (14)	Scale at A4:	1:160,000
		Very High (4)		

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Path: X:\CM-FloodProtection-Wgtn\GIS\AssetManagement\Projects\APT\2026 APT\APT_2026_Master.aprx

Ruamāhanga River Schemes – 2026 Risk Mitigation

Waiōhine River Scheme Flood Asset High & Very High Risks and Their Remediation

2026

2026

Scheme	Location, XS, Bank	Scheme	Location, XS, Bank	Scheme	Location, XS, Bank	Waiōhine River Scheme										
Te Kāuru, Waipoua	Urban Reach, 3 - 4 Right Bank, 5 - 6 Right Bank, 7 - 10 Both Bank, 11 - 12 Right Bank	Te Kāuru, Waingawa	MDC water supply pipeline, 29-31, Left bank	Waiōhine	Fuller bend, 221, Right bank	Scheme	Location, XS, Bank	Failure Mode(s)	Description	Capacity ¹	Intrinsic Strength ²	Condition of Assets ³	Probability of Failure	Consequence of Failure	Risk	Remediation 2026
		Te Kāuru, Mount Bruce	Rathkeale College, 257, Right bank			Consequence; Capacity; Condition	During 1% AEP event water spills out river towards Greytown. Some assets within XS have condition issues	2	2 & 3	2 & 3	3	4		This will be addressed through the Waiōhine River Plan. Proposed project of constructing stopbanks to remediate this issue is currently being assessed. Operations Work Program - Stopbanks rated poor due to excessive grass and scrub on stopbank, maintenance works have been programmed into 26/27 work programme.		

¹ The Capacity is therefore be low

² The Intrinsic Strength foundation soft

³ The Condition and may therefore

¹ The Capacity is therefore be low
² The Intrinsic Strength is soft
³ The Condition and may therefore

XS – Cross Section

XS – Cross Section

XS – Cross Section/s

D/S – Downstream

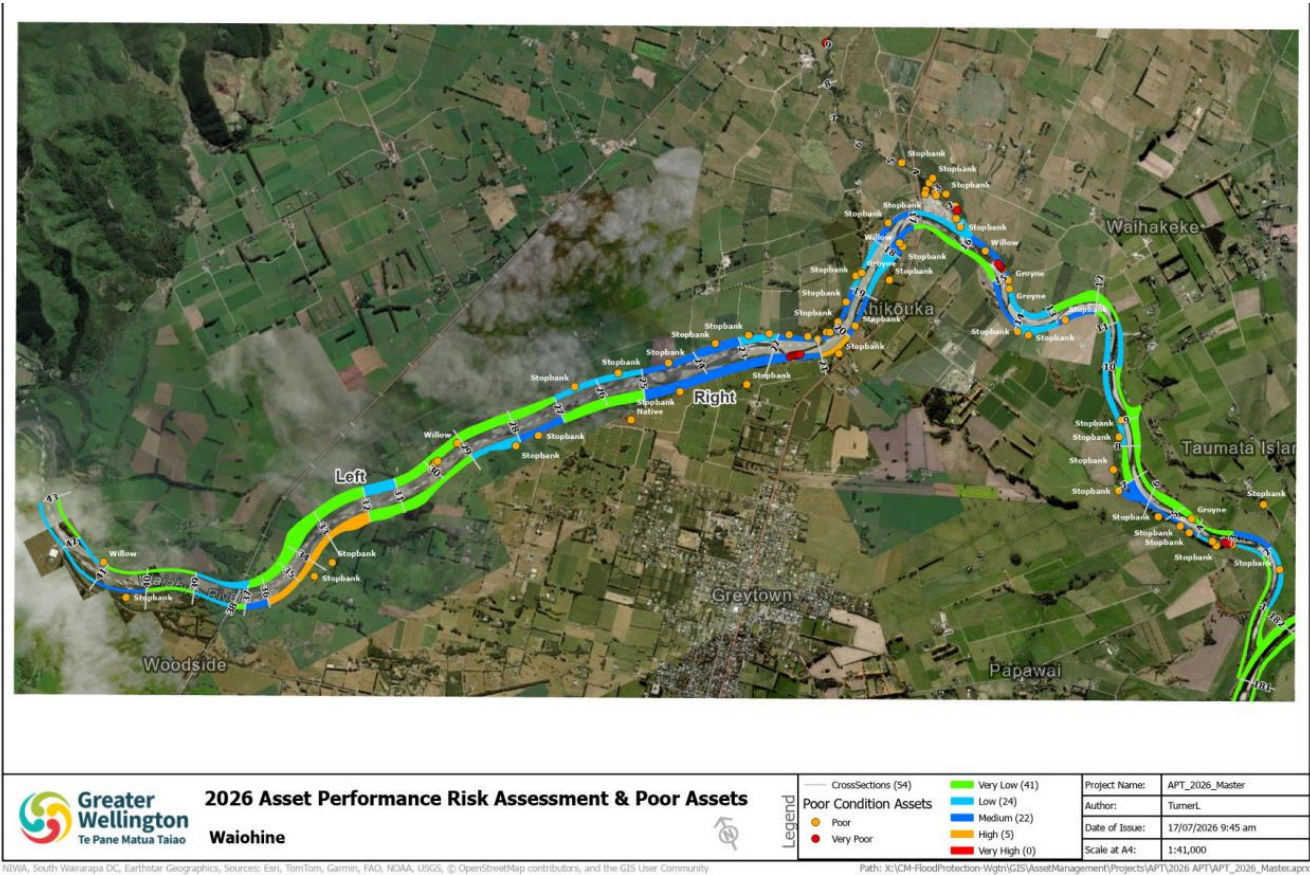
AEP – Annual Exceedance Probability

XS – Cross Section/s

D/S – Downstream

AEP – Annual Exceedance Probability

Risk Maps Overlayed With Poor Condition Assets 2026



Proposed Work Programme 2026

Waiōhine River Scheme				
Location	Cross Section	Work Required	Segment Risk	Condition of Assets ¹
Waiōhine River	SR 2	Willow Pole Planting	Low	4
	SL 2	Floodgate repairs	Medium	4
	SL 3	Willow Pole Planting	Very Low	3
	Various	Rock Groyne Maintenance - Restack eleven Condition 4 Groynes & five Condition 5 groynes	Various	4
	SL 15	Willow Pole Planting	Medium	5
		Rock Groyne Maintenance		
	SL 17	Willow Pole Planting	Medium	3
	SR 20	Stopbank maintenance, Willow Pole Planting	High	3
	SR 21	Stopbank maintenance, Willow Pole Planting	Medium	4
	SR 22	Native Planting Maintenance	Medium	3
	Various	Stopbank Maintenance	Various	Various
	Various	Stopbank Mulching	Various	Various

Recommendations

- That The Committee:
 1. **Notes** that the Ruamāhanga River Schemes flood protection and erosion control asset portfolio continues to perform well, with the majority of assets remaining in Very Good to Moderate condition and overall flood risk remaining stable.
 2. **Notes** that the return to a full asset inspection programme in 2026 has provided a more comprehensive understanding of asset condition and greater confidence in the assessment of network performance.
 3. **Agrees** that flood protection and erosion control assets within the Ruamāhanga River Schemes have been managed to the agreed Levels of Service during 2025/26.
 4. **Notes** that identified priority issues are being addressed through operational maintenance programmes, capital improvement works and longer-term asset management and infrastructure planning.

Environment & Climate Committee
20 August 2026
Report 26.303



For Decision

REVIEW OF FLOOD PROTECTION IN SOUTH WAIRARAPA (Lower Wairarapa Valley Development Scheme and Wairarapa Coast Catchment Schemes)

Te take mō te pūrongo

Purpose

1. To advise the Committee on the long-term partnership approach being taken to improve flood risk management services in South Wairarapa, and to outline the immediate recovery actions and business-as-usual changes implemented collaboratively with South Wairarapa District Council, mana whenua, and the community following a series of significant rainfall events.

Whakarāpopototanga Matua

Executive Summary

2. A combination of aging public infrastructure (flood scheme design, roads, bridges) and extreme weather events is putting communities at increased risk from flooding in South Wairarapa. A series of rainfall events above the 1% Annual Exceedance Probability occurred in the eastern hills between February and June 2026, twice cutting off Lake Ferry and coastal communities by damaging bridges and roads. Significant landslips and erosion have impacted coastal communities to a level that is being compared to Cyclone Gabrielle.
3. Existing work programmes are being adapted to respond to the severe weather events. A wide range of services have been provided including gravel and willow clearance, bank stabilisation and channel realignment, support for South Wairarapa District Council's asset repairs, resource management advice and community engagement.
4. These events have placed acute emphasis on our longer-term planning for flood protection in South Wairarapa. Efforts to review the Lower Wairarapa Valley Development Scheme (set as a 2021 resource consent condition; approved in the 2021 and 2024 LTPs) and to review and update the Awhea/Opouawe Catchment scheme have taken on greater urgency and importance. Many communities outside of scheme areas are also asking what services they can access.

He tūtohu

Recommendations

That the Committee:

- 1 **Agrees** the flood recovery actions Greater Wellington has undertaken in South Wairarapa including urgent reprioritisation of work programmes, meetings with

landowners, mana whenua and territorial authority staff, consideration of drawdown from reserves, and other actions to support works in response to extreme rainfall events have been appropriate, robust and effective.

- 2 **Notes** Greater Wellington will work with South Wairarapa District Council and local communities to conduct a review of the Awhea–Ōpouawe Catchment Scheme in order to recommend changes to Council during 2027. This will be part of the wider review of all Wairarapa Coast Catchment schemes.
- 3 **Notes** Greater Wellington will work with the Wairarapa Moana Statutory Board to establish options for oversight and governance of the review of the Lower Wairarapa Valley Development Scheme, alongside ongoing discussions with mana whenua and the wider community.

Te tāhū kōrero

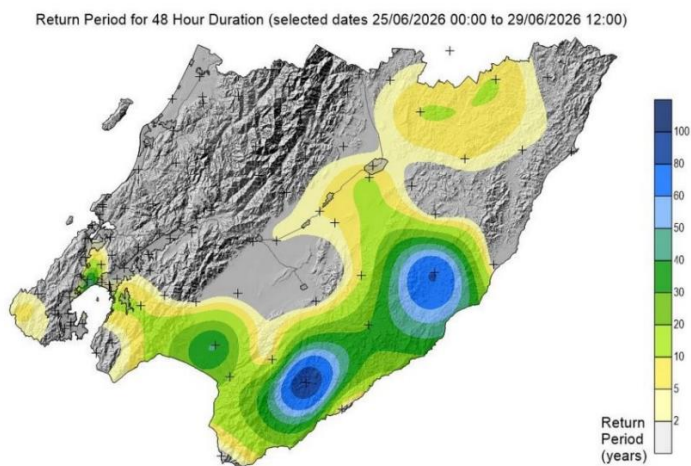
Background

Recent major weather events and flooding

5. Significant storm events have occurred in the Wairarapa in February, April and June in 2026. Widespread flooding has occurred across the whole region including Masterton and Carterton Districts but has been more intense in the south of the Wairarapa impacting most communities and rural areas.
6. In February this year, South Wairarapa experienced a significant flood event that saw impacts heavily concentrated around the Tūranganui and Tauanui Rivers near Pirinoa. This included the road approach to a key bridge being washed out by the Tūranganui River, cutting off access to Lake Ferry and communities around the coast. Measurements in the headwaters put this rainfall event for the Tūranganui catchment and the Awhea/Opouawe catchment at a 1% AEP (100-year event), with more than 400mm falling in 24 hours. The Tauanui catchment received 150mm and experienced a 1 in 60-year event.
7. In late April the area was hit again by another severe weather event. This event was not concentrated to a single catchment and occurred across South Wairarapa. The Huangarua River to the east of Martinborough experienced a 1 in 25-year flow event. During this time the Lower Ruamahanga Valley floodways were operating and performed as expected; however, the resulting road closures caused significant disruption.
8. The June-July 2026 severe weather event had widespread impacts across Wairarapa, with the most significant damage concentrated again in South Wairarapa. The event caused rapid rises in rivers and streams, extensive surface flooding, widespread slipping and erosion, significant roading damage, and power outages across the region.
9. This event included another wash out of the bridge at Lake Ferry Road. This event saw more than 400mm of rain in the headwaters of the Tūranganui, putting the estimation at greater than a 1% AEP (100-year event) again. It looks like more rain fell in the June event than in either the February or April events. Damage through landslips and flooding has been extensive. Some of the damage on the Wairarapa

Coast is being compared with Cyclone Gabrielle with loss of livestock, roads and other infrastructure.

10. The Stoney Creek rain gauge recorded the highest rainfall over this period, at more than 400 mm across four days. The Te Wharau (Flat Point) rain gauge was similarly high with over 200 mm across four days. Based on the average rainfall record for this site, this was assessed as approximately a 1-in-100-year event at both sites.
11. This series of weather events has severely impacted all of the Awheia/Opouawe Catchment on the Wairarapa Coast, around to Cape Palliser, through to lower east North Island coastal communities (Ngawi, Whangaimoana) and up to Lake Ferry into Pirinoa and the Tauanui and Tūrangānuī catchments.



Background to Wairarapa Coast Catchment Schemes

12. Awheia-Ōpouawe is one of six catchment schemes on the Wairarapa Coast, managed by Greater Wellington alongside local landowners and the relevant district council, in this case South Wairarapa District Council. Established in 1958, the scheme supports the long-term health and resilience of the Awheia, Ōpouawe and Ōterei catchments through integrated soil conservation and sustainable land management. While the scheme's broader outcomes include environmental, social, financial and community wellbeing benefits, current budget constraints mean its practical focus is primarily on protecting infrastructure, including roads and bridges, from flood damage.
13. All Wairarapa Coast Schemes are being reviewed in 26/27 to ensure they are fit for purpose as all were developed in the 1950s-80s. There have been requests from the scheme committees to widen the scope of the schemes to be more holistic and include activities such as pest control for wider catchment outcomes.

The Lower Wairarapa Valley Development Scheme

14. The Lower Wairarapa Valley Development Scheme is an ongoing intervention in the hydrology of Wairarapa Moana in South Wairarapa that stretches back more than 100 years.
15. One aspect of this historical background from a Māori perspective is contained in the historical account from the Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua Treaty Settlement:

“In 1888, the Crown disregarded Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua property rights and rights under te Tiriti o Waitangi when it supported those cutting a channel to Lake Ōnoke, partially draining Wairarapa Moana. To protect Wairarapa Moana and the lakes’ bountiful resources as well as to end decades of dispute over control of lake levels and the outlet at Onoke, Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua made a tuku rangatira (chiefly gift) of their lakes to the Crown in 1896.”
16. Two online videos are a good way to get a sense of the scheme, why it exists and community values. These videos include interviews with mana whenua and other local people, and historical footage:
17. The Battle of the Lakes Video produced in 2023 under the Lakes380 programme as part of the Wairarapa Moana pūrākau kete:

<https://www.youtube.com/watch?v=SkGMNJusZlw>
18. Threatened Valley Video produced for the Wairarapa catchment board in 1970, documenting installation of the scheme:

<https://www.youtube.com/watch?v=szvsY3Lou-Y>
19. Further background to the scheme can be found in “Report for Information to Council Lake Wairarapa Control Structure”, and Council Report 25.450 “REVIEW OF LOWER WAIRARAPA VALLEY DEVELOPMENT SCHEME”, which was presented in September 2025 to Council’s Environment Committee. These papers are included as [Attachments 1](#) and [2](#).

Review of the Development Scheme

20. A review of the development scheme is funded through the LTP. Conditions of Greater Wellington’s current resource consents to operate the scheme stipulate a broad scope of this review:

“a comprehensive catchment wide review of the Lower Wairarapa Valley catchment to understand the level of effects the Lower Valley Development Scheme is having on the environment. This review shall include but not be limited to:

 - i. Review the level of flood protection provided through the Lower Wairarapa Valley Development Scheme in light of climate change.*
 - ii. Review the current maintenance and operation regime of all elements of the Lower Wairarapa Valley Development Scheme.*
 - iii. Understand and monitor the level of effect the operation of the Lower Wairarapa Valley Development Scheme is having on the surrounding environment.*

- iv. *Provide options and recommendations for changes to the management of the Lower Wairarapa Valley Development Scheme to improve environmental and cultural outcomes.”*

- 21. The need for a review is underscored by the scheme’s age, our changing climate, and impacts on community values for the environment.
- 22. Treaty settlements have created a clear governance role for mana whenua through *Te Rohe o Rongokako Joint Redress Act 2022* and have led to significant lands, including Lake Wairarapa which is integral to the scheme, being returned to iwi.

The Wairarapa Moana Statutory Board

- 23. *Te Rohe o Rongokako Joint Redress Act 2022* gives effect to shared cultural redress between Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua and Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua as contained within their respective deeds of settlement with the Crown.
- 24. It established the Wairarapa Moana Statutory Board, a co-governance partnership between mana whenua and the Crown. Appointing agencies to the Board include the Wairarapa iwi settlement trusts, Department of Conservation, Greater Wellington and South Wairarapa District Council. The Board is to act as a guardian of Wairarapa Moana and the Ruamāhanga River catchment, for the benefit of present and future generations.
- 25. In December 2024 the Wairarapa Moana Statutory Board’s interim position statement reaffirmed the centrality of the 1896 Tuku Rangatira as the first of its guiding principles:

“Te Tuku Rangatira. Wairarapa Moana was gifted to the Crown by iwi in 1896. It was formally gifted back by the Crown to iwi in 2024. The parties made these gifts to reflect their commitment to an enduring relationship based on the best interests of Wairarapa Moana and the Ruamāhanga River catchment. It is important to honour this commitment and engage in the utmost good faith to recognise the intentions of the parties in making the tuku.”
- 26. The Wairarapa Moana Statutory Board’s interim position statement is provided in full as Attachment 3.

Te tātaritanga Analysis

- 27. Erosion and flooding are to be expected in major events such as those in February, April and June/July. The level of service being provided by funded schemes is being reviewed; however, these events almost certainly exceed the design level. Flooded paddocks and damage to infrastructure should not be seen as a failure of scheme maintenance or operations if the event is above the level of flood protection being provided by design.
- 28. There is understandable concern and frustration from all parts of the community, regardless of appreciation of the design level. This has prompted conversations about where, and how, flood protection services are being provided. Who pays,

what management techniques are used, and the future sustainability of historical practice are all under scrutiny.

29. Farming is occurring in areas that previously were riverbed in many places such as in the Tūrangānui (images below comparing 1944, 2017 and 2025 showing the narrowing of the available corridor and how the natural sinuosity of the river is an inevitable ongoing feature). In some places, the width of riverbeds has been reduced from 200m to less than 10m.



GWRC general policy

30. In areas where Greater Wellington provides active flood protection (scheme areas) for rural communities and associated land use, stopbanks are generally constructed up to a 1 in 20-year flood standard to alleviate frequent or nuisance flood events. Note that the standard for urban areas is generally much higher (1 in 100 as a minimum) due to the nature of the risk to life and property in urban areas compared to rural areas.
31. Greater Wellington’s principles for floodplain management planning are:
 - a Avoid building in areas at high risk of flood hazard
 - b Only consider new flood protection infrastructure where existing development is at risk
 - c Establish standards of flood protection relative to the degree of risk
32. Our principles of floodplain management planning describe this in more detail; see Report 17.494 “Floodplain management planning – principles update” included as **Attachment 4**.

Impacts on areas outside of schemes

33. Many people across South Wairarapa were impacted by flooding and not every community is covered by a flood protection scheme. This means that many people, such as those at Whangaimoana who experience regular flooding, do not receive a similar level of service to those included in historical scheme boundaries.
34. Emergency response and flood advisory services are provided to all communities.

Implications of recent events for the Development Scheme

35. Significant damage and erosion in the Tūrangānui, Tauanui and Huangarua rivers has triggered a review of the current Development Scheme annual work programme (separate to the review of the overall Scheme). Officers are considering a drawdown of reserves and reprioritisation of planned maintenance.

36. The impacts of these high rainfall events have also highlighted critical missing information. This information will be generated through the Scheme review to support longer term planning. The information we need to gather includes accurate understanding of the current levels of service, the nature of specific flood hazard around critical infrastructure, and the key values the community wish to prioritise.
37. Concerns of farmers in relation to our business-as-usual maintenance have come to the fore. Critical topics raised by farmers in our most recent engagement include:
38. **Gravel extraction.** We are currently working with farmers and with South Wairarapa District Council to find economical and practical ways to extract and stockpile gravel from aggrading rivers (where gravel is building up) for use as roading base where this makes sense to do. Not all parts of the river system are aggrading and in some areas riverbeds are dropping. Removing gravel can undermine riverbanks and move problems from one part of the system to another. A planned and tactical approach is needed.
39. **Willow maintenance.** Ongoing trimming and cutback of mature willows is part of business-as-usual maintenance to help avoid blockages and confinement of rivers. Willow maintenance will be part of reprioritisation of the annual work programme. However, the historical and geographical extent of willow planting across the entire Ruamāhanga river system presents a major ongoing challenge.
 - a **Shaping of rivers by bulldozer.** Historical management practices utilised bulldozers to create a dish-like channel. This was achieved by driving up and down the river and pushing gravel to both sides. This is no longer a regular management practice in these particular rivers due to the environmental impact and the preference for more accurate and targeted gravel extraction and redistribution; however, bulldozers may still be used when required in essential wet gravel extraction and localised bed recontouring. As noted above, more gravel extraction could be occurring in these aggrading rivers where the practical economics can be determined.

Immediate and planned recovery works

40. Greater Wellington has undertaken a range of emergency works in the immediate aftermath of each rain event. This has included works to reverse changes where rivers have altered course, remediation and repair of stopbanks, and support for protection of key assets such as bridges and roads.
41. Reprioritisation of work programmes has also occurred in order to respond to these events in the medium term. Officers have conducted site visits, flown aerial survey by drone, and developed a new schedule of work for the Tūrangānui, Tauanui and Huangarua rivers. Not all of this work is occurring as fast as people would like. Some works need to wait until the dry season, and in other cases decisions have to be made about relative priority given the available resource.
42. In all cases Greater Wellington is keeping in touch with the relevant Council advisory group, catchment groups, and individual landowners. We are also sending regular updates to iwi partners, mana whenua groups and Councillors.

Challenges of maintaining levels of service

43. The impacts of recent flooding, and the concerns of farmers in the Tūranganui, speak to wider challenges associated with river management in the lower Wairarapa Valley.
44. We believe that the Lower Wairarapa Valley Development Scheme was built to provide protection for a 1-in-50 year event. This was based on the climate data of the 1960s-70s. Our review will help resolve the actual current level of service and identify what this means in the present day. Regardless, this standard will not prevent frequent nuisance flooding when climate change is making these events even more common.
45. Land in the lower Wairarapa Valley is gradually sinking due to tectonic subsidence but also drainage. This, coupled with increasing storm surges and sea level rise, has already begun to change the nature of ecosystems and farm viability due to groundwater levels and salinity. The land drainage aspects of the scheme are especially vulnerable to this.
46. Environmental values, modern work practices, and increased community scrutiny on works in rivers have all contributed to increased resource intensiveness of maintenance and scheme operations. As noted above, it is no longer practical to use historical practices that maintained rivers primarily as drains.
47. Ultimately, an agreement is needed on the appropriate tools and levels of service for each part of the scheme. This agreement will need to take the changing environment, the age of the infrastructure, and modern community values into account.

How the LWVDS scheme review will help

48. The review of the scheme is our mechanism for developing options and supporting decisions on how flood risk is managed (through river management activities, non-structural measure such as planning controls and emergency management measures). Levels of service, preferred management practise and priorities for protection in the lower Wairarapa valley can be developed and agreed.
49. There is no current strategic document or agreement guiding our work in the lower Wairarapa Valley; instead our recent management choices have been guided by historical practice and informed by asset condition and landowner expectations. Levels of service are not defined and we don't have agreed management practices or maps showing where river corridor is to be respected and where erosion control will be implemented.
50. Greater Wellington's management approach is to develop a strategic document that will contain the elements of a Floodplain Management Plan (and may include other elements as well). Existing Floodplain Management Plans for the upper Ruamāhanga Catchment and the Waiōhine have been adopted by Council and help to guide our work based on agreed levels of service and management practices in those locations.

Implications of recent events and response for the Awhea/Opouawe scheme

51. A key community-identified pinch point is the section of White Rock Road near the former Tukurumuri School. This stretch of road frequently floods during heavy rainfall and can cut off residents because it is the only access route into the area. Developing a long-term solution is complex because the road sits within a landscape of wetlands and floodplain systems, existing infrastructure, challenging topography, and ongoing erosion. Greater Wellington and South Wairarapa District Council are therefore working together to assess options that could improve the reliability and resilience of this area.
52. To support this work, Stantec has been commissioned to undertake a feasibility assessment of the flood-prone section of White Rock Road between the Stoney Creek and Awhea River bridges. The assessment will consider hydrology, geotechnical conditions, roading and drainage requirements, ecology, consenting considerations, cultural values, and stakeholder perspectives. It will evaluate up to three feasible resilience options and provide concept designs, high-level cost estimates, and an assessment of risks, constraints and consenting requirements to inform future investment and decision-making.
53. Greater Wellington has assessed and scoped the repair required for the stopbank on the Awhea River.
54. Greater Wellington is investigating options to return Stoney Creek to its main channel. Gravel removal options are also being explored with South Wairarapa District Council, particularly where gravel build-up is contributing to out-of-channel flow or infrastructure risk. This will include a longer-term management plan for Stoney Creek to guide future works, reduce repeat issues and clarify responsibilities.
55. Greater Wellington is holding a community discussion day and catchment scheme meeting in September, which will include the scheme review and the wider recovery work.

Ngā hua ahumoni

Financial implications

56. The budget for the Lower Wairarapa Valley Development Scheme review is allocated under the Wairarapa Loan Investigations in the current LTP. As a major project, the business case and associated budget for the review is going through internal management processes to determine its adequacy against scope as it is finalised.
57. The remaining 2024-34 Long Term Plan budget allocated for the whole of Wairarapa Investigations is currently \$6.4 million over 10 years.
58. The outcome of the multi-year Scheme review is likely to include options and recommendations for future investment. For example, this could include new capital works to amend components of the scheme, or changes to operational management approaches. These financial implications are currently unknown.

Lower Wairarapa Valley Development Scheme

59. The value of Greater Wellington assets in the Lower Wairarapa Valley Development Scheme is approximately \$311m (June 2024 Asset Revaluation). The annual operational budget for maintenance of the scheme in the 26/27 year is \$1.6m. Insurance, power, rates and other costs of the scheme in the 26/27 year is an additional \$500k.
60. Greater Wellington is planning its 26/27 programmes for these two of the sites in Ruamāhanga flood resilience capital programme:
 - a Awaroa Sill (site 6): Most of the sill has been built to design level, but completion was delayed by weather events in February, April, and June 2026. Remaining works are planned for spring/summer after sustained dry weather. Expenditure in 2025/26 was approximately \$750,000.
 - b Tawaha Sill (site 10): Consenting, design and scope confirmation for the Tawaha Floodway site upstream of SH53 are ongoing. Expenditure in 2025/26 was approximately \$430,000.

Awhea/Opouawe Catchment Scheme

61. The annual operational budget for maintenance and operation for the Awhea/Opouawe Catchment Scheme is \$80,450 for 26/27. This includes Greater Wellington's regional contribution and the South Wairarapa District Council contribution.
62. This pays for asset repair, emergency works, new asset builds, planting, channel clearing, reconnaissance and administration.

**Ngā Take e hāngai ana te iwi Māori
Implications for Māori**

Ongoing operation and review of the Lower Wairarapa Valley Development Scheme

63. As discussed above, this work is of critical significance to Māori.
64. Wairarapa Moana is Ngā Taonga Nui a Kiwa, acknowledged as “a jewel in the lives of the people of Wairarapa.” It is where mana whenua source their cultural, spiritual and physical sustenance.
65. Negative impacts on this taonga affect the inherent values of the landscape and ecosystem, and the life-sustaining relationship to te ao Māori.
66. Te Rohe o Rongokako Joint Redress Act 2022 gives effect to the respective deeds of settlement with the Crown and Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua and Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua through the co-governance structure of the Wairarapa Moana Statutory Board. This provides clear and defined statutory considerations.
67. Returning tino rangatiratanga and kaitiakitanga back to mana whenua honours the intent of 1896 Tuku Rangatira for Wairarapa Moana and the Ruamāhanga River catchment is crucial to restoring the mana and the mauri of Wairarapa Moana and the Ruamāhanga River catchment.

68. The renaissance of mana whenua is bringing about a determination and understanding towards tino rangatiratanga, mana motuhake, and how those rights and interests are best represented into the future.
69. Greater Wellington continues to progress our commitment and obligation towards our Te Tiriti partners as an integral part of how we support equitable outcomes for Māori and deliver better outcomes for the region.

**Te hiranga
Significance**

70. Officers considered the significance (as defined by Part 6 of the Local Government Act 2002) of these matters, taking into account Council's Significance and Engagement Policy and Greater Wellington's decision-making guidelines. Officers recommend that these matters are of low significance for the purposes of the Act, as they relate to Greater Wellington's core work and the delivery of business-as-usual functions.

**Te whakatūtakitaki
Engagement**

71. Ongoing engagement on these matters will be carried out through numerous channels and forums including those described below:

Collaboration with South Wairarapa District Council

72. Officers from both councils have been meeting regularly for more than six months on a coordinated approach to road and bridge resilience planning and remediation. Greater Wellington is contributing technical expertise and on-the-ground collaboration for work near rivers.
73. In the immediate recovery from the recent flooding events this collaboration has gone up a gear to include joint-problem solving and coordinated engagement with the wider community.
74. This engagement has led to a number of innovations including:
 - a A shared prioritisation of where work is needed to shore up road and bridge infrastructure.
 - b Agreement to trial stockpiles of river gravel where this can support flood protection outcomes and also reduce costs for road maintenance.

Lower Ruamāhanga Advisory Group

75. For work programming, budget and prioritisation decisions under the Lower Wairarapa Valley Development Scheme we continue to work with the relevant Council Advisory Body.
76. The Lower Ruamāhanga Advisory Group has met twice this calendar year to provide feedback to council officers around our flood and erosion activities in the Lower Valley.
77. The first meeting was held on the 11 May where they were asked to provide feedback on the asset condition rating for assets in the Lower Valley.

78. The second meeting was held on the 20 July where they received an update on the previous year's work and discussed the proposal for the 26/27 annual work programme for flood and erosion activities. They also discussed recent concerns from landowners following several severe weather events this year.
79. In addition to these meetings, the Chair of the Advisory Group has been providing additional support to ongoing conversations with various parties in the Lower Valley following the recent flood events. This has included conversations with concerned landowners along the Huangarua River and the Tūranganui Triage Action Group. The chair has been briefed by GW staff ahead of these conversations.

Lower Wairarapa Valley Development Scheme (LWVDS) Review

80. Engagement for the LWVDS review has been split into two phases to ensure all interested and involved parties have opportunities to participate throughout the process in a structured and meaningful way.
81. Phase One is the investigation and information-gathering phase. It includes collecting community knowledge and values, developing and refining flood hazard models, and engaging on draft and final flood hazard maps to improve understanding of flood risk and inform future decision-making.
82. Phase Two will focus on option development (optioneering). Building on the information gathered during Phase One, engagement will centre on potential future options for the Scheme, helping to shape and evaluate possible approaches for managing flood risk and delivering wider environmental, cultural, recreational, and economic outcomes.
83. Below outlines the key purposes of the four stages for Phase One Engagement.



84. Stage 1 commenced on 20 July 2026 and concluded on 9 August 2026. As the first stage of Phase One engagement, it focused on raising awareness that the LWVDS review had begun and gathering information to help build the evidence base for future decision-making. Interested and involved parties were invited to share their knowledge of historic flood events, environmental changes, and the values they associate with the Lower Wairarapa Valley. A particular focus was placed on

collecting local observations, photographs and experiences from significant flood events to support flood hazard modelling and improve understanding of how the catchment has changed over time.

85. A range of communications activities supported the engagement period. The Lower Valley review webpage and Have Your Say platform were launched, providing information about the review, frequently asked questions and opportunities for participation. Targeted communications were distributed to key involved parties to advise them of the review and encourage involvement. Broader awareness was supported through social media, local advertising, community newsletters and a flyer drop across the Lower Valley.
86. Pre-application engagement relating to resource consent renewals (Barrage Gates consent and river management activities in the wider Scheme) is being planned separately and will follow a more targeted approach. This work will run alongside the broader LWVDS review engagement programme, with activities coordinated and aligned where appropriate.
87. Given the close relationship between the LWVDS review and the resource consent renewal process, some community members may not distinguish between the two engagement streams. Greater Wellington will ensure clear, consistent and coordinated messaging so that the purpose, scope and opportunities for input are well understood.

Engagement on the review in the Tūrangānui and Tauanui Catchments

88. Due to the series of significant weather events in the Tūrangānui and Tauanui catchments, including three major rainfall events within a six-month period, Greater Wellington will accelerate engagement on the LWVDS review in this area.
89. These catchments are in the southernmost part of the scheme area. Our approach recognises the increasing flood risk, growing community expectations for action, and the need to avoid reactive or uncoordinated engagement.
90. Engagement at this stage is intended to gather information and understand local issues and perspectives specific to these rivers while flood hazard modelling is underway. As this work is not yet complete, no major decisions can be made, and no outcomes can be predetermined. However, the process may reveal some shorter-term practical solutions. Information gathered through this process will help inform future analysis, option development and decision-making.

Engagement with landowners along the Huangarua

91. Major erosion along significant stretches of riverbank have occurred in the Huangarua which flows into the Ruamāhanga near Martinborough and is within the LWVDS scheme area.
92. Officers have met with landowners and have proposed a mix of urgent works to protect a private roadway and longer term works that will occur in the dry season. This engagement is ongoing and there is frustration that works can't proceed faster.

**Te huritao ki te huringa o te āhuarangi
Consideration of climate change**

93. Climate change is a driver for, and part of the underlying context to, all of the work described in this paper.
94. The trend of more frequent intense rainfall events (leading to high river flows and stormwater flooding) will lead to an ongoing increase in associated impacts such as erosion, landslip and inundation. Appropriate planning and community preparedness is needed to minimise the risk to life and property from these impacts. Given predicted increases to storm surges and possible sea-level rise combining with higher rainfall it is coastal communities that are likely to be at the forefront of these changes.
95. Reviews into Greater Wellington's flood protection services will help to clarify and support decisions on the appropriate level of protection that should be funded and delivered. The work may also be able to contribute to climate adaptation outcomes. This will be particularly relevant where we can agree issues and priorities directly with communities including mana whenua and other agencies so that decisions reflect and respond to local needs.
96. For the Lower Wairarapa Valley Development Scheme in particular, levels of service in relation to flood protection will need to consider how ongoing active drainage and coastal stopbanks are performing now and into the future. Sea level rise combined with tectonic subsidence is likely to be changing the underlying hydrology of the lower reaches, altering the location of where freshwater and saltwater meet, and increasing the intrusion of salt into groundwater. When more fully understood these changes may alter the calculus of where future economic benefits will outweigh the costs of ongoing protection.

Ngā tūāoma e whai ake nei

Next steps

97. Reviewing our flood protection and catchment schemes will continue and further updates will be provided to Council. Engagement with the Wairarapa Moana Statutory Board, iwi and the wider community will occur in order to create the right conditions for a wide range of knowledge and perspectives to be gathered, and for future decision-making to be well informed.
98. Greater Wellington will also maintain active communication about our immediate flood recovery works. We will work with affected communities across South Wairarapa and will continue to keep councillors from both Greater Wellington and South Wairarapa District Council informed
99. We are maintaining an active register of flood recovery work across the whole of the Wairarapa (and wider region). We will be following up with various landowners, schools and other parts of the community impacted by flooding across the Wairarapa. This will involve collaborating closely with local councils and landowners in relation to stormwater flooding and flooding outside of scheme areas where Greater Wellington has limited capacity to help.

100. We will explore the benefits of expanding our collaboration on improving Wairarapa roading and bridge resilience that has been successful in the South Wairarapa District Council area so far.
101. We are trialling an approach to stockpiling gravel to support local authority roading work and will share the lessons on how the current financial model is meeting flood protection requirements.

**Ngā āpitihanga
Attachments**

Number	Title
1	Report for information to Council – Lake Wairarapa Control Structure
2	Report 25.450 - Review of Lower Wairarapa Valley Development Scheme
3	Interim Statement – Wairarapa Moana Statutory Board
4	Report 17.494 - Floodplain management planning – principles update

**Ngā kaiwaitohu
Signatories**

Writers	Pete Huggins, Catchment Manager - Ruamahanga Tash Styles, Catchment Manager – Wairarapa Coast
Approvers	Nicola Patrick – Director, Catchment Fathima Iftikar – Group Manager, Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council's roles or with Committee's terms of reference</i> This paper relates to Environment & Climate Committee's oversight role in relation to the development, implementation and delivery of regional resilience priorities for flood protection. The paper also speaks to the Committee's role regarding climate change adaptation.
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> The work described in this paper reflects Council's adopted principles of floodplain management and describes progress and next steps on the Review of the LWVDS as part of the current LTP.
<i>Internal consultation</i> This paper has been developed in consultation between Environment Group, Te Hunga Whiriwhiri and the Climate Change team in Strategy Group.
<i>Risks and impacts - legal / health and safety etc.</i> There are no specific risks and impacts related to the information in this paper. Noting that the work relates to specific flood hazard and environmental risks relating to the interaction of climate change with ageing infrastructure.

15 March 2024



For Information

Lake Wairarapa Control Structure

Te take mō te pūrongo

Purpose

This paper provides information about the Lake Wairarapa control structure (the Geoffrey Blundell Barrage Gates), to provide an understanding of:

- Its purpose – i.e. what it is regulating and the benefits/costs of that
- What Greater Wellington Planning instruments say about the control structure and the control of the Lake
- How the control structure is consented and the consent conditions, and whose name the consent is in
- When the consent comes up for renewal and the process for that
- What the Regional Plan says about the control structure or management of the local environment and how that is different from when the control structure was last consented.

Te tāhū kōrero

Background

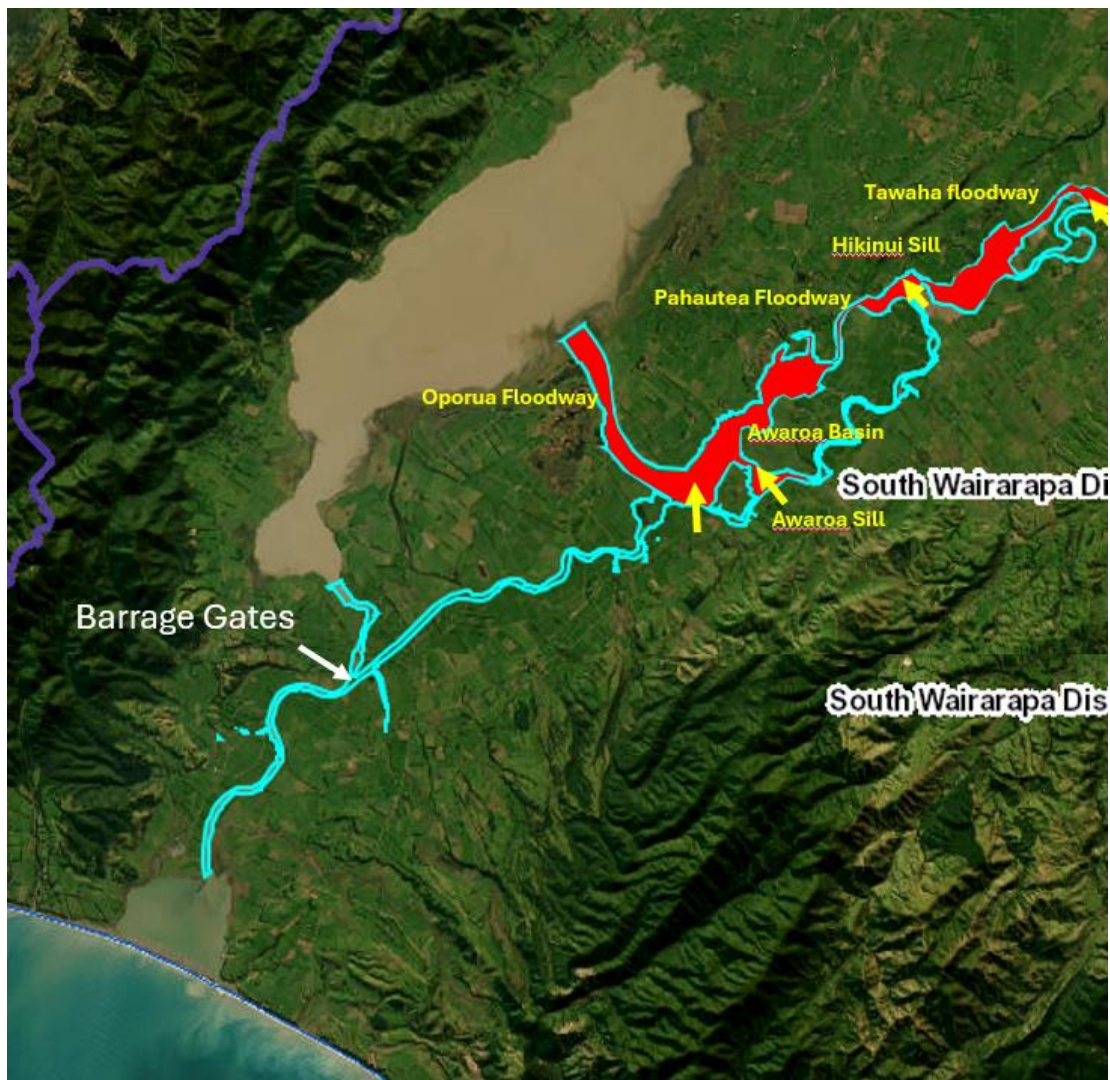
1. The Lake Wairarapa control structure is one element of an ongoing intervention in the hydrology of Wairarapa Moana which stretches back more than 100 years.
2. One aspect of this historical background from a Māori perspective is contained in the historical account from the Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua Treaty Settlement:

“In 1888, the Crown disregarded Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua property rights and rights under te Tiriti o Waitangi when it supported those cutting a channel to Lake Ōnoke, partially draining Wairarapa Moana. To protect Wairarapa Moana and the lakes’ bountiful resources as well as to end decades of dispute over control of lake levels and the outlet at Onoke, Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua made a *tuku rangatira* (chiefly gift) of their lakes to the Crown in 1896.”

3. With the lakes in Crown ownership, successive plans were considered for developing pastoral land in the lower Wairarapa Valley. This culminated in a scheme supported by the 1960s Wairarapa Catchment Board and central government to fundamentally alter the lower Ruamahānga catchment.

4. The Lower Wairarapa Valley Development Scheme (LWVDS) included the diversion of the Ruamāhanga river away from Lake Wairarapa, extensive dredging and stopbanking of the Ruamāhanga, diversion and stopbanking of other tributaries, pumped drainage, in-filling of wetlands, and installation of the control structure.
5. The control structure on Lake Wairarapa is a set of six radial barrage gates at the outlet of the lake. When opened the gates are raised up out of the water. When closed, the gates are lowered to prevent the flow of water in or out of the lake. The gates were formally commissioned on 15 March 1974 and are now owned and operated by Greater Wellington.
6. Additional developments were discussed in the 1970s and 80s. There were plans to reclaim parts of the remaining lakebed for pastoral farming through the installation of polders and further drainage. However, the Scheme ran out of government funding and local beneficiaries would have been unable to repay any extended loans.

Figure 1. Map showing position of barrage gates and floodways in relation to the lake.



Te tātaritanga Analysis

Primary purpose – flood retention

7. The primary purpose of the barrage gates is to dam water in Lake Wairarapa during flood conditions. This activity protects a large land area in the lower valley from flooding by using Lake Wairarapa as a flood detention dam.
8. During flood flows in the Ruamāhanga a series of overland floodways operate to divert water out of the Ruamāhanga, over land, and into the lake. The barrage gates dam this water for the duration of the flood. Closing the gates during a flood also prevents backflow of floodwater upstream into the lake from the lower Ruamāhanga, facilitating rapid transfer of floodwater into lake Ōnoke and out to sea.
9. When flood conditions have subsided the barrage gates are opened. Any retained flood water is released into the lower Ruamāhanga.

Benefits/costs of flood retention capacity

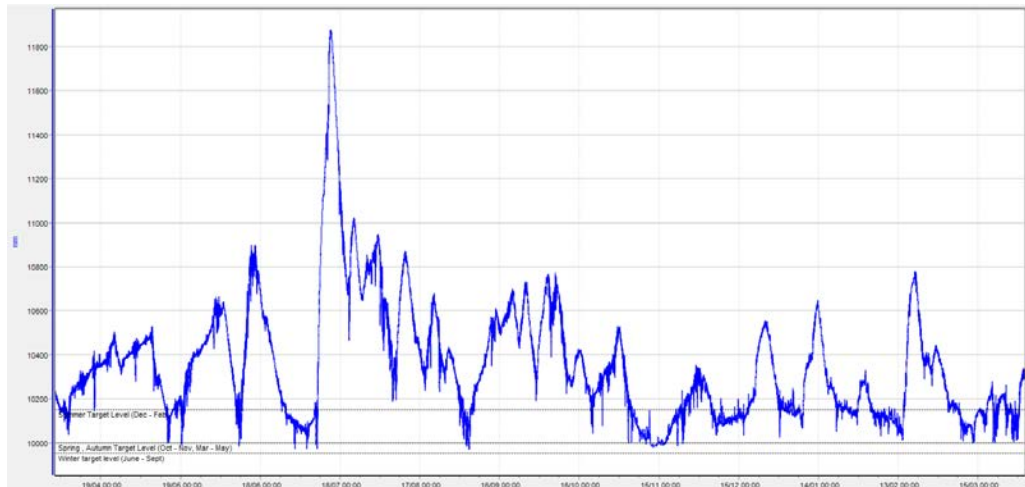
10. When considered together with overland floodways the barrage gates benefit the community by mitigating extensive flooding which otherwise would occur at peak Ruamāhanga river flows.
11. As part of the wider scheme the barrage gates impose costs on the Wairarapa Māori economy by degrading mahinga kai and limiting traditional activities. In conversation with iwi, and through submissions, we've heard the call for more holistic approaches to flood protection by working more closely with indigenous systems and knowledge.
12. Environmental connections between wetland, lake, lagoon and stream habitats in the lower valley have all been greatly reduced by the flood protection works. This development has reduced the extent and accessibility of habitat for plants and animals endemic and/or native to Wairarapa Moana.
13. The barrage gates (and wider scheme) were put in place to enable economic development of pastoral farmland which has benefitted from the security and protection from intermittent flooding that the barrage gates (and wider scheme) provide. The gates, as a critical component part of the wider engineering scheme, allow for land uses and investments that might not exist without it.

Secondary purpose - lake levels

14. A secondary purpose of the barrage gates is to control the level of Lake Wairarapa. This is the main activity of the gates outside flood conditions and when the spit is open, i.e. most of the time the gates are opened or closed to control lake levels.
15. The barrage gates are opened and closed through a manually controlled system to keep lake levels at the minimum possible level within the following regime:

Season:	Summer	Autumn	Winter	Spring
Maximum:	10.3m above datum			
Minimum:	10.15m	10m	9.95m	10m

16. To help facilitate fish passage, and during normal conditions, two of the six gates are opened for one hour at high tides between 1 September and 30 November and at low tides between 15 December and 31 March, provided certain conditions are met.
17. Recorded lake levels over the past 12 months are represented below. The 11.8m recording in July 2022 coincided with the activation of floodways as described in paragraph 8, above.



Benefits/costs of lake level purpose

18. Controlling lake levels is a delicate balance influenced by multiple values. Retaining flood retention capacity, enacting the National Water Conservation (Lake Wairarapa) Order 1989, impacts on surrounding landowners, recreational, cultural and environmental values are all affected by lake levels.
19. The gates facilitate higher lake levels, especially in summer, when river flows are low. The ability to maintain higher lake levels is seen as a key benefit of the gates.
20. Control of lake levels using the barrage gates is a cost to Māori values. When closed, the barrage gates sever the connection between the river, the lakes, and the sea, preventing natural circulation of water, and when combined with the diversion of the Ruamāhanga represent a fundamental alteration of the lake environment gifted to the Crown in 1896.
21. Mātauranga of historical lake levels includes knowledge that the lake was typically higher in summer than winter. In recent conversations with iwi representatives, and through submissions, we have heard the importance of higher lake levels during certain periods. We have also heard the view that all control of lake levels could be removed.
22. Fish passage through the barrage gates is a point of concern. The original design included provision for fish passage even when the gates were closed but the effectiveness of this design has been questioned. As noted above the gates are periodically opened to facilitate fish passage. Evaluation and monitoring of fish passage has been insufficient to draw conclusions.
23. Most environmental conditions around the lake are affected by lake levels alongside numerous other factors. For example, the extent and nature of freshwater habitat is highly connected to lake levels and their fluctuation. The volume and quality of river water entering

the lake, sediment, wave conditions, salinity and other factors all influence environmental conditions.

24. Managed lake levels benefit recreational activities around the lake such as birding and gamebird hunting. By providing predictable and controlled lake levels the barrage gates allow for consistency of access year-on-year, including protection of tracks, hides/maimais and other infrastructure.
25. Managed lake levels also provide certainty for lakeside landowners. Grazing paddocks and associated infrastructure extend close to the lake edge and are protected by the existence of consistent lake levels.

The Water Conservation Order

26. The importance of lake levels for habitat is recognised in the 1989 Water Conservation Order. The Order states: “It is hereby declared that the wildlife habitat created in part as a consequence of the natural fluctuations of water levels, particularly over the eastern shoreline, is an outstanding feature of Lake Wairarapa.” The Water Conservation Order is reproduced as **Attachment 1**.
27. Specific minimum lake levels were introduced in the 1991 Lake Wairarapa Wetlands Management Guidelines developed by the Lake Wairarapa Coordinating Committee set up to help implement the Order.
28. A maximum lake level was also recommended by the then Wildlife Service. It concluded Lake Wairarapa water levels should not go below 10.0m and not go above 10.3 m for long periods. The Wildlife Service also noted that regular variations in water levels are essential at all times of the year. A 1999 Department of Conservation (DOC) study concluded that:

“When the lake rises over about 10.3 m above datum, the normal feeding habitat becomes submerged and hence inaccessible, and so the birds are displaced to adjacent farmland and further afield. When the lake level drops, birds quickly return to the lake shore, indicating that this is their preferred feeding habitat.”
29. Since 2020 the lake environment has been recognised as a wetland of international significance under the Ramsar convention. Under this convention any changes to the ecological character of the wetland would be considered by DOC for potential notification to Ramsar.

Additional purpose – Lake Ōnoke

30. The gates are also used to assist the manual opening of Lake Ōnoke to the sea.
31. Following a closure of Ōnoke Spit, the barrage gates are closed to prevent Ruamāhanga river water from flowing up into the lake. This activity builds a head of water downstream in Lake Ōnoke for the purpose of assisting the opening with additional volume/flow.
32. This activity occurs several times a year.

Benefits/costs of lake Ōnoke purpose

33. Artificial opening of Ōnoke spit is a traditional practise which can enable the Māori economy. Timing the opening to the appropriate season, and constructing an appropriate opening, enabled harvesting of large quantities of food.
34. Opening the spit is a permitted activity that Greater Wellington undertakes whenever the spit closes. This activity prevents flooding in the lower valley by ensuring Ruamāhanga river water has an open outlet to the sea.
35. During the season of the tuna heke, Greater Wellington is required to notify Tuhirangi Marae at Pirinoa before the spit is cut. This facilitates a cutting in line with Tuhirangi Marae purposes. This engagement is occurring at the time of writing, mid-March 2024, where the spit has closed over. A meeting will occur between Greater Wellington and Tuhirangi Marae to support activity such as eel harvesting.
36. Closing the barrage gates when the spit is closed prevents the circulation of water upstream from Ōnoke and into lake Wairarapa which would have historically occurred whenever the spit was closed. As noted above, this severs the connection between the various water bodies which, together, form the Wairarapa Moana environment.
37. Closure of the gates when the spit is closed may support maintenance of the target lake level in Lake Wairarapa, especially if the waters are already above the target level. Closing the gates to create a head of water also improves the efficiency of the spit opening by maximising the chance of a wide deep cut that is resistant to closing over again.

What Greater Wellington Planning instruments say about the control structure and the control of the Lake

38. Lake Wairarapa is identified in the Natural Resources Plan (NRP) as inherently connected to mana whenua identity and the mana of the area.
39. The lake is recognised for numerous values in the NRP. These include recognition as having significant indigenous biodiversity values (both migratory fish habitat and indigenous bird habitat, being a regionally significant primary contact waterbody, and as Ngā Taonga Nui a Kiwa for both Rangitāne o Wairarapa and Ngāti Kahungunu ki Wairarapa).
40. Lake Wairarapa is specified a Category 1 surface water body in the NRP as a lake with outstanding indigenous ecosystem values for wildlife habitat. As an outstanding water body Lake Wairarapa is covered by a range of stronger rules relating to discharges and other water uses.
41. The lake is also covered by provisions in the NRP that seek to restore it to a healthy and well-functioning state (Objective 25 and Policy P7). Policy P37 states that adverse effects of use and development on Lake Wairarapa and wildlife habitat values shall be avoided.

Rules relating to the barrage gates and lake levels

42. Operation of the barrage gates is covered by rules 147 and 149 which all relate to damming and diversion of water.
43. The NRP also sets minimum lake levels for Lake Wairarapa. The minimum levels in the plan are identical to the minimum levels stated in paragraph 15, above. There is no maximum lake level specified in the plan.

44. The NRP (Rule R.R3) prohibits any water take from the lake when it is below the specified water levels.

What is different in the Regional Plan from when the control structure was last consented, that affects the control structure or management of the local environment

45. There are no changes to the regional plan since 2021 that affect the control structure or management of the local environment.
46. Te Mana o Te Wai statements for Wairarapa iwi have been received by Greater Wellington. They have been included as part of the current change to the regional policy statement, which is part way through the hearings process.

Treaty Settlements

47. Recent changes brought about by Treaty Settlements, including ownership changes of the lakebed and some surrounding lands, offer an opportunity to explore alternative schemes and a different way of operating that give greater effect to relevant NRP Objectives and Policies.
48. The Wairarapa Moana Statutory Board is tasked with producing a natural resources document for the Ruamāhanga catchment including Wairarapa Moana. Interplay between development of this document and a review of the LWVDS presents a strong opportunity for collaboration.
49. The Te Rohe o Rongokako Joint Redress Act (s112) identifies the LWVDS, including barrage gates, and clarifies that Greater Wellington may continue to operate the scheme, and that (in s112(7b)) “the Statutory Board has no functions in relation to the existing Development Scheme.”
50. Notwithstanding the relative roles of Greater Wellington and the Statutory Board, Greater Wellington is undertaking a review of the LWVDS with mana whenua partners and others.
51. Most recently, in November 2023, Greater Wellington met together with representatives of Kahungunu and Rangitāne to advance a shared review of the LWVDS including the barrage gates.

How the control structure is consented and the consent conditions, and whose name the consent is in

52. The damming and diverting of water via the barrage gates were most recently consented in December 2021. Greater Wellington was the applicant and assessed the barrage gates as a non-complying activity due to an inability to ensure minimum lake levels.
53. The control structure is pre-RMA and in 2021 it was difficult to see how the application could gain consent under the regional plan. It could only be consented if the applicant was able to demonstrate it would be fanciful or unrealistic to consider the existing environment as if the barrage gates were not in operation.
54. Following significant work and legal input (on behalf of both the applicant and the consenting authority) it was demonstrated to be fanciful or unrealistic to assess the environment as if the barrage gates were not in operation.
55. Greater Wellington was ultimately granted a consent on this basis. The consent was non-notified.

Consent conditions

56. The consent has three main conditions:
57. Preparation of a certified Operations and Environmental Monitoring Plan (OEMP) for the barrage gates and an associated working group to discuss alternative operating regimes. Any alternative operating regimes must be approved by the regulator. The OEMP is where the minimum and maximum lake levels (paragraph 15, above) are codified as part of the consent.
 - A review of the Lower Wairarapa Valley Development Scheme including the level of flood protection, its operations and maintenance, and effects on the environment. This review is to consider climate change and the overall environmental effects of the whole scheme.
58. Annual monitoring and reporting of matters such as the actual lake levels, number of times that flood conditions prevailed, number of times Ōnoke spit was opened, etc.
59. The full wording of all conditions is included as **Attachment 2**.

When the consent comes up for renewal and the process for that

60. The consent for the barrage gates, and the consent for other aspects of the LWVDS, both expire in 2027. The idea behind aligning the two consents was to renew them as part of a wider review of the scheme, conducted with mana whenua and other parties.
61. Greater Wellington is likely to recommend that the new consent application is notified.
62. Greater Wellington is seeking to work with mana whenua, the LWVDS scheme committee, and other parties to meet the existing consent conditions and renew the consent with appropriate new conditions.
63. To date the working group to develop alternative operating regimes for the barrage gates has not been convened. Agreeing an approach with mana whenua is the key next step. It would be an opportunity to agree cultural and environmental indicators as part of an Environmental Monitoring Plan, to review the minimum and maximum lake levels, and seek approval for alternative operating regimes. This could lead to the wider working group being convened in order to seek agreement, including with scheme members, DOC and South Wairarapa District Council.
64. Work is also underway to scope the size of a wider review to look at the long-term sustainability of the LWVDS in light of climate change and other factors. This is an opportunity to work with mana whenua on a shared investigations programme, align investment in restoration works, and set a shared direction. Both consent renewals are likely to be components but not the end product of a review, which will carry on beyond the consent renewal timeline.
65. A review of the scheme is an opportunity to pursue the objectives and policies outlined in the regional plan, to meet our Te Tiriti obligations, and enhance environmental health and resilience for future generations.

**Ngā āpitihanga
Attachment**

Number	Title
1	Water Conservation Order
2	WAR190233 consent conditions

**Ngā kaiwaitohu
Signatories**

Writer	Pete Huggins - Catchment
Reviewed by	Tim Lewis – Area Engineer Jacky Cox – Manager Logistics & Resourcing Tracy Berghan – Manager Riverlink Nicola Arnesen – Manager Policy Wayne O'Donnell – Programme Manager Riverlink
Approvers	Jack Mace – Director Delivery Tash Styles – Acting Director Catchment

Attachment 1 – 1989 Water Conservation Order

1 Title and commencement

(1) This order may be cited as the National Water Conservation (Lake Wairarapa) Order 1989.

(2) This order shall come into force on the 28th day after the date of its notification in the *Gazette*.

2 Interpretation

In this order, unless the context otherwise requires,—

Act means the Water and Soil Conservation Act 1967

Lake Wairarapa means the more or less continuous area of water commonly known as Lake Wairarapa, including the Ruamahanga Cut-off, in Featherston County, the shoreline of which is the outer edge of the area within which the vegetation changes from predominantly aquatic to predominantly terrestrial, except at the outlet of the lake, where the shoreline is the lakeward foot of the barrage gates. For the avoidance of doubt it is declared that the shoreline adjacent to the land known as Lots 1 and 2 on Deposited Plan 4547 (Wellington Land District) is the lakeward foot of the stopbank on that land.

3 Outstanding features

It is hereby declared that the wildlife habitat created in part as a consequence of the natural fluctuations of water levels, particularly over the eastern shoreline, is an outstanding feature of Lake Wairarapa.

4 Prohibition on water rights

(1) No right to divert any water within Lake Wairarapa shall be granted under section 21 of the Act.

(2) No general authorisation to divert any water within Lake Wairarapa shall be made under section 22 of the Act.

5 Water rights and general authorisations

(1) No water rights shall be granted, and no general authorisation shall be made, in respect of any part of Lake Wairarapa if the effect would be to diminish significantly the outstanding wildlife habitat features of any part of the lake.

(2) Nothing in this order shall be construed as limiting the effect of the second proviso to section 21(1) of the Act relating to the use of water for domestic needs, for the needs of animals, and for or in connection with fire-fighting purposes.

(3) Nothing in this order shall prevent the renewal of any water right or general authorisation which is current on the commencement of this order.

(4) Subject to subclause (1), nothing in this order shall prevent the issue from time to time of water rights in connection with the barrage gates at the outlet of Lake Wairarapa.

Marie Shroff,
Clerk of the Executive Council.

Explanatory note

This note is not part of the order, but is intended to indicate its general effect.

This order declares that the wildlife habitat created in part as a consequence of the natural fluctuations of water levels, particularly over the eastern shoreline, is an outstanding feature of Lake Wairarapa.

The order also includes various provisions to preserve and protect the wildlife habitat.

Attachment 2 – current barrage gates consent conditions

Consent conditions

General conditions

1. The location, design, implementation and operation of the take shall be in general accordance with the consent application and its associated plans and documents lodged with the Wellington Regional Council on
 - 28 February 2019 (application documents);
 - 29 April 2019 (Buddle Findlay Memo 'GRE00500014 – Reconsenting the operation of the Barrage Gates – existing environment'); and
 - 09 July 2021 (Buddle Findlay NPSFM 2020 and NES Freshwater assessment).

Where there may be contradiction or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of the consent, the conditions apply.

Note: Any change from the location, design concepts and parameters, implementation and/or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

Operations and Environmental Management Plan

2. Within one month from the commencement date of this consent, the consent holder shall prepare and submit a final Operations and Environmental Monitoring Plan (OEMP) to the Manager, Environmental Regulation, Wellington Regional Council for certification. The OEMP shall include details of:
 - a) The operation of the Barrage Gates under the five operating regimes;
 - b) The process for the establishment of a OEMP working group to guide research and monitoring activities relating to the operation of the Gates and alternative Gate operation research modes approved in accordance with an Environmental Monitoring Plan (EMP);
 - c) The process for submitting an EMP;
 - d) Monitoring and annual reporting in accordance with condition 9 below;
 - e) Complaints register in accordance with condition 10 below; and
 - f) Review process for the OEMP.
3. The consent holder shall manage and operate the Barrage Gates in accordance with the OEMP at all times after its certification under condition 2 above.
4. An EMP shall be provided to the Manager, Environmental Regulation, Wellington Regional Council, for certification, 20 working days prior to monitoring recommended by the OEMP working group commencing. Certification will not be provided if the effects of the alternative way of operating are greater than those already occurring in the existing environment. An EMP shall include, at a minimum, the following detail:
 - a) An assessment to demonstrate the effects of operating in an alternative way are not greater than those already occurring as a result of the Barrage Gates operation
 - b) The purpose of the proposed monitoring programme;
 - c) Description of the environmental effect that is being monitored;
 - d) Duration of the monitoring period;
 - e) Methodology for undertaking the monitoring and how the operation of the Barrage Gates may differ from the protocol within the OEMP;

- f) Risk assessment, including how any risk will be managed;
 - g) Identification of potentially affected parties;
 - h) Protocol for notification of landowners.
- 4A. If flood conditions arise when the Barrage Gates are being operated in accordance with an EMP, then regime 2 (operation of the Barrage Gates during flood conditions) will override the EMP. This is to ensure that a level of flood protection and safety is maintained to the surrounding landowners.
- 4B. If the Manager, Environmental Regulation, Wellington Regional Council receives an OEMP or EMP for certification, the Manager must, no later than 20 working days of receipt, certify the plan or decline to certify and give notice and reasons. If notice is not given, the plan is deemed to be certified. The consent holder may resubmit revised plans for certification.
- Note: the 20 working day timeframe may be extended by written agreement from both Manager, Environmental Regulation and the Consent Holder.*
5. No amendments may be made to the OEMP, unless they are certified by the Manager, Environmental Regulation, Wellington Regional Council.
6. At a minimum the consent holder shall review the OEMP by 30 November 2023. Amendments must be certified by the Manager, Environmental Regulation, Wellington Regional Council.
7. Within three months of the commencement of this consent (in accordance with the OEMP), the consent holder shall establish the OEMP working group.

Note 1: The working group is considered to be established when the consent holder has collated contact details for all group members and the group has been provided with a plan of how the working group is intended to be facilitated.

Note 2: The working group is not a decision making group but a forum for the formation of the EMP, dissemination of information from the consent holder and provides the opportunity to comment on consent compliance, monitoring and research, and to provide recommendations for changes to the operation and implementation of the EMP.

Lower Wairarapa Valley Development Scheme Review

8. By 30 September 2026, the Consent Holder must submit to Manager, Environmental Regulation, Wellington Regional Council, a comprehensive catchment wide review of the Lower Wairarapa Valley catchment to understand the level of effects the Lower Valley Development Scheme is having on the environment. This review shall include but not be limited to:
- a) Review the level of flood protection provided through the Lower Wairarapa Valley Development Scheme in light of climate change;
 - b) Review the current maintenance and operation regime of all elements of the Lower Wairarapa Valley Development Scheme;
 - c) Understand and monitor the level of effect the operation of the Lower Wairarapa Valley Development Scheme is having on the surrounding environment;
 - d) Provide options and recommendations for changes to the management of the Lower Wairarapa Valley Development Scheme to improve environmental and cultural outcomes.

Monitoring and Reporting

9. The consent holder shall prepare an annual monitoring report covering the previous calendar year, to be submitted to the Manager, Environmental Regulation, Wellington Regional Council, no later than 15 February each year (except if consent is granted after 01 December 2021, then the first annual report is to be submitted by 15 February 2023), unless otherwise mutually agreed by written agreement from both Manager, Environmental Regulation and the Consent Holder. The report shall include as a minimum:
 - a) Record of flood events for the past year;
 - b) Record of lake levels and the number of times the target lake levels were met and not met;
 - c) Record of the number of days the Barrage Gates were operated during BAU conditions (including the number of times the Barrage Gates were open for fish passage and/or the Gates fish pass automator was disabled);
 - d) Record of when each operational regime (1-5 in OEMP) came into effect;
 - e) Record of the number of times Lake Onoke became blocked (as a result of no opening in the sand spit), the duration of the blockage and the weather conditions that caused the closure of the spit at the time;
 - f) Record of alternative operating regimes approved for research and monitoring purpose, when these were undertaken, the duration of these regimes, and the conditions under which these occurred;
 - g) Summary of actions taken/progress made by the OEMP Working Group;
 - h) Summary of any research and/or monitoring commenced and/or completed relating to the operation of the Barrage Gates under its different operational regimes, including the purpose of the research and/or monitoring, the methodology employed and the outcome/s of that work;
 - i) Summary of the findings of any research and/or monitoring specifically undertaken in accordance with the EMP;
 - j) A programme of planned/scheduled research and/or monitoring activity, and any related EMP for the next 12 months;
 - k) An indicative programme for the next three years of planned/scheduled research and monitoring to be undertaken;
 - l) Record of any complaints (in accordance with condition 10) regarding the operation of the Barrage Gates;
 - m) Record of any consultation with scheme owners, land owners, iwi and other potentially affected persons;
 - n) Summary of the outcome of any Kaitiaki monitoring; and
 - o) Summary of progress and/or actions taken to comply with condition 8;

10. The consent holder shall, for the duration of the consent, keep and maintain a complaints register to record any complaint received regarding the operation of the Barrage Gates, or alleged effects from the operation of the Barrage Gates. The complaints register shall include at a minimum:
 - a) The name and contact details of the complainant;
 - b) The nature of the complaint;
 - c) Location, date, time of the complaint and the alleged event;
 - d) Weather conditions at the time of the alleged event (as far as practicable);
 - e) Outcome of the consent holder's investigation in to the complaint;
 - f) Measures taken to respond to the complaint; and
 - g) Any other known activities in the area unrelated to the operation of the Barrage Gates that may have potentially contributed to the complaint.

The complaints register shall be provided to Manager Environmental Regulation, Wellington Regional Council, as part of the annual monitoring report required by condition 9 above and also made available to Wellington Regional Council at any time upon request.

Review condition

11. The Wellington Regional Council may review any or all conditions of this permit by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within three months of the annual anniversary of the date of commencement of this permit for any of the following purposes:
- To deal with any adverse effects on the environment which may arise from the exercise of this (permit/consent), and which it is appropriate to deal with at a later stage.
 - To review the adequacy of any plan(s) prepared for this consent and/or monitoring requirement(s) so as to incorporate into the permit any modification to any plan(s) or monitoring requirement(s) which may become necessary to deal with any adverse effects on the environment arising from the exercise of this permit.
 - To alter the monitoring requirement(s) in light of the results obtained from any previous monitoring.

Environment Committee
25 September 2025
Report 25.450



For Information

REVIEW OF LOWER WAIRARAPA VALLEY DEVELOPMENT SCHEME

Te take mō te pūrongo

Purpose

1. To update the Environment Committee (the Committee) on preparations for a review of the Lower Wairarapa Valley Development Scheme (the scheme).

Te horopaki

Context

The scheme is a significant regional asset with major ongoing implications

2. Wairarapa Moana is central to progress on the Ruamāhanga Whaitua Implementation Programme, the Regional Policy Statement (RPS), Greater Wellington's mana whenua partnerships, and Treaty settlements. Reviewing the scheme is a major programme within our overall commitment to the moana and the Ruamāhanga River catchment. The review has direct links with climate change adaptation, freshwater outcomes and Treaty settlement commitments.
3. Flood prevention and drainage work undertaken by local government, river and catchment boards and settlers have been an ongoing intervention in the hydrology of Wairarapa Moana and the Ruamāhanga River catchment stretching back more than 100 years. The "Battle of the Lakes" in the 1880s set the scene for an ongoing conflict between settlers who wanted the land drained and Māori who wanted to retain mahinga kai and the tuna fishery associated with natural fluctuations in water.
4. The Crown has acknowledged that its acts and omissions in relation to Wairarapa Moana and the Ruamāhanga River catchment were individually and collectively breaches of Te Tiriti o Waitangi and recommitted to new Tiriti-based relationships with Rangitāne o Wairarapa and Ngāti Kahungunu ki Wairarapa.
5. Excerpts from the historical account and Crown acknowledgements, and Crown apologies to Rangitāne o Wairarapa and Ngāti Kahungunu ki Wairarapa are provided as **Attachment 1**.
6. A significant recent development was the establishment of the Wairarapa Moana Statutory Board under the *Te Rohe o Rongokako Joint Redress Act 2022*, with its inaugural meeting held on 22 March 2024.

7. The Board's statutory purpose is to:

“Act as a guardian of Wairarapa Moana and the Ruamāhanga River catchment, for the benefit of present and future generations”.

The scheme has significant impacts on Māori/mana whenua

8. Online video material that provides insight into the historical background and values associated with the scheme are linked in **Attachment 2**.
9. A key aspect of the scheme's historical background is contained in the historical account from the Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua Treaty Settlement:

“In 1888, the Crown disregarded Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua property rights and rights under te Tiriti o Waitangi when it supported those cutting a channel to Lake Ōnoke, partially draining Wairarapa Moana. To protect Wairarapa Moana and the lakes' bountiful resources as well as to end decades of dispute over control of lake levels and the outlet at Ōnoke, Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua made a tuku rangatira (chiefly gift) of their lakes to the Crown in 1896.”

Additional background to the scheme

10. With the lakes in Crown ownership, successive plans were considered for developing pastoral land in the Lower Wairarapa Valley. This culminated in a scheme supported by the 1960s Wairarapa Catchment Board and central government to fundamentally alter the lower Ruamāhanga catchment.
11. Installing the scheme took more than a decade and was not without considerable community and mana whenua opposition. The intent of the river and catchment boards ultimately led to a landscape-scale alteration of the natural environment. It included the diversion of the Ruamāhanga River away from Lake Wairarapa, extensive dredging and stopbanking of the Ruamāhanga, diversion and stopbanking of other tributaries, pumped drainage, in-filling of wetlands, and installation of a control structure (barrage gates) at the outlet of Lake Wairarapa.
12. Lake Wairarapa is still a major component of the scheme. It is used as a detention dam to hold floodwaters several times a year.



Figure 1. Map showing scale of the scheme including Greater Wellington-owned floodways (blue), drains (green and yellow dots), stopbanks (pink lines). Please note the Greater Wellington land in the forested area at the right and bottom is not part of the scheme.

Why this is regionally significant

13. The 1947 flood in the Wairarapa was a catalyst for the Crown and settlers to plan a major intervention. Recognised as the largest flood on record for the region, it caused extensive inundation of land around Lake Wairarapa. This was exacerbated by the natural closure of the spit at Lake Ōnoke which restricted the drainage of floodwaters to the sea.
14. The resulting drainage and flood protection scheme was developed over several decades. It has enabled certain types of economic activity and allowed for land uses and investments that would not exist in the same way without it. The combination of gravity and pumped-drainage, river management and lake management activities affect more than 30,000 hectares which is primarily in pasture. These interventions provide an unquantified, but presumably large, financial return.
15. Lake Wairarapa is identified in the Natural Resources Plan (NRP) as inherently connected to mana whenua identity and the mana of the area. It is also a key component of the scheme whereby control gates at the lake outlet can be closed to turn the lake into a flood detention dam during larger events which occur most years.
16. The lake is recognised for numerous values in the NRP. These include recognition as having significant indigenous biodiversity values (both migratory fish habitat and indigenous bird habitat, being a regionally significant primary contact waterbody,

and as Ngā Taonga Nui a Kiwa for both Rangitāne o Wairarapa and Ngāti Kahungunu ki Wairarapa).

17. Lake Wairarapa is the third-largest lake in the North Island and is specified a Category 1 surface water body in the NRP as a lake with outstanding indigenous ecosystem values for wildlife habitat. The margins of Lake Wairarapa (especially on the Eastern shoreline) host the largest wetland system in the Lower North Island. Due to the significant biodiversity present these Wairarapa Moana Wetlands have been designated as a Ramsar site (a wetland of international importance).
18. A national Water Conservation Order was established in the late 1980s and has resulted in lake level targets in the NRP. The Order was established under the Water and Soil Conservation Act 1967 without consultation and/or support from Rangitāne o Wairarapa and Ngāti Kahungunu ki Wairarapa. The report of the committee of the National Water and Soil Conservation Authority which recommended the wording of the order included no mention of Māori values.
19. The lake levels entrenched by the order mirror the minimum lake extent established in the early days of colonisation and drainage, rather than the wider moana recognised by mana whenua. The order is a significant national regulation that has placed conditions on our partnership approach and current operation of the scheme.

Why we initiated a review

20. Greater Wellington is responsible for the scheme assets and operations, including the extent to which they provide flood protection. We are also responsible for supporting effective natural resources planning and sustainability. Our commitments therefore require us to review the scheme given:
 - a Climate change predictions suggesting sea level rise and altered rainfall patterns
 - b Freshwater quality/quantity objectives adopted by Council via the Ruamāhanga Whaitua Implementation Programme developed under the National Policy Statement – Freshwater Management (NPS-FM)
 - c Mana whenua priorities including statements of Te Mana o Te Wai
 - d Environmental, social and economic objectives adopted by Council via the Wairarapa Water Resilience Strategy
 - e Evidence that some aspects of the scheme are becoming ineffective and need to be re-designed
 - f The need to renew the Barrage gates and the river management consents for the Scheme.
21. A review of the scheme is an opportunity to pursue the objectives and policies outlined in the regional plan, to meet our Te Tiriti obligations, and enhance environmental health and resilience for future generations.
22. Our commitments, and the need for a review, were codified in the most recent resource consent conditions for part of the scheme. These conditions include the requirement for:

“A review of the Lower Wairarapa Valley Development Scheme including the level of flood protection, its operations and maintenance, and effects on the environment. This review is to consider climate change and the overall environmental effects of the whole scheme.”

23. Funding for the investigations, which will form a major part of phase one of the review, was provided for in the 2024-34 Long Term Plan.

Te tātaritanga

Analysis

Te Tiriti o Waitangi and Treaty Settlements

24. Te Tiriti o Waitangi settlements have recognised the significance of the mana whenua relationship with Wairarapa Moana and the Ruamāhanga River catchment.
 - a Rangitāne Tū Mai Rā Trust is a post settlement governance entity (PSGE) for Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua who settled with the Crown in 2017.
 - b Ngāti Kahungunu ki Wairarapa Tāmaki-nui-a-Rua Settlement Trust is a post settlement governance entity who settled with the Crown in 2022.
25. Legal transfer of the ownership of Wairarapa Moana to the iwi settlement trusts honours the intent of 1896 Tuku Rangatira returning tino rangatiratanga and kaitiakitanga back to mana whenua for Wairarapa Moana and the Ruamāhanga River catchment.
26. *Te Rohe o Rongokako Joint Redress Act 2022* gives effect to shared cultural redress between Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua and Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua as contained within their respective deeds of settlement with the Crown.
27. It established the Wairarapa Moana Statutory Board, a co-governance partnership between mana whenua and the Crown. Appointing agencies to the Board include the Wairarapa iwi settlement trusts, Department of Conservation, Greater Wellington and South Wairarapa District Council. The Board is to act as a guardian of Wairarapa Moana and the Ruamāhanga River catchment, for the benefit of present and future generations.
28. In December 2024 the Wairarapa Moana Statutory Board’s interim position statement reaffirmed the centrality of the 1896 Tuku Rangatira as the first of its guiding principles:

“Te Tuku Rangatira. Wairarapa Moana was gifted to the Crown by iwi in 1896. It was formally gifted back by the Crown to iwi in 2024. The parties made these gifts to reflect their commitment to an enduring relationship based on the best interests of Wairarapa Moana and the Ruamāhanga River catchment. It is important to honour this commitment and engage in the utmost good faith to recognise the intentions of the parties in making the tuku.”

Note: The Wairarapa Moana Statutory Board’s interim position statement is provided in full as **Attachment 3**.

29. Greater Wellington is required to work with mana whenua partners in their own right including to give effect to Treaty settlements.
30. Whilst section 112(7)(b) of the Joint Redress Act that states the Board “has no functions in relation to the existing Development Scheme”, Greater Wellington will work through the implications of the Wairarapa Moana Statutory Board role and functions in relation to the review. This includes their role in setting direction and decision-making for Wairarapa Moana and the Ruamāhanga River catchment.

Partnership approach

31. Upholding the mana and tino rangatiratanga of Ngāti Kahungunu ki Wairarapa Tāmaki-nui-a-Rua Settlement Trust and Rangitāne o Tamaki nui-a-Rua provides the foundation for a genuine partnership acknowledging the significance of the taonga for mana whenua and aspirations to restore the mauri of Wairarapa Moana and the Ruamāhanga River catchment.
32. The Ruamāhanga Whaitua Implementation Programme also provides guidance on a partnership approach:
Recommendation 1 – Promotes active mana whenua leadership and participation as integral to the implementation of improved water quality and quantity management.
33. Because any significant changes to the scheme are likely to occur in the medium to longer-term, we have the conditions for an authentic partnership with Kahungunu and Rangitāne contributing to decision making processes.

Impact of review and review outcomes

34. The review is a significant undertaking that will involve considerable multi-disciplinary work over several years. The review encompasses a range of areas including:
 - a Establishing the level of flood protection in the lower Ruamāhanga in light of climate change
 - b Reviewing our operation and management of the existing scheme
 - c Assessing the level of effect the scheme is having on the environment
 - d Providing options and recommendations to improve environmental and cultural outcomes.
35. Greater Wellington will be seeking review outcomes that guide future investment in Wairarapa Moana and provide direction on future operation of the scheme.
36. A partnership approach will support mutually beneficial outcomes that are co-designed. These outcomes will include components that would usually be included in a floodplain management plan, such as asset plans, river management plans, project identification, and community engagement approaches.
37. The review may also produce outcomes and components that would not normally be included in a floodplain management plan. In which case the outcome may be a different sort of document such as a catchment plan, or an artefact designed by mana whenua.

Community engagement

38. Landowners undertaking land uses enabled by the scheme, especially lakeside landowners, will require up-to-date information and access as we progress with the review. A variety of institutional stakeholders also have a strong interest in understanding how the review is being undertaken and what roles they can play. This includes South Wairarapa District Council and Wellington Fish & Game, amongst others.
39. As a first step an update on preparations for the review was shared with the Lower Ruamāhanga Valley Floodplain Management Advisory Committee (a subsidiary advisory body to Wairarapa Committee) on 3 July 2025.
40. The emergence of new catchment groups in the Lower Wairarapa Valley presents an opportunity for engagement at a more local level and discussions about specific aspects of the scheme at place.

Consent context

41. Resource consents for our operation of the scheme expire in 2027. These consent renewals are significant milestones but are not the end product of a review, which will carry on beyond the consent renewal timeline.
42. To continue to legally undertaking maintenance and operational activities, Greater Wellington must reapply for resource consent under Section 124 of the Resource Management Act 1991 (RMA) by 30 March 2027.
43. The significant time pressure on Greater Wellington to renew resource consents presents challenges to, and tests our commitment to, partnership approaches to the broader review.
44. Engagement about the consent renewals with potentially affected parties, and the wider community, will need to happen in parallel with our work on the longer-term review of the scheme. This will be closely managed to ensure clarity.

Ngā hua ahumoni**Financial implications**

45. The budget for the Lower Wairarapa Valley Development Scheme review is allocated under the Wairarapa Loan Investigations.
46. The remaining 2024-34 Long Term Plan budget allocated for the whole of Wairarapa Investigations is currently \$6.4 million.
47. The outcome of the review is likely to include options and recommendations for future investment. For example, this could include new capital works to amend components of the scheme, or changes to operational management approaches. These financial implications are currently unknown.

Ngā Take e hāngai ana te iwi Māori**Implications for Māori**

48. As discussed above, this work is of critical significance to Māori.

49. Wairarapa Moana is Ngā Taonga Nui a Kiwa, acknowledged as “a jewel in the lives of the people of Wairarapa.” It is where mana whenua source their cultural, spiritual and physical sustenance.
50. Negative impacts on this taonga affect the inherent values of the landscape and ecosystem, and the life-sustaining relationship to te ao Māori.
51. Te Rohe o Rongokako Joint Redress Act 2022 gives effect to the respective deeds of settlement with the Crown and Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua and Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua through the co-governance structure of the Wairarapa Moana Statutory Board. This provides clear and defined statutory considerations.
52. Returning tino rangatiratanga and kaitiakitanga back to mana whenua honours the intent of 1896 Tuku Rangatira for Wairarapa Moana and the Ruamāhanga River catchment is crucial to restoring the mana and the mauri of Wairarapa Moana and the Ruamāhanga River catchment.
53. The renaissance of mana whenua is bringing about a determination and understanding towards tino rangatiratanga, mana motuhake, and how those rights and interests are best represented into the future.
54. Greater Wellington continues to progress our commitment and obligation towards our Te Tiriti partners as an integral part of how we support equitable outcomes for Māori and deliver better outcomes for the region.
55. The proposed review presents a significant opportunity to obtain clear direction, understand expectations and needs, elevate mātauranga Māori and strengthen Māori decision-making and strategic alignment. Through kotahitanga we can demonstrate that we are all moving forward in the right direction together.

Ngā tūāoma e whai ake nei

Next steps

Preparations that are underway

56. Greater Wellington is working with Kahungunu and Rangitāne to establish the appropriate partnership framework for the review.
57. Foundational investigations that will support our review of the scheme are planned. These include hydrological modelling and environmental investigations.
58. We are also preparing for a pre-application consultation on resource consent renewals.

Working with community

59. We will be providing information to landowners directly and via catchment groups. We will also continue to inform the council advisory body for the lower Ruamāhanga. We expect to significantly increase our communication and information service to the local community as we proceed through the review.
60. Our first steps are likely to include community engagement on hydrological modelling and on potential changes to our operation of the barrage gates.

Ngā āpitihanga Attachments

Number	Title
1	Excerpts from Crown acknowledgements and apologies to Rangitāne and Ngāti Kahungunu
2	Links to online videos providing information about the historical background and values related to the scheme
3	Wairarapa Moana Statutory Board Interim Statement (December 2024)

Ngā kaiwaitohu Signatories

Writers	Pete Huggins – Kaiwhakahaere Manaaki Wai Catchment Manager Ruamāhanga Carl Chenery - Principal Advisor Te Tiriti - Te Hunga Whiriwhiri Nora Moore – Acting Hautū Tūhonohono Mana Whenua Director Mana Whenua Partnerships
Approvers	Nicola Patrick – Hautū Manaaki Wai Director Catchment Lian Butcher – Kaiwhakahaere Matua, Taiao Group Manager Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council's roles or with Committee's terms of reference</i> This report provides an update on our work to conduct a review of a large-scale drainage and flood protection scheme from the 1970s, which is of strategic importance to the Wairarapa. Our management and operation of the scheme has significant impacts on the environment and Treaty settlement commitments. The report also provides information on the way we intend to approach partnerships and community engagement.
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> Our work on the review was funded through a previous Long Term Plan process. The work will also contribute directly to Rōpū Taiao's 10-year outcomes: - Safeguarding and restoring ecosystems and natural environments across our rohe, and, - Strengthening regional resilience and supporting our communities. The approach we take to this work seeks to uphold our Te Tiriti commitments and mana whenua partnership agreements.
<i>Internal consultation</i> This report has been co-authored by Rōpū Taiao and Te Hunga Whiriwhiri.
<i>Risks and impacts - legal / health and safety etc.</i> As a report for information, there are no specific risks related to this paper.

Wairarapa Moana Statutory Board: Interim Statement

Preamble

1. The purpose of the Wairarapa Moana Statutory Board (WMSB) is to act as a guardian of Wairarapa Moana and the Ruamāhanga River catchment by leading their sustainable management and promoting the restoration, protection and enhancement of these water bodies.
2. The WMSB is required to develop, implement and report on the Wairarapa Moana Document, which will set out its vision, mission, goals and work programme. This document is scheduled for completion by 2027.
3. In the interim period, the WMSB recognises that several important workstreams are being undertaken by central and local government agencies and third parties that impact on the health and use of Wairarapa Moana and the Ruamāhanga River. The WMSB has developed this interim statement to set out our goals, principles and expectations to provide guidance to agencies and third parties during the period while the full Wairarapa Moana Document is under development.
4. This interim statement will be superseded by the Wairarapa Moana Document when it is published.

Background

5. The WMSB was established by the Te Rohe o Rongokako Act 2022. This Act sets out, among other things, the constitution, membership, purpose, functions and reporting arrangements for the WMSB. It also includes a definition of Wairarapa Moana and the Ruamāhanga River catchment.
6. The Act sets out the purpose and functions of the WMSB which include:

s45 Purpose

The purpose of the Statutory Board is to act as a guardian of Wairarapa Moana and the Ruamāhanga River catchment for the benefit of present and future generations, by ...

... (c) providing leadership on the sustainable management of Wairarapa Moana and the Ruamāhanga River catchment; and

(d) promoting the restoration, protection and enhancement of social, economic, cultural, environmental and spiritual health and well-being of Wairarapa Moana and the Ruamāhanga River catchment

s46 Functions of Statutory Board

- (1) The principal function of the Statutory Board is to achieve its purpose.

(2) The other functions of the Statutory Board are as follows ...

... (g) to engage with, seek advice from, and provide advice to local authorities and other relevant agencies about the sustainable integrated management of Wairarapa Moana and the Ruamahanga River catchment;

... (i) to engage with third parties and interest groups, including by producing and disseminating information about, and awareness of, Wairarapa Moana and the Ruamahanga River catchment.

7. The full text of the Te Rohe o Rongikako Act 2022 is available at <https://www.legislation.govt.nz/act/public/2022/0076/latest/LMS14443.html?src=qs>

WMSB Interim Goals

8. To give effect to its statutory purpose and functions, the WMSB has identified the following interim goals to guide its operations for the time being:
 - a. **Oranga Taiao / Restoring the Water Bodies and their Ecosystems.** The WMSB seeks to restore the health of Wairarapa Moana and the Ruamahanga River catchment, including re-generating native flora and fauna within thriving ecosystems.
 - b. **Oranga Tāngata / Reconnecting People with the Moana.** The WMSB seeks to support whānau, hapū, iwi and the Wairarapa community to re-connect with Wairarapa Moana and the Ruamahanga River catchment.
 - c. **Oranga Wai / Rebalancing the Use of our Water Bodies.** The WMSB seek to develop and promote an appropriate balance of use of our water bodies and their waters to support social, cultural, economic and wellbeing outcomes.

Guiding Principles

9. In order to give effect to these goals, the WMSB has developed the following interim principles to guide its actions and the activities of central and local government and third parties.
 - a. **Te Tuku Rangatira.** Wairarapa Moana was gifted to the Crown by iwi in 1896. It was formally gifted back by the Crown to iwi in 2024. The parties made these gifts to reflect their commitment to an enduring relationship based on the best interests of Wairarapa Moana and the Ruamahanga River catchment. It is important to honour this commitment and engage in the

utmost good faith to recognise the intentions of the parties in making the tuku.

- b. **Wairarapa Mātauranga.** All planning, work and reporting to support the WMSB goals should recognise and promote the unique knowledge systems within iwi and our local community about Wairarapa Moana and the Ruamāhanga River catchment. It is important that all planning, work and reporting are informed by and reflect the best available research and scholarship.
- c. **Iwi Aspirations at the Centre.** The return of Wairarapa Moana and the establishment of the WMSB were undertaken as part of Treaty Settlements between (a) the Crown and Ngāti Kahungunu and (b) the Crown and Rangitāne. It is important to provide appropriate weighting to iwi aspirations, including reconnection, restoration, partnership and mana motuhake.
- d. **Transformational Change is Required.** The health of Wairarapa Moana and the Ruamāhanga River catchment has been severely degraded over an extended period of time. Transformational change is required to achieve the goals of the WMSB, and it is important that we are courageous, persistent and ambitious for change.
- e. **A Living System.** Wairarapa Moana and the Ruamāhanga River catchment represent a living, interconnected system, which includes whānau, hapū, iwi and the Wairarapa community. All planning, work and reporting must address the overall system through a holistic and interconnected lens.
- f. **A Long-Term, Intergenerational Kaupapa.** The restoration of Wairarapa and the Ruamāhanga River catchment will require ongoing investment and action by many parties across several generations. All planning, work and reporting should reflect the importance of short-term and long-term planning.

Expectations of Central and Local Government and Third Parties

10. The WMSB has identified the following expectations for central and local government and third parties in regard to all matters relating to Wairarapa Moana and the Ruamāhanga River catchment.

Rangatira-ki-te-Rangatira Relationships

11. The WMSB expects that central and local government agencies and third parties will engage with it on an ongoing basis to form enduring rangatira-ki-te-rangatira relationships. We expect these relationships will be led by senior leaders within the agencies and third parties, including Chairs, Mayors, Chief Executives and other senior officials. We also expect that ongoing engagement will be undertaken by our respective teams.

Information Sharing

12. The WMSB expects that central and local government agencies and third parties will provide data, financial information, records and other information about Wairarapa Moana and the Ruamāhanga River catchment as requested by the WMSB within reasonable timeframes.

Planning and Reporting

13. The WMSB expects central and local government agencies will engage the WMSB in their annual planning and reporting cycles. In particular, we expect these agencies will:

- a. Engage the WMSB at the outset and throughout their annual and long-term planning processes to discuss proposed work that impacts Wairarapa Moana and the Ruamāhanga River catchment; and
- b. Present their annual report to the WMSB in writing, and provide an opportunities for the WMSB to meet and examine senior officials and elected members about annual reporting.

Early and Ongoing Engagement on Major Issues

14. The WMSB expects central and local government agencies and third parties to engage early and often on all issues related to the Wairarapa Moana and the Ruamāhanga River catchment including, but not limited to:

- a. national and regional policy statements;
- b. resource consents for water takes;
- c. resource consents for infrastructure development;
- d. management of water infrastructure assets;

e. regional and district plan changes

15. This engagement should begin at the earliest possible opportunity and should continue on an ongoing basis until the issue has been resolved



Report	17.494
<i>Date</i>	<i>22 November 2017</i>
<i>File</i>	<i>CCAB-10-447</i>
Committee	Environment Committee
Author	Tracy Berghan, Principal Planning Advisor

Floodplain management planning – principles update

1. Purpose

To update the Committee on the floodplain management planning principles that were approved by the Council in 2015 (Report 15.99).

2. Background

At a workshop on the 28 October 2014, the Strategy and Policy Committee discussed the report *Floodplain Management Planning – Principles* which is included as **Attachment 1** to this report. The workshop covered:

- The four principles that underlie GWRCs approach to floodplain management in the Region;
- The rationale behind the introduction and application of these principles; and
- Examples of relevant national and international research, guidance and policy directives that support their application.

In 2015, Council agreed that the four principles discussed at the workshop and detailed in section 2.1 below were representative of Greater Wellington Regional Council's current practice in its delivery of floodplain management planning in the region and approved the continued application of these principles in future floodplain management planning in the region.

3. Principles

Principle 1: Avoid building in areas at high risk of flood hazard

Avoiding the construction of residential and other buildings vulnerable to flooding in undeveloped urban and rural areas (i.e. a 'greenfields' situation) exposed to a high level of flood hazard is the most effective way of managing flood risk in these locations in the long-term. In areas subject to a lesser degree of flood hazard, activities and development should be appropriate to the circumstances and should not exacerbate flood risk.

Principle 2: Only consider new flood protection infrastructure where existing development is at risk



Where existing urban or rural land use and/or development (e.g. dwellings, irrigation infrastructure, dairy sheds) is subject to an unacceptable degree of flood risk the construction of new structural protection measures (e.g. stopbanks, elevating existing buildings) will be considered.¹

Principle 3: Establish standards of flood protection relative to the degree of risk

In developing and implementing structural and non-structural measures within areas subject to flood risk, the following standards are to be applied by GWRC and, where relevant, city/district councils:

- Protection of all habitable buildings and urban areas
 - A minimum 1 in 100 year flood standard to floor levels for habitable buildings and new development within existing urban areas, along with provision of safe access.
- Stopbank protection
 - Where required to protect existing urban areas and associated land use, stopbanks will be constructed to achieve a minimum 1 in 100 year flood standard.
 - Where required to protect rural areas and associated land use, stopbanks are generally constructed up to a 1 in 20 year flood standard to alleviate frequent or nuisance flood events.

Principle 4: Plan for climate change in assessing the degree of flood hazard risk and in determining an appropriate response

GWRC will use the following allowances for climate change predicted to occur over the next 100 years in the design criteria for its flood hazard investigations.

The current allowances are:

- Increase in rainfall intensity 20%
- Sea Level Rise 0.8m

4. Comment

The floodplain management planning approach adopted by GWRC continues to represent an effective response to managing flood risk, and is premised on the core principles outlined above and also reflects the following:

- The evolving nature of GWRC's practice in preparing and implementing FMPs throughout the region and the corresponding lessons learnt; and

¹ The presence of property or infrastructure in an area subject to a 1 in 100 year flooding does not necessarily justify intervention. Such intervention is only appropriate where there is an "unacceptable level of risk."



- The political and economic realities associated with any prospective change to GWRC's current approach to managing flood hazard risk (e.g. managed retreat vs building or upgrading flood protection structures).

The principles contained in this report reflect current practice and have been developed over time as part of the outcomes of the FMPs completed to date. These principles are not the final word on these issues, but they continue to represent a baseline that would not be compromised in an individual FMP without re-examining the principles as a whole. How the principles are applied in detail will vary within each FMP.

The principles also reinforce and complement the objectives and policies in the Regional Policy Statement (RPS) for the Wellington Region and GWRC's operational floodplain management guidelines.

5. Communication

The principles have been discussed as part of the FMP processes undertaken by GWRC and are referenced in various discussions between GWRC and TA council officers. Principles 1 and 3 are communicated through the RPS. RPS Policy 29 is a directive policy to avoid inappropriate subdivision development in areas at high risk from natural hazards and Policy 51 is a consideration policy which requires the minimisation of the risks and consequences of natural hazards, including the need to locate habitable floor areas and access routes above the 1 in 100 year flood level.

6. Consideration of Climate Change

The matter/s addressed in this report have been considered by officers in accordance with the process set out in the GWRC Climate Change Consideration Guide.

6.1 Mitigation assessment

Mitigation assessments are concerned with the effect of the matter on the climate (i.e. the greenhouse gas emissions generated or removed from the atmosphere as a consequence of the matter) and the actions taken to reduce, neutralise or enhance that effect.

The effect of the proposed principles on the climate are not considered significant, and will be addressed through GWRC's procurement process which is undergoing review in 2017 and will encourage suppliers and contractors to minimise emissions.

6.2 Adaptation assessment

Adaptation assessments relate to the impacts of climate change (e.g. sea level rise or an increase in extreme weather events), and the actions taken to address or avoid those impacts.

GWRC plans for climate change in assessing the degree of future flood hazard and in determining an appropriate response. There are only specific, limited situations in



which climate change is not relevant (for example, planning for present-day emergency management).

In terms of the wider, long term work of the Department which these principles support, assessing flood hazard and determining appropriate structural and/or non-structural responses in areas subject to flood risk, GWRC applies the following allowances for climate change predicted to occur over the next 100 years in the design criteria for flood hazard investigations which is the same as the principles above:

- Increases in rainfall intensity – 20%
- Sea level rise – 0.8m.

7. The decision-making process and significance

Officers recognise that the matters referenced in this report may have a high degree of importance to affected or interested parties.

The matter requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002 (the Act). Part 6 sets out the obligations of local authorities in relation to the making of decisions.

7.1 Significance of the decision

Part 6 requires Greater Wellington Regional Council to consider the significance of the decision. The term ‘significance’ has a statutory definition set out in the Act.

Officers have considered the significance of the matter, taking the Council's significance and engagement policy and decision-making guidelines into account. Officers recommend that the matter be considered to have low significance.

The decision is of low significance as the Committee, by approving this paper, is confirming the Greater Wellington Regional Council's current practice for the delivery of its flood protection responsibilities.

Officers do not consider that a formal record outlining consideration of the decision-making process is required in this instance.

7.2 Engagement

In accordance with the significance and engagement policy, no engagement on the matters for decision is required

8. Recommendations

That the Committee:

1. *Receives the report.*
2. *Notes the contents of the report.*



3. ***Endorses*** the four principles that underlie GWRCs approach to floodplain management in the Region.

Report prepared by:

Report approved by:

Report Approved by:

Tracy Berghan
Principal Planner Advisor

Graeme Campbell
Manager Flood Protection

Wayne O'Donnell
*Group Manager, Catchment
Management*

Attachment 1: *Floodplain management planning – Principles (Background Paper)*

Environment and Climate Committee
20 August 2026
Report 26.355



For Information

HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI) REGIONAL RESPONSE UPDATE

Te take mō te pūrongo

Purpose

- 1 To update the Environment and Climate Committee (the Committee) on HPAI and our planned response, following the detection of the first cases in Aotearoa New Zealand.

Te tāhū kōrero

Background

- 2 The Highly Pathogenic Avian Influenza (HPAI) H5N1 strain has decimated wild bird populations, poultry farms, and affects mammals, including humans, with seals being particularly badly affected
- 3 Greater Wellington has two primary roles in the response to HPAI, driven by the Biosecurity Act 1993 and the Health & Safety at Work Act 2015 (HSWA). These are:
 - a Health and safety (H&S) Management (Operational Response) - Leads Greater Wellington's operational preparedness and response to HPAI on Greater Wellington-managed land by developing response plans, procedures, training, monitoring systems, and providing the equipment needed to safely manage incidents involving sick or dead birds.
 - b Regional leadership - Provides regional coordination and leadership by sharing Ministry for Primary Industries (MPI) information, supporting partner agencies' planning and response efforts, fostering collaboration among councils and stakeholders, and promoting consistent public awareness and messaging on HPAI.
- 4 For the H&S Management Role we have established a coordinated HPAI response programme that includes response planning, operational procedures, staff and partner training, public awareness measures, PPE and equipment procurement, engagement with Mana Whenua, and a monitoring system for reporting sick or dead birds in Greater Wellington-managed lands.
- 5 For the Regional leadership role, we are sharing MPI information and intelligence with partners, supporting coordinated planning and response activities, collaborating with other councils and agencies, convening regular regional forums, and promoting consistent public messaging. These activities help ensure

a well-aligned and coordinated approach to HPAI management across the Wellington Region.

- 6 Highly Pathogenic Avian Influenza (HPAI or 'bird flu') is a group of Influenza A viruses that are highly contagious to birds. The H5N1 strain has been spreading around the world with migrating and wide-ranging oceanic wild birds since 2020.
- 7 HPAI is spread through direct contact with faeces and respiratory secretions from infected birds, especially through contaminated feed and water.
- 8 As such, we cannot prevent its arrival, establishment and spread in New Zealand. The best we can do is to keep our staff and the public safe, and support wildlife populations to recover.

Situation Update

- 9 In New Zealand, the H5N1 strain was first detected from a kāhu/swamp harrier recovered on 9 July 2026. As of 7 August 2026, there have been two confirmed cases of H5N1 in New Zealand, both in the Wellington region.
- 10 In Australia, the H5N1 strain was first detected from a hākoakoa/subantarctic skua and a pāngurunguru/southern giant petrel both recovered on 14 June 2026 in Western Australia and South Australia, respectively. As of 3 August 2026, there have been 74 confirmed cases of H5N1 across five states in Australia, covering: Western Australia (10), South Australia (54), New South Wales (2), Queensland (1) and Victoria (7) [in order of discovery]. Australia has begun to record local transmission of HPAI between greater crested terns (a.k.a crested tern in New Zealand), which has resulted in their first mass-mortality case.

New Zealand Case histories:

- 11 Kāhu/Swamp Harrier - The bird was recovered alive from a fenceline in the Carterton district by a wildlife rehabilitator on 9 July 2026, taken to their home, before being transferred to the Wildbase clinic at Massey University. Here it was provided treatment, but didn't improve, so was euthanised. Samples were taken as part of MPI's surveillance programme. When these confirmed the H5 surface protein, the bird was transferred to the National Biocontainment Laboratory where H5N1 Clade 2.3.4.4b was confirmed by sequencing. The bird was disposed of to landfill by the laboratory.
- 12 Hākoakoa/Subantarctic (a.k.a. Brown) Skua - The bird was picked up alive on Petone Beach by two members of the Wellington Bird Rehabilitation Trust on 10 July 2026 and taken to Wellington Zoo. Here it was provided treatment, but didn't improve, so was euthanised. Samples were taken as part of MPI's surveillance programme. When these confirmed the H5 surface protein, the bird was transferred to the National Biocontainment Laboratory where H5N1 Clade 2.3.4.4b was confirmed by sequencing. The bird was disposed of to landfill by the laboratory.
- 13 While the skua is likely to have become infected offshore, the harrier is most likely to have been infected from another bird locally. This suggests that there was at least a third case, but there is possibly a pool of undetected infection in the wild.

Te tātaritanga Analysis

Role of Regional Councils in Biosecurity Incursions

- 14 The Biosecurity Act 1993 provides the legal framework for MPI and others to help keep harmful organisms out of New Zealand and the framework for how we respond, and manage them, if any do make it into the country. It covers:
 - a pre-border risk management and standard setting;
 - b border management;
 - c readiness and response; and
 - d long term pest management.
- 15 Section 12B of the Biosecurity Act 1993 describes the responsibilities of regional councils in preventing, reducing or eliminating adverse effects from harmful organisms that are present in its Region. The Biosecurity Act 1993 clearly states that if a harmful organism is present within its region, then a regional council must apply the requirements set out in section 12B. These include:
 - a Promote alignment and coordination of pest and biosecurity management activities within their region.
 - b Facilitate communication, cooperation, and collaboration between agencies, councils, iwi, landowners, industry, community groups, and other stakeholders.
 - c Support consistent and efficient biosecurity responses across local authority boundaries.
 - d Encourage public awareness and participation in biosecurity management.
 - e Provide leadership that supports national biosecurity objectives while addressing regional priorities and risks.
- 16 Other legislation also plays a role. The HSWA notes that as an employer and landowner, the regional council has obligations to ensure the health and safety of visitors, staff and the wider public is not put at risk on Greater Wellington managed land or from our activities.

Role of other Agencies

- 17 HPAI is a multiagency response, coordinating actions across national, regional, and local agencies, including MPI, territorial authorities (Tas) and the Department of Conservation (DOC). Our understanding of their roles is described below.

Ministry for Primary Industries

- 18 MPI is the lead agency; they coordinate national preparedness, surveillance, response, recovery, and long-term management activities in partnership with DOC, Health New Zealand, the Ministry of Health, local government, industry, iwi, and other stakeholders. This includes:

- a Surveillance and early detection - MPI operates and coordinates surveillance programmes to detect HPAI as early as possible. This includes investigating reports of sick or dead wild birds and laboratory testing.
- b Disease investigation and response - When HPAI is detected, MPI confirms cases through laboratory testing and traces potential sources and pathways of infection.
- c Biosecurity and disease control - MPI leads implementation of biosecurity measures designed to reduce disease spread, including implementing movement controls where necessary, implements biosecurity requirements for poultry operations, and provides guidance for farmers, industry and the public.
- d Coordination of the One Health Response - MPI coordinates a One Health approach that recognises the links between animal health, human health, and environmental health. This involves working closely with the DOC, Ministry of Health, local government, industry groups and Māori organisations
- e Protection of poultry and primary industries - A major MPI responsibility is safeguarding New Zealand's poultry and egg industries.
- f Public information and reporting - MPI is responsible for national public messaging and reporting systems.

Territorial Authorities

- 19 TAs are responsible for managing the risks of HPAI to people on the lands they administer.

Department of Conservation

- 20 DOC has responsibilities for H&S Management Operational Response as land managers. DOC also have key responsibilities for:
 - a protecting threatened and endangered species;
 - b responding to marine mammal infections; and
 - c vaccination of Critically Endangered birds – kākāpō, takahē, kakī/black stilt, tūturuatu/shore plover, and kākārīki karaka/orange-fronted parakeet.

Mana whenua Role

- 21 Supporting communities and the region to prepare for and respond to HPAI is a shared responsibility. Consistent with Te Tiriti o Waitangi obligations and our commitments to partnership, Greater Wellington must ensure that mana whenua are actively involved in decision-making, planning, response and recovery activities.
- 22 Mana whenua holds an important role as kaitiaki within their rohe, bringing deep connections to whenua, wai, taiao and their communities, and are therefore uniquely placed to contribute to both regional preparedness and local response efforts.

- 23 Through engagement with mana whenua, it has been articulated that the transfer of ‘paru’ from one rohe to another is not supported, reinforcing the need for response arrangements that respect cultural boundaries and local tikanga.
- 24 Where outbreaks result in the presence of sickness and/ or mortality of taonga species, mana whenua may determine the placement of rāhui as an expression of rangatiratanga and kaitiakitanga to support protection, healing and recovery of the affected environment.
- 25 These impacts underscore the importance of iwi led decision making and culturally grounded responses that uphold tikanga, mana whenua authority, and the long-term health of the environment.

Greater Wellington’s Interpretation of the Requirements

- 26 After reviewing key legislation, and associated legal advice we have assessed our role as the following;
 - a **H&S Management (Operational Response)** - We have a responsibility under the Health and Safety at Work Act 2015 to ensure, so far as is reasonably practicable, the health, safety and wellbeing of our staff working on Greater Wellington managed land, and to protect visitors and others who may be affected by our activities in these areas.
 - b **Regional Leadership** - A Biosecurity regional leadership role in the region (under Biosecurity Act 1993).
- 27 Table 1 below provides an overview of the key activities under these two core roles.

Table 1 - Overview of Actions

H&S Management (Operational Response)	• Response Planning - identified front-country areas with high visitor numbers in which we are more likely to need to respond to sick and/or dead birds. While in the more remote back-country areas we will mainly use signage to inform the public of potential risk. • Standard Operating Procedures – developed standard operating procedures for HPAI responses on Greater Wellington -managed land. • PPE – procured PPE and equipment for safe handling and disposal. • Training - provided training for staff and contractors on HPAI risk and safety requirements. • Monitoring – for Greater Wellington-managed land we have developed a GIS field app. to record reports of sick and dead birds and management actions. • Communications – information provided to staff, volunteers and other park users through signage, website updates, and direct communication explaining the risk
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	from HPAI, how to stay safe, and how to report potential HPAI events.
Regional Leadership	• Disseminate information from MPI to regional partners where appropriate. • Support regional partners in planning and responding to the harmful organism, where appropriate. • Connect with other regional councils and authorities to coordinate approaches to the harmful organism, where appropriate. • Connect with our mana whenua partners to support collaboration across the region, and to enable consistent communication pathways that focus on keeping our communities safe and informed. • Convene regular forums of regional partners to facilitate communication and co-operation among those involved in responding to the harmful organism, where appropriate. • Promote public messaging and awareness of the harmful organism, where appropriate.

28 Legal advice has provided the following interpretation of the Biosecurity Act 1993:

- a Section 12B requirements apply to any 'harmful organisms' that are present in our region.
- b The Act doesn't define the term 'harmful organism' so therefore does not limit our responsibilities to the pests that are included in our Regional Pest Management Plan (RPMP).
- c The Act does not state how we should go about providing leadership (except in relation to the leadership we provide by making plans), or how much resource we should devote to that work. Therefore, our interpretation is that we have a discretion about what we do and will just need to ensure that we meet any public law requirements (e.g. make decisions that are reasonable and based on relevant considerations).

Response Actions to date

- 29 The Environment Group has an established cross-functional response team working on both the H&S Management (Operational Response) and Regional Leadership components. The Response Team structure is based on a Coordinated Incident Management System (CIMS) model adapted for the HPAI response.
- 30 A summary of the actions completed by the Greater Wellington HPAI Response team are outlined in tables 2 and 3 for both the H&S Management (Operational Response) and Regional Leadership components.

Table 2 – H&S Operational Response Actions

Response Planning - identified front-country areas with high visitor numbers in which we likely will need to respond to sick and dead birds. While in the more remote back-country areas we will use signage to inform the public.	• A HPAI Response Plan has been developed for the Greater Wellington HPAI Response based on the principles presented to Council on 26 February 2026. • Front-Country and Back Country areas have been identified for all Greater Wellington managed lands. • Engagement with mana whenua on readiness and response support and ngā tikanga cultural guidance.
Standard Operating Procedures – developed standard operating procedures for HPAI responses on our land.	• A detailed Standard Operating Procedure (SOP) has been developed to direct our operational staff responding to or dealing with suspected HPAI cases. • Signage has been installed across Greater Wellington managed land to raise awareness of the HPAI risk and notification process.
PPE – procured PPE and equipment for safe handling and disposal.	• PPE and other safety equipment such as biohazard bags have been purchased and distributed.
Training - provided training for staff and contractors on HPAI risk and safety requirements.	• Training has been developed and provided to Greater Wellington staff, mana whenua partners, territorial authorities and Zealandia. • Internal engagement with all operational teams and distribution of HPAI messaging to all staff.
Monitoring - developed a GIS field app. to record reports of sick and dead birds on Greater Wellington-managed land.	• An app has been developed and circulated to relevant field staff to capture reports of sick or dead birds in Greater Wellington managed lands from which responses will be triaged and actions recorded.

Table 3 - Regional Leadership Actions

Disseminate information - from MPI to regional partners where appropriate.	- Regular intelligence reports are being distributed to regional partners. - MPI information is being distributed on receipt to all regional partners.
Support regional partners - in planning and responding to the designated harmful organism, where appropriate.	- Greater Wellington facilitated a regional HPAI Response planning workshop attended by MPI, Regional public health, WREMO, DOC, Fish and Game, Greater Wellington and TAs - Development and sharing of regional guidance for disposal including consenting, landfill, cultural considerations, communication and signage. - Sharing of contractor guidance, SOPs and panel arrangements.
Supporting our mana whenua partners - across the region	- Mana whenua participation in Greater Wellington and DOC facilitated HPAI Response planning wānanga in Pōrirua, Kohunui Marae, Whareroa (QE2) Regional Park, and full PPE training at Greater Wellington's Upper Hutt Depot. - Clear communication pathways established for sharing information with regular communications and online hui. - Information being shared are communication releases from Greater Wellington to support mana whenua with localised and consistent messaging that focus on growing awareness and understanding, maintaining vigilance, keeping whānau safe, reporting pathways and Q&As.
Connect with other Regional Councils - and Authorities to coordinate approaches to the harmful organism, where appropriate.	Participating with Te Uru Kahika HPAI planning workstreams including membership of the Biosecurity working Group focused on HPAI Response Planning.
Convene regular forums - of regional partners to facilitate communication and co-operation among	Regular forum to discuss HPAI response planning, intelligence and the ongoing response are being held with Tas and the

those involved in responding to the harmful organism, where appropriate.	DOC to align response planning across the Region.
Promote public messaging and awareness - of the harmful organism, where appropriate.	Provision of messaging developed by MPI through Greater Wellington networks and channels.

Response Principles

- 31 The Committee was advised at its meeting on 26 February 2026 of the response principles (Highly Pathogenic Avian Influenza – Greater Wellington’s Response Approach – Report 26.53). These principles underpin the H&S Management (Operational Response) component of our response. For reference these principles are:
- a Principle 1 – Collection and disposal in high visitor access areas
 - b Principle 2 - Where possible avoid (public limited spaces)
 - c Principle 3 – Greater Wellington land only

Regional challenges

- 32 The Region is in a good space with HPAI response planning. There are still challenges that we are working through. These include;
- **Funding** - Although MPI provided some funding for HPAI preparation, not all of this could be spent before the end of the financial year. This resulted in shortfalls in PPE, training, and support for some local authorities and Mana Whenua in our region that we would like support from MPI for.
 - **Better Information** – We are working to obtain better information from MPI regarding specific guidance to support the response and on specific details about the cases that would enable more monitoring.

Ngā hua ahumoni

Financial implications

- 33 Environment Group Leadership has allocated \$100,000 from operational budgets to support the HPAI response in the current financial year. Further funding support is being sought from MPI.

Ngā Take e hāngai ana te iwi Māori

Implications for Māori

Negative impacts and risks

- 34 The negative impacts and risks are considered significant based on the highly contagious nature of the HPAI Influenza A viruses to mana whenua across the region primarily felt through the effects on:
 - a The preservation of mauri (life force) of whenua (land), wai (water), taiao (environment) and sites of cultural significance across the region.
 - b Upholding tikanga, kawa and practices.
 - c Kaitiakitanga (guardianship) objectives to protect taonga and sites of significance across the region including protecting mahinga kai to traditional food-gathering sites, coastal resources and customary hunting areas.
 - d Risks to taonga species, including manu (birds), kekeno (seals) extend beyond ecological impacts to negatively affecting cultural practices, tikanga and kawa such as kaitiakitanga, mahinga kai, toi raranga, karakia and rāhui.
- 35 These impacts highlight the importance of embedding appropriate cultural considerations into preparedness response and recovery activities. Mana whenua are uniquely positioned to provide guidance on tikanga and kawa within their respective rohe, recognising that cultural practices and responses may vary across the region. A partnership approach is therefore essential to ensure decision-making and operational responses are both culturally appropriate and effective in keeping communities and staff safe.
- 36 Through engagement with mana whenua, it has been articulated that the transfer of 'paru' from one rohe to another is not supported, reinforcing the need for response arrangements that respect cultural boundaries and local tikanga.
- 37 Where outbreaks result in sickness and/ or mortality of taonga species, mana whenua may determine the placement of rāhui as an expression of rangatiratanga and kaitiakitanga to support protection, healing and recovery of the affected environment. Further wānanga with mana whenua are proposed to strengthen and prioritise culturally informed tikanga, kawa, and health and safety practices as risk levels increase.
- 38 Overall, an effective HPAI response must support mana whenua-led decision-making, incorporate mātauranga Māori, and recognise the interconnected relationship between the environment and people.
- 39 During periods of increased risk, customary practices may need to be adapted, reinforcing the importance of locally determined guidance that respects mana whenua specific tikanga and kawa.
- 40 Greater Wellington Te Hunga Whiriwhiri group will continue working alongside mana whenua to strengthen HPAI preparedness through ongoing engagement, awareness-building, response planning and timely information sharing. By maintaining strong relationships, regular communication pathways and coordinated collaboration with partner agencies, we can support a culturally

informed and effective HPAI response while strengthening connections between Greater Wellington and mana whenua across the region.

Te huritao ki te huringa o te āhuarangi **Consideration of climate change**

- 41 Climate change is not considered the direct cause of HPAI. Climate change is best viewed as a risk multiplier. It can increase opportunities for transmission, stress wildlife populations, complicate disease management, and impact population recovery, therefore amplifying the potential impacts of an HPAI outbreak. Key links include:
- a **Changes in bird distribution patterns:** Rising temperatures and changing weather conditions may alter migration routes, timing, and stopover locations. This could bring different bird species into contact more frequently, creating more opportunities for HPAI transmission.
 - b **Stress on wildlife health:** Climate-related events such as droughts, floods, strong winds, and heatwaves may result in food shortages and physical stress that would weaken birds' health and immune systems, making them more susceptible to disease.
 - c **Habitat loss and population disruption:** Sea level rise, coastal erosion, flooding, and changing wetlands can decimate breeding habitats, destroying eggs and chicks.
 - d **Increased interaction between wildlife, domestic animals, and humans:** Environmental changes may alter where birds live and feed, potentially increasing contact at farms, urban areas, and shared water sources.

Ngā tūāoma e whai ake nei **Next steps**

- 42 With the detection of HPAI within our Region our response stance has shifted from preparation to response. However, we are reviewing and updating the response plans based on what we are learning as HPAI unfolds. We note that HPAI has not been detected in other regions, so we are the first regional council to respond. The following actions are currently planned:



- 43 Regional Coordination Plan – We are reviewing our Greater Wellington HPAI response plan and splitting into two distinct plans to reflect our dual role in responding to HPAI. These are:
- a **Greater Wellington HPAI Response Plan** – The Greater Wellington HPAI Response Plan sets out how we will fulfil our responsibilities as a Land manager. The response will be updated to reflect the development of the Regional Coordination Plan and adoption of our HPAI SOP.
 - b **Greater Wellington Regional Coordination Plan** - The Regional Coordination Plan is a new document and will cover the organisational responsibilities, prioritisation, regional coordination roles, regional communication flows, intelligence development and distribution, and regional guidance. The draft plan will be shared with territorial authorities, DOC and MPI to ensure alignment across agencies before finalisation.
 - c **Site Specific Plans** – We will continue to work with partners on sites which require specific management arrangements such as Wairarapa Moana. These sites have bespoke management arrangements or interfaces which require further planning.
 - d **Kaitiaki Plans** – We are looking to support our mana Whenua partners in the development of tikanga or kaitiaki plans to ensure iwi and Hapu perspectives are embedded the regional HPAI response.
 - e **Transition to BAU** – HPAI will become endemic and as such will need to be part of our management practices moving forward. We will be working with internal teams to design the transition to BAU and the drawdown of the response.

Ngā kaiwaitohu Signatories

Writers	Andy Brown – Knowledge Risk Management & Resilience Lead Roger Uys – Senior Scientist Terrestrial Ecology
Approvers	Evan Harrison – Manager Knowledge David Boone – Manager Ecosystems & Community Megan Oliver – Director Knowledge (acting) Fathima Iftikar – Kaiwhakahaere Matua Rōpū Taiao Group Manager Environment (acting)

He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Committee's terms of reference</i> The Committee has responsibility for Environment include ... biosecurity and has specific responsibility for considering regional, national, and international developments; emerging issues and impacts (clause 2.6).
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> HPAI does not impact the annual plan, long-term plan or other strategies at this moment in time but the HPAI response will continue to monitor the situation and will reassess impacts.
<i>Internal consultation</i> Engagement on HPAI has been extensive across the Environment Group, Health Safety and Wellbeing, Marketing & Comms, Te Hunga Whiriwhiri and the Wellington Emergency Management Office (WREMO).
<i>Risks and impacts - legal / health and safety etc.</i> HPAI presents a significant environmental, operational, health and safety, and legal/regulatory risk for Greater Wellington particularly given the recent detections of H5 bird flu in wild birds in the Wellington region. The primary impact is expected to be on wildlife, biodiversity, and council operations, rather than on human health. Key Risks Environmental and Biodiversity Risks • Potential mortality events in wild bird populations, including threatened native species and coastal bird colonies. • Impacts on wetlands, estuaries, regional parks, and biodiversity programmes managed or supported by Greater Wellington. • Increased monitoring, surveillance, and carcass management requirements. Health and Safety Risks • Council staff, contractors, and volunteers working in parks, biosecurity, flood protection, and environmental operations may encounter sick or dead birds. • Human infection risk is currently considered low, but exposure controls, PPE requirements, hygiene procedures, and reporting protocols are required for workers handling wildlife or contaminated material. Operational Risks • Increased demand on biosecurity, environmental management, communications, and emergency management functions. • Potential closure or restricted access to affected sites, regional parks, reserves, or recreation areas. • Requirement to support MPI, DOC, health agencies, and local authorities during response activities. Legal and Regulatory Risks

He whakarāpopoto i ngā huritaonga Summary of considerations
• Obligations under the Health and Safety at Work Act 2015 to identify and manage workplace exposure risks for employees and contractors. • Responsibilities under biosecurity and environmental legislation to cooperate with national response agencies and manage risks on council-controlled land. • Potential reputational and liability issues if hazards are not appropriately communicated or managed. Potential Consequences for Greater Wellington • Increased response and operational costs. • Resource diversion from normal council activities. • Public concern and increased enquiries regarding wildlife and public safety. • Impacts on conservation outcomes and regional biodiversity values. • Possible disruption to regional park operations, community events, and recreational use of affected areas.

Environment & Climate Committee
20 August 2026
Report number 26.304



For Information

TE AWARUA O PORIRUA CATCHMENT/ACTION PLAN 2026

Te take mō te pūrongo

Purpose

1. To share the first Te Awarua-o-Porirua Catchment Action Plan ([Attachment 1](#)), developed collaboratively by the Te Wai Ora o Parirua – Porirua Harbour Accord partners, and to fulfil the commitment made by the Chief Executive at the previous Environment and Climate Change Committee meeting to bring the completed plan to the Committee.

Te tāhū kōrero

Background

Catchment Approach and Catchment Plans

2. The Greater Wellington Catchment Approach is a strategic shift from delivering individual projects to an integrated, place-based model focused on achieving environmental, cultural, social and economic outcomes at a catchment scale. It recognises that issues such as freshwater health, biodiversity, climate resilience, land use and contaminants are interconnected and require coordinated responses.
3. Catchment Plans are the primary mechanism for translating this strategic intent into action. They provide a shared vision, outcomes, priorities and actions at-place, linking regional objectives with on-the-ground delivery.
4. Catchment Plans are developed in collaboration with mana whenua, councils, communities and other organisations. They coordinate priorities and delivery across organisations.
5. The Catchment Plan developed by the partner agencies of the Harbour Accord is the first of our five Catchment Plans to be developed for the Wellington Region. It will continue to be developed to ensure a connection with other Greater Wellington catchment planning mahi over time.
6. By the end of this year, council can expect to see similar plans for all catchments, which will reflect the various levels of partnership with mana whenua and community. Greater Wellington's commitment is aligned to our Environment Group Strategic Framework and is outcomes focused. Internally for Greater Wellington, the catchment plan is important to make place-based decisions that reflect Council priorities.

Te Wai Ora o Porirua – Porirua Harbour Accord

7. The Harbour Accord was established to provide a unified partnership framework for restoring the health and mauri of Te Awarua o Porirua (Porirua Harbour) and its catchments.
8. The Harbour Accord was signed by Mayors/Chairs and Chief Executives of Te Rūnanga o Toa Rangatira, Greater Wellington, Porirua City Council, Wellington City Council and Wellington Water Ltd on 6 February 2025 at Takapūwāhia Marae. On 15 July 2026 the new Wellington water entity, Tiaki Wai, signed the Accord.
9. One of the first major deliverables agreed under the Harbour Accord was the development of a Catchment Plan. The draft final Catchment Plan was endorsed on 15 July 2026 by the Harbour Accord Governance Group, comprising the five chief executives from the partner agencies.
10. The Te Rūnanga o Toa Rangatira designed the Te Wai Ora o Porirua logo which draws from the traditional Māori koru form, reinterpreting its natural curve into a fluid water droplet. This transformation reflects both growth and renewal, while grounding the design in the identity of wai (water) as a source of life.



11. Each of the four droplets represents the four interconnected outcomes of the Mauri Ora Framework and the related restorative aspects detailed below.
12. By repeating and combining the form, the icon creates a sense of balance and connection — representing the coming together of people, place, and environment. The mirrored shapes suggest flow and continuity, echoing the movement of water and the interconnectedness of Porirua Harbour and its communities.
13. The overall composition symbolises kotahitanga (unity), wellbeing, and harmony — where individual elements move as one, reinforcing the kaupapa of Te Wai Ora and the harbour as a living, breathing entity.

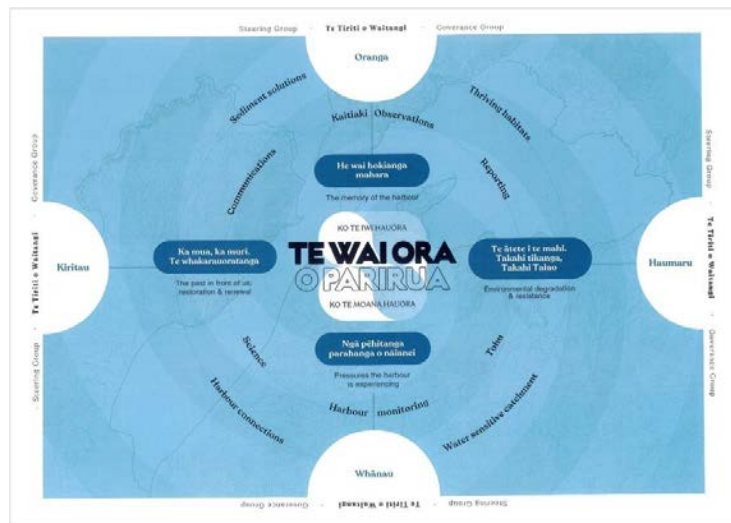
Te tātaritanga Analysis

Porirua Catchment Plan

14. The Catchment Plan translates the vision and objectives of the Harbour Accord into an integrated and coordinated programme of work, identifying priorities, responsibilities, success measures, and resource needs.
15. The Catchment Plan seeks to align and integrate existing commitments, initiatives, and programmes across partner organisations, as well as identify new and different ways of doing things.
16. The Catchment Plan emphasises that restoration must be informed by understanding both the historical and present-day condition of the Porirua Harbour.

Mauri Ora Framework

17. The Catchment Plan was developed using a mauri ora framework developed by Ngāti Toa Rangatira, which recognises that the health of the Porirua Harbour is intrinsically linked to the wellbeing of its people, communities and natural systems.
18. Guided by the principle of '*Ko te iwi hauora, ko te moana hauora*', the framework (shown below) provides a holistic basis for identifying outcomes, prioritising actions and defining measures of success.



Te Wai ora o Parirua Mauri Ora Framework.

19. The Catchment Plan is grounded in an iwi-led mauri ora approach, which defines harbour restoration through four interconnected outcomes:
 - a. **Oranga:** healthy ecosystems and restored mahinga kai.
 - b. **Haumaru:** clean, safe and resilient water environments.
 - c. **Whānau:** communities and whānau actively connected to and caring for the harbour.
 - d. **Kiritau:** restored mana, fairness and shared responsibility.
21. The Catchment Plan is based around four related and connected restorative aspects. Each of these aspects relates to certain time periods and events in the history of the Porirua Harbour. As a collective, the restorative aspects will provide insight into mauri – vitality, environmental health, and capacity.
22. With clarity about the damage to the Porirua Harbour and the existing pressures today, actions have been developed to achieve the vision – *health and mauri of Te Awarua is restored*. The actions address the pressures confronting the Porirua Harbour and, in doing so, will make progress towards the outcome of restoration.

Mauri ora restoration aspects	Te ātete ki ngā mahi takahi tikanga, takahi tai ao – Environmental and cultural degradation and resistance	Ngā pēhitang a parahanga o nāianeī – Pollution pressures the harbour is experiencing today	Ka mua, ka muri. Te whakarauoratanga – The past in front of us, restoration and renewal	He wai hokinga maha ra – The memory of the harbour
Category	Pressures context	Pressures	Actions	Outcomes and measures
Key themes	Reclamation and damage to shorelines Deforestation Sedimentation Water pollution Habitat loss Highly modified and damaged waterways	Sedimentation Water pollution and contaminants Habitat loss	Water sensitive catchment Thriving habitats Harbour connections Sediment solutions	Oranga – mahinga kai practices restored, international transmission of knowledge. Haumarū , clean and safe waters, healthy ecosystems. Whānau – capacity to exercise manaakitanga. Communities care and interact with the harbour. Kiritau – restored mana, respect and esteem. Fair sharing of benefits, costs and responsibilities.

Ka mua, ka mauri. Te whakarauoratanga - Restoration and Renewal Actions

23. Twenty actions were prioritised as the most effective and feasible to address the pressures facing the Porirua Harbour and surrounding habitat. They also focus on non-regulatory actions that have opportunities for Te Rūnanga o Toa Rangatira leadership and collaboration.
24. The majority of these actions are resourced and funded in the agencies' Annual Plans for 2026/27. The focus is on coordination and alignment for delivery and integration of services at place.

The actions are centred under four priority focus areas with supporting actions:

Sediment solutions	Reducing sediment entering streams and the Porirua Harbour through improved management of rural, lifestyle, parks and forestry land. Actions include: • a new role targeting small rural/lifestyle landowners, • erosion control incentives, • riparian planting, and • best practice management on council lands.
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Water sensitive catchment	Reducing contaminants entering waterways by improving wastewater and stormwater management. Actions include: - targeted and proactive finding and fixing of wastewater leaks, - supporting private property repairs, - implementing water-sensitive design solutions, - improving infrastructure planning, strengthening regulatory coordination, and - increasing habitat outcomes within transport corridors.
Thriving habitats	Restoring habitats to increase biodiversity and ecological resilience guided by mātauranga Māori and kaitiakitanga. Actions include: - Shoreline Kaitiaki role, - stream restoration (focus on Kahotea and Takapū), - Titahi Bay Road coastal restoration, - fish passage improvements, - Kenepuru Stream naturalisation, and - biosecurity management, and protection of high-value sites.
Harbour connections	Strengthening community connection to the harbour through the living streams approach at Kahotea and Takapū Streams. Actions include: - Kura connection and education, - Accord Community Environment Fund, - Shoreline/Pollution Prevention Kaitiaki role, - Exploring the feasibility of a Marine and Waka Education Centre, and - Water industry training programme.
Supporting actions	The delivery of the four priority focus areas will be supported by coordinated monitoring, performance measurement, reporting, communication and engagement, funding and resourcing.

For each of the four focus areas, the Catchment Plan identifies the specific activities, lead agency(s), partner organisations, outputs, timeframes and responsibilities.

What's different?

25. The Catchment Plan focuses on coordination and collaboration across agencies to integrate services at place. Most actions have been re-prioritised within 2026/2027 Annual Plan budgets for delivery. The priority actions also confirm that our Greater Wellington programmes are focusing on the right things, which has made it easier to tweak locations or enhance/increase effort by prioritising funding through the *Porirua Whaitua Implementation Programme 2019* (WIP) budget.
26. The following actions are tangible highlights in the development of the Catchment Plan and illustrate the collaboration and level of coordination emerging through the Harbour Accord:
 - a **A new Shoreline/Pollution Prevention Kaitiaki role** - proposed to be based at Te Rūnanga o Toa Rangatira and 50/50 funded by PCC, and Greater Wellington

from the Porirua WIP and Policy Implementation (Method 43 improving the health of urban waterways, PC1) budgets.

- b **A new Rural Lifestyle Property Advisor role** – proposed to be based at Greater Wellington, this role will enable a new focus on small rural landowners and is funded by Greater Wellington’s Porirua WIP and Policy Implementation (Method 44 supporting the health of rural waterbodies, PC1) budgets.
- c **Joint landowner incentives programme** – this action is a continuation of a pilot programme to be led by Greater Wellington with funding from Greater Wellington (50%) PCC (25%) and landowners (25%). WCC funding to be determined on a project-by-project basis. This prioritises the most erosion-prone land and critical source areas management on private land at a higher 75% incentive rate, leading to greater land use change. Greater Wellington funding through our existing Wellington Regional Erosion Control Initiative and Sustainable Land Use Fund programmes.
- d **Harbour Accord Community Environment Fund** – this action builds on Greater Wellington’s successful Community Environment Fund managed in partnership with Te Rūnanga o Toa Rangatira and expands it to include PCC and WCC funding and decision-making. With future potential growth possible through alignment with council’s waste minimisation programmes and external partners.
- e **Forestry best-practice incentive trial** – this action builds on the forestry engagement programme currently run by Greater Wellington and aims to incentivise best practice beyond the requirements of the National Environmental Standards for Commercial Forestry. Funded through the Porirua WIP budget.
- f **A catchment-wide educators' network** – this action brings the educators network back together and will start to look at how to improve and better coordinate the delivery of environment education to schools and community.
- g **Our Living Streams integrated approach** - two priority awa catchments have been selected: Kahotea Stream (Titahi Bay) and Takapū Stream. Within these catchments, partners will collaborate with catchment community groups, and coordinate services and expertise to deliver integrated restoration, engagement and education rather than working in organisational silos.
- h **Expansion of the *Know Your Pipes* programme** – Tiaki Wai has committed more resource to this programme in the catchment and is approaching the delivery in a more strategic and targeted way. Tiaki Wai are also focusing on the priority sub-catchments identified in the Catchment Plan.

Greater Wellington commitment

- 27. Numerous Greater Wellington subject matter experts from across Catchment, Delivery, Knowledge and Insights, Strategy, Policy and Regulation and Te Hunga Whiriwhiri have supported the development of this plan.

28. In addition to Greater Wellington's commitment detailed in the above highlighted new or enhanced actions, there are numerous priority actions to maintain existing levels of service across our key programmes. These include:
- a **Recloaking Papatūānuku** – maintain this programme with a priority focus on the retirement of West Belmont Regional Park grazing areas to reduce sediment impacts in the Porirua catchment. Leading by example in our Regional Parks helps support our engagement, education and implementation of our programmes on private land.
 - b **Pest management** – maintaining current levels with more integration across agencies and Predator Free Porirua. Exploring a new ungulate control project in northern Transmission Gully area.
 - c **Key Native Ecosystem sites** – maintain our level of effort across the six Porirua catchment sites: Battle Hill Bush, Karehana Bay Bush, Porirua Western Forests, Raroa-Pukerua Coast, Taupō Swamp Complex and Whitireia Coast. The work programme includes pest plant and animal control, habitat restoration, and ecosystem management. Explore opportunities to connect work more widely beyond Key Native Ecosystem boundaries.
 - d **Flood operations** – continue our existing level of service in the Kenepuru (Porirua) Stream and other streams (Taupō, Kenepuru Iti, Takapū) named within the Watercourses Agreement (1977).
 - e **Forestry engagement** – continue this programme with private plantation forestry owners/managers and incorporate the new best practice incentives trial.
 - f **State of Environment monitoring** – continue across the catchment and support new mātauranga led initiatives linked to Harbour Accord outcomes and measures.
 - g **Enviroschools** – maintain the current Enviroschools programme and work with Harbour Accord agencies to develop a Porirua Kura Programme for the whole catchment.
 - h **Environmental regulation** – continue to prioritise earthworks consent monitoring in the catchment and respond to other wastewater network related issues. Work with Harbour Accord partners on engagement and education initiatives.

Measuring success

29. Successful implementation of the Catchment Plan relies not only on delivering actions, but also on regularly assessing progress, learning from experience, and sharing results with partners, mana whenua, stakeholders, and the wider community. For this purpose, the Harbour Accord is currently developing a Performance Monitoring Framework that will also enable timely sharing of progress in meeting obligations through monitoring and reporting of actions.
30. The *Performance Monitoring Framework* aims to answer the following core questions:

- a Are we doing what we said we would do?
 - b Are our actions making a difference?
 - c Are we working together effectively?
31. The intent is to create a clear line of sight from investment and action delivery through to measurable improvements in the health and mauri of the Porirua Harbour.
 32. The Catchment Plan is intended to be a living document, with regular reporting, review and adaptation. Progress will be monitored and actions adjusted as new information becomes available and circumstances change.

Te Awarua o Porirua Whaitua Implementation Programme (2019)

33. The Catchment Plan builds on and weaves in the *Te Awarua o Porirua Whaitua Implementation Programme 2019* (WIP), which included 75 regulatory and non-regulatory recommendations for the Porirua Harbour.
34. The majority of WIP implementation activities are decentralised and held across multiple Environment Group work programmes; however, in the 2021-2031 LTP a small Porirua implementation budget was assigned and this remains with the Catchment team to provide for dedicated new activities. This budget is \$187,413 in 26/27.
35. Over half of these recommendations (44) required regulatory change for full implementation. This has been done through a combination of the Regional Policy Statement, Natural Resources Plan (NRP) and Plan Change 1. This process has progressed and fully implemented 38 of these, with a further three recommendations 'supported or partially implemented' before the Government put a hold on all plan changes as part of its RMA reform agenda (WIP Report November 2025).
36. The non-regulatory WIP recommendations were all included in the development process for the Catchment Plan and prioritised alongside other actions from previous plans, including the earlier Porirua Harbour and Catchment Strategy and Action Plan (2015). Of these recommendations, 11 have been included in the Catchment Plan.
37. Although the Catchment Plan is currently based on non-regulatory actions, it is also closely aligned with policy implementation. For instance, both proposed new roles (Rural Lifestyle Property Advisor and the Shoreline/Pollution Prevention Kaitiaki position) support delivery of Method 44 (supporting the health of rural waterbodies) and Method 43 (improving the health of urban waterways) respectively under Plan Change 1 of the Natural Resources Plan.
38. The Catchment Plan also includes communication and engagement actions which featured in some WIP recommendations and are essential to education and behaviour change.

Community Feedback

39. Direct feedback on the draft Catchment Plan was sought from groups involved throughout the process, including the Porirua Harbour Trust, Guardians of

Pāuatahanui Inlet, Pāuatahanui Catchment Group, Department of Conservation, Fish & Game New Zealand, Predator Free Porirua and the Whitireia Park Restoration Group.

40. Feedback was also gathered through a community briefing and Q&A session organised by the Porirua Harbour Trust held in Whitby on 3 August 2026, with around 40 people in attendance and both Greater Wellington and PCC councillors present.
41. Feedback was supportive of the collaborative approach taken to develop the Catchment Plan. People acknowledged the leadership of Te Rūnanga o Toa Rangatira and the collective effort involved in preparing the draft. There was strong support for maintaining a long-term focus on harbour restoration, continuing partnerships with mana whenua and community groups, and ensuring priority actions are practical, coordinated and achievable.
42. Key themes raised included the need for stronger prioritisation of actions, greater emphasis on addressing development-related runoff and growth pressures, managing litter, clarity on how much is funded, and ensuring implementation remains focused on activities that will deliver the greatest benefit to harbour health.

Ngā hua ahumoni

Financial implications

43. Greater Wellington and the Harbour Accord partners have, given the proposed local government amalgamation and fiscal constraints, focused on re-prioritisation of existing budgets within the Annual Plan 26/27 and collaboration and coordination of programmes. In many cases we have been able to build on the existing work we are doing (e.g. Greater Wellington's incentive programme for private landowners).
44. The Porirua Whaitua Implementation Programme budget (\$187,413), held by Catchment, has also been used specifically to enable Greater Wellington's contribution to the Catchment Plan. For 26/27 this also includes an additional amount that was carried over (\$120,961) for Catchment Plan implementation due to timing delays in delivering that work in 25/26.
45. The priorities set through the Catchment Plan and reflected in the Annual Plan 26/27 re-prioritisation, are anticipated to carry through into the Long Term Plan 2027-2037, subject to Council decisions.

Ngā Take e hāngai ana te iwi Māori

Implications for Māori

46. Feedback from Te Rūnanga o Toa Rangatira indicated that the Catchment Plan strongly reflects te ao Māori and mātauranga Māori perspectives and supports the exercise of kaitiakitanga through its consideration of the harbour's past, present, and future. This aligns with the outcome of enabling co-designed catchment planning and implementation across the rohe.

47. The Ngāti Toa Rangatira Claims Settlement Act 2014 and associated Deed of Settlement (the Ngāti Toa Rangatira settlement) formally acknowledges the damaging impact of pollution, reclamation and other damaging activities on the Porirua Harbour. This degradation has had a severe impact on the mana of the iwi and the ability of Ngāti Toa Rangatira to use and protect traditional resources.
48. The Ngāti Toa Rangatira settlement, however, is not just about the past. It is a future based on the recognition of the Porirua Harbour as a taonga for Ngāti Toa Rangatira. The Harbour Accord is a step towards this future. It is an important way that Greater Wellington can support the implementation of the Ngāti Toa Rangatira settlement.
49. The Catchment Plan is designed around a mauri ora framework – Te Wai Ora o Parirua, developed by Te Rūnanga o Toa Rangatira. This framework grounds the plan in Ngāti Toa Rangatira mātauranga and places the implementation actions in the context of the ‘memories of the harbour’ and ‘environmental degradation and resistance’ that has occurred over many decades.
50. Additionally, the long-term restoration efforts are guided by Ngāti Toa Rangatira tohu (indicators of change) and values that inform the measures and indicators for the outcomes of Oranga, Haumarū, Whānau and Kiritau (as described above in point number 20).
51. Greater Wellington actively resources Te Rūnanga o Toa Rangatira to partner on implementation and catchment planning mahi through the new 18-month Kaupapa Partnership agreement for 2026-2027.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

52. As outlined in the 18 June 2026 Update Paper for the Committee, climate change is embedded within the Catchment Plan through both its vision and priority actions.
53. One of the outcomes of the Harbour Accord is that the harbour, catchment and communities remain in a state of enduring stability (manawaroa) while adapting to climate-related pressures. The planning process incorporated recommendations from the *Porirua Assembly on Climate Change 2025*, and these have been reflected in the Catchment Plan's priority actions.
54. The Catchment Plan also promotes resilience through actions that improve freshwater, coastal and ecological health, strengthen stormwater and wastewater performance, and support communities to adapt to future environmental change.

Ngā tūāoma e whai ake nei

Next steps

55. The Porirua Catchment Plan and executive summary are scheduled for release publicly on Friday 14 August.
56. The Porirua Harbour Accord Steering Committee is setting up action leads to guide the delivery of actions for 26/27 and beyond.

57. The Porirua Catchment Plan delivery and Harbour Accord will be incorporated into Greater Wellington's Long Term Plan 2027-37 proposal and processes.

Ngā āpitihanga

Attachments

Number	Title
1	Te Awarua o Porirua Action Plan – Revised Draft 9 July 2026

Ngā kaiwaitohu

Signatories

Writers	Jimmy Young – Catchment Manager, Te Awarua-o-Porirua Toby Barach - Senior Advisor, Porirua Catchment Mel Branch – Senior Advisor, Porirua Catchment Kara Kearney – Partnership Manager
Approvers	Nicola Patrick – Director, Catchment Fathima Iftikar – Group Manager, Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<i>Fit with Council’s roles or with Committee’s terms of reference</i> The Environment Committee oversees the development, implementation and delivery, and review of Council’s environmental strategies, policies, plans, programmes, and initiatives to improve environmental outcomes for the Wellington Region’s land, water, air, biodiversity, natural resources, parks and reserves, and coastal marine area.
<i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i> The Porirua Catchment Plan is the key mechanism for Accord partners to meet their commitments under the Porirua Harbour Accord. The Catchment Plan supports the delivery of Greater Wellington, Porirua City Council and Wellington City Council’s Annual Plan and Long Term Plan objectives around improved environmental outcomes, connected communities and climate resilience. The action plan will support the aspirations of Te Rūnanga o Toa Rangatira to see the mauri of the harbour restored.
<i>Internal consultation</i> Collaboration across all functions within Rōpū Taiao and the Te Hunga Whiriwhiri partnerships team.
<i>Risks and impacts - legal / health and safety etc.</i> There are no risks of concern.



Te Awarua o Porirua Action Plan

Revised Draft
9 July 2026

*Mai i Miria Te Kakara ki Whitireia whakawhiti te Moana o Raukawa ki
Whakatu ki Wairau. Te Waka Tainui.*

*That THE NGĀTI TOA TRIBE of Porirua in the Dominion of New Zealand
and the respective families and individuals thereof...was on the 6th day of
February one thousand eight hundred and forty being the date of the
Treaty of Waitangi the owners of, and entitled to the full exclusive and
undisturbed possession according to ancient Māori usage and custom, of
various Lands and Estates Forests near and adjoining the Porirua Harbour
including the fishing beds on and in the land lying between mean high
water mark and mean low-water mark in the said harbour (herein after
called “the tidal lands”).*

*Extract of the petition of the Ngāti Toa Tribe and the respective families and
individuals of Porirua in the Dominion of New Zealand. Compiled by Tutu Ira Wi
Neera and 88 others.¹*

¹ Fishing Policy and General, Porirua Harbour, Pollution of Shellfish Beds, 1960, R22156828, Archives New Zealand

Te Wai Ora o Parirua

Te Awarua o Porirua Action Plan

Last updated, 9 July 2026

This Action Plan is a collaboration of the signatories to *Te Wai Ora o Parirua – Porirua Harbour Accord* (the Harbour Accord). The partner agencies are Te Rūnanga o Toa Rangatira, Porirua City Council, Greater Wellington, Wellington City Council and Wellington Water Limited.

Tiaki Wai became the Wellington water services organisation on 1 July 2026 and will sign the Harbour Accord on 15 July 2026. In light of this change, references and actions related to Wellington Water in this document are amended to Tiaki Wai.

The plan proposes a suite of actions to restore Te Awarua o Porirua (Porirua Harbour) to achieve the purpose of the Harbour Accord. The actions are contained in Section 7: Ka mua, ka muri. Te whakarauoratanga - The past in front of us: restoration and renewal. These actions are articulated within a mauri ora approach to the harbour which includes the principles of:

- **kiritau** (restored balance);
- **haumarū** (safety, stability, resilience);
- **oranga** (healthy ecosystems and cultural practices); and
- the involvement of **whānau** and communities in the restoration of the harbour.

Like the Porirua Harbour, this is a living document. It will be periodically reviewed and updated as challenges arise, new information emerges and the partner organisations refine their approaches to tackling the degradation of the harbour. In keeping with good practice, updated versions of the plan will be made publicly available to support transparency, accountability, and ongoing collective stewardship.

Feedback for improvement

Achieving lasting change requires collaboration between Harbour Accord agencies, mana whenua, community groups, stakeholders, and the wider community. We welcome your feedback and ideas on how we can strengthen the Action Plan and work together more effectively.

For any feedback, questions and enquiries relating to this document, please contact: porirua.harbouraccord@ngatitoa.iwi.nz

Te Rūnanga o Toa Rangatira
Porirua City Council
Greater Wellington
Wellington City Council
Tiaki Wai (formerly Wellington Water Ltd)

Mā tini, mā mano, ka rapa te whai!

By many, by thousands, the mahi will be accomplished.

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Te Wai Ora o Parirua logo



Te Wai Ora o Parirua logo draws from the traditional Māori koru form, reinterpreting its natural curve into a fluid water droplet. This transformation reflects both growth and renewal, while grounding the design in the identity of wai (water) as a source of life.

Each of the four droplets represents the four key principles of the Mauri Ora Framework: kiritau (restored balance), haumaru (safety, stability, resilience), oranga (healthy ecosystems and cultural practices) and the involvement of whānau and communities.

Further, with the Mauri Ora Framework, the four droplets also represent four related restorative aspects:

1. He wai hokinga mahara - The memory of the harbour.
2. Te ātete ki ngā mahi takahi tikanga, takahi Taiao - Environmental and cultural degradation and resistance.
3. Ngā pēhitanga parahanga o nāianeī - Pollution pressures the harbour is experiencing today.
4. Ka mua, ka muri. Te whakarauoratanga - The past in front of us: restoration and renewal.

By repeating and combining the form, the icon creates a sense of balance and connection — representing the coming together of people, place, and environment. The mirrored shapes suggest flow and continuity, echoing the movement of water and the interconnectedness of Porirua Harbour and its communities.

The overall composition symbolises kotahitanga (unity), wellbeing, and harmony — where individual elements move as one, reinforcing the kaupapa of Te Wai Ora and the harbour as a living, breathing entity.

**He iwi hauora
He moana hauora**

When the iwi is healthy,
the harbour is healthy.

1. Purpose and preparation of the Action Plan

On 6 February 2025, *Te Wai Ora o Porirua - Porirua Harbour Accord* (the Harbour Accord) was signed by representatives of Te Rūnanga o Toa Rangatira, Porirua City Council, Greater Wellington, Wellington City Council and Wellington Water Limited (the partner agencies).



Tiaki Wai is the new water services agency to be established on 1 July 2026. It is scheduled to sign the Harbour Accord on 15 July 2026.

The Harbour Accord is an agreement to restore the health of Te Awarua o Porirua (Porirua Harbour). The vision of *Te Wai Ora o Porirua* is:

Ko te ora me te mauri o Te Awarua o Porirua ka whakahokia, ā, ko ōna wai ka noho hauora, ka toitū mō ngā reanga kei te heke mai, me te hunga e noho ana, e mahi ana, e tākaro ana, e hono ana rānei ki te whanga.

The health and mauri of Te Awarua o Porirua is restored, its waters are healthy and sustainable for future generations and for those who live, work, play or connect with the harbour.

The purpose of this Action Plan is to give life to the vision of *Te Wai Ora o Parirua*. It articulates the three purposes of the Harbour Accord:

1. Establish an agreed approach between the partner organisations to improve the health of Porirua Harbour;
2. Agree on consistent, harmonised and collaborative actions which improve, restore and positively impact the harbour; and
3. Establish, implement and monitor well-resourced, accountable work programmes that deliver the improvements that will restore harbour health.

It affirms that restoring the harbour must be more than signing a document; it must result in real, effective actions on the ground and within the harbour's waterways.

The Action Plan gives effect to the objectives and principles of the Harbour Accord by articulating an implementation pathway based on an iwi-led mauri ora approach for the restoration of Te Awarua o Porirua. This includes developing agreed restorative actions which involve joined-up and aligned work programmes.

This is based on the fundamental principles of rangatiratanga, whakapapa, mana whenua, mahinga kai, manaakitanga, whanaungatanga, wairuatanga, kotahitanga and kaitiakitanga.

A separate companion document, the Harbour Monitoring Framework, will outline how performance measurement and reporting frameworks, including the state of the harbour's cultural health, and regulatory and evidence-based practices and mechanisms will be implemented.

Governance

The governance structure is founded on Te Tiriti o Waitangi partnerships. This structure is represented by the chief executives of each of the five partner agencies. The chief executives meet biannually to provide overall direction for *Te Wai Ora o Parirua*.

A steering group, consisting of senior staff representing each agency, reports to the chief executives and provides overall coordination and oversight. The steering group is chaired by Te Rūnanga o Toa Rangatira on behalf of Ngāti Toa Rangatira.

The steering group established a number of working groups to scope and develop the actions. We are now in the process of shifting or reconfiguring these groups to ensure joined-up and coordinated delivery of the agreed actions.

There are also specific groups for other purposes, like communications and engagement and the proposed marine education centre. It is envisaged that a harbour

monitoring and performance measurement committee will also be established in the future.

Preparing for the Action Plan

For Te Rūnanga o Toa Rangatira, *Te Wai Ora o Parirua* has involved extensive oral history, research and education about the history of the harbour. With the support of PHF Science, oral history interviews were conducted to capture the living memories of the harbour. A number of these interviews were featured in the videos at the signing of the Harbour Accord and at other events. The oral histories and interviews have supplemented existing research and contributed to *He wai hokinga mahara – the memory of the harbour*.

The research also involved the environmental degradation of the harbour and the whakapapa of resistance by the iwi. This research contributed towards the Mutumutu Ki Mukukai exhibition at Pātaka Art + Museum which opened on 6 December 2025.

This exhibition includes history of harbour degradation, submissions and petitions by the iwi to safeguard the harbour. A summary of this research is outlined in the *Te ātete ki ngā mahi takahi tikanga, takahi taiao – environmental and cultural degradation and resistance* section of this action plan.

The exhibition also triggered intentional research involving the original te reo names of bays and streams of Te Awarua o Porirua catchment (see Section 4 and Appendix 1).



Developing the Action Plan

The collaborative planning exercise undertaken by the partner agencies following the signing of the Harbour Accord has concentrated on the future *Ka mua, ka muri. Te whakarauoratanga – The past in front of us, restoration and renewal*.

This process has involved a dedicated effort to identify key outcomes to achieve the vision, measures of those outcomes, and key restorative actions to achieve them. The key steps in the process involved:

- The Harbour Summit on 5 March 2025 at Takapūwāhia Marae which was an opportunity to share the vision for the Porirua Harbour and ‘brainstorm’ ideas for the restoration of the harbour following the signing of the Harbour Accord.
- Three workshops were held at the Mana Cruising Club (Paremata) during August-September 2025. These workshops focused on addressing sedimentation and water pollution and enhancing indigenous ecosystems and habitats. This process included an examination of current work programmes along with actions and recommendations identified in past harbour strategies and documents, including:
 - Pāuatahanui Inlet Advisory Group, *Towards Integrated Management Pāuatahanui Inlet Action Plan*, 2000.
 - Porirua City Council, *Porirua Harbour and Catchment Strategy and Action Plan*, 2011.
 - Greater Wellington, *Te Awarua-o-Porirua Whaitua Implementation Programme*, 2019.
 - Te Rūnanga o Toa Rangatira, *Te Awarua o Porirua Whaitua Implementation Programme, Ngāti Toa Rangatira Statement*, 2019 and Harbour Review 2020.
 - KPMG, *Te Awarua-o-Porirua Harbour and Catchment Strategy Review*, 2020.
- During the workshops the most effective and feasible actions were selected and an intervention logic was applied to the priority actions. This logic model helps to illustrate a causal relationship between the proposed actions and the Harbour Accord outcomes and associated measures.
- Following the workshops, during November and December, further alignment and refinement of priority actions led to a final list of 15 actions. This phase also focused on ensuring the proposed actions would be effective in contributing to the outcomes of the Harbour Accord and on enabling Ngāti Toa Rangatira leadership.
- To refine and scope the actions, in early 2026, four working groups were established around clusters of actions. These groups are sediment solutions, water-sensitive catchments, thriving habitats, and harbour connections. The identified actions were allocated to the groups as outlined in the table below. This process enabled greater interrogation of the actions across scope, key outputs, resources and budget, timing, risks, and overall effectiveness in achieving the outcomes. It also, in the case of the harbour connections group, led to the action being broken down into six supplementary actions, which is how we now have 20 actions listed in this plan.

Working group	Actions
Sediment solutions	- Coordinated rural land engagement programme - Forestry engagement programme
Water sensitive catchment	- Identify and repair private and public leaks - Water sensitive design - Planning, compliance and regulation - Wastewater strategic programme - Stormwater and transport asset management - Transport network habitat restoration
Thriving habitats	- Titahi Bay Road coastal restoration - Shoreline habitat restoration - Ki Uta Ki Tai Waterway Restoration (including fish passage) - Integrated pest management programme - Wetland habitat restoration - High value habitat restoration
Harbour connections	- Bringing it all together - Our living streams - Community support - Kura connection - Pollution prevention - Marine education centre - Industry training

A monitoring and performance measurement group was also established to advise on how the actions would be tracked with respect to their impact on the long-term health of the harbour. We are currently considering options for joined-up monitoring of the harbour and how we will be able to report and track performance. This will be guided by the Performance and Monitoring Framework for the harbour, which includes the development of a dashboard for the integrated collection, review, and reporting of all relevant data related to harbour health and condition.

In addition to these actions, the research programme has focused on better understanding, and a stocktake of existing issues and pollutants which has built on existing research data associated with Te Awarua o Porirua *Whaitua Implementation Programme* and Plan Change 1 of the Natural Resources Plan. This stocktake is the basis for Section 7: *Ngā wero parahanga o nāianeī – pollution pressures the harbour is experiencing today.*

2. Mauri ora model for Te Awarua o Porirua

The concept of restoration is approached through the lens of mauri ora to articulate the central importance of ora as a holistic approach to wellbeing. The model has a particular focus on:

- The life of iwi members – from womb to grave.
- Rowing our own waka – designing and delivering ourselves.
- Driving change in complex social and environmental systems.
- Connected and joined up policy interventions.

For Te Awarua o Porirua, the Mauri Ora model is central to understanding Te Wai Ora o Parirua – He iwi hauora, He moana hauora.

Outcomes

Understanding of mauri is a sensitive endeavour. It goes to the heart of the relationship of people and the natural world and central to wellbeing and whakapapa.

For this reason, the Mauri Ora Framework developed for Te Awarua o Porirua is an emerging process – it is being developed as we gain a deeper understanding of the history of the harbour, the current pollution pressures and find our way forward towards restoration. A restored harbour is recognisable when the following outcomes have been achieved:

Oranga

- Mahinga kai practices are restored and maintained.
- Intergenerational wellbeing and transmission of knowledge.

Haumaru

- Clean fresh and estuarine water.
- The harbour, iwi and communities are safe from ongoing pollution and degradation.
- Ecosystems are stable and resilient.
- Iwi and communities can interact with the harbour without risk to health.
- Sustainable customary and recreational practices are safeguarded.

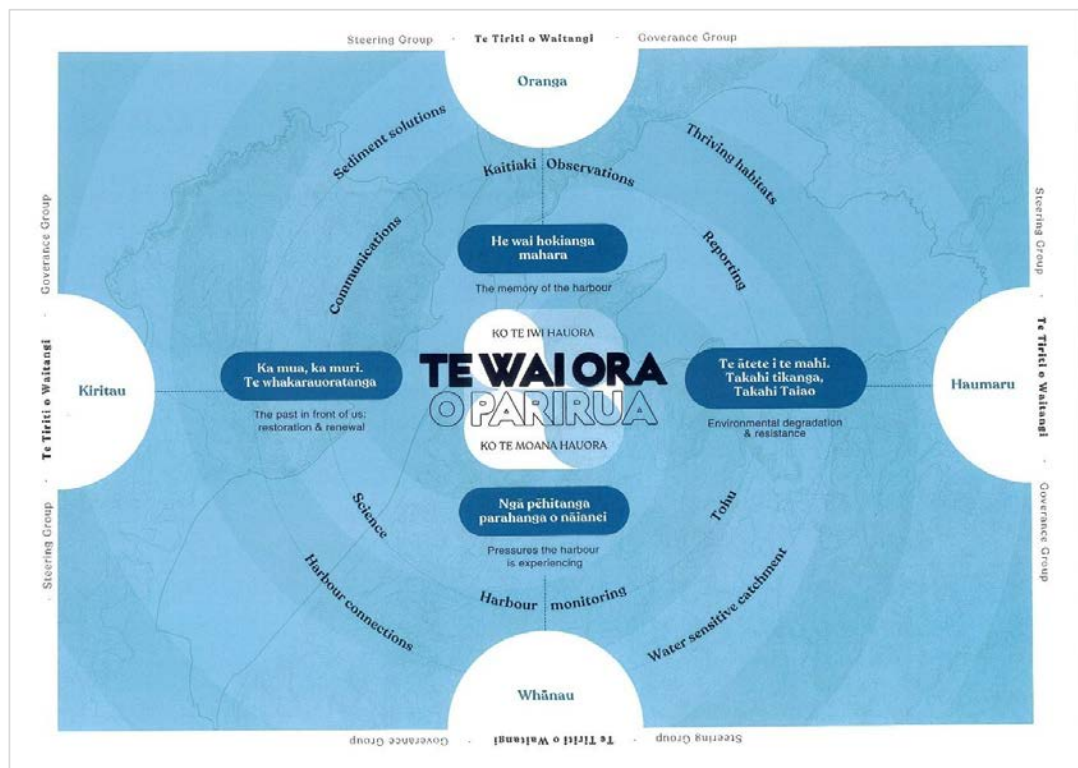
Whānau

- The restoration of the capacity of whānau to exercise manaakitanga – being able to care, exercise guardianship, empower and plan ahead.
- Support and care for local communities to interact with the harbour.

Kiritau

- Restored mana, respect and esteem.
- Fair sharing of benefits, costs and responsibilities.

In addition to the application of the entire catchment, these outcomes are also specific to each waterway and associated whenua, such as Taupō, Te Kāhaho, Waiohata, Kenepuru, Mahinawa, Kahotea, etc. Ideally, each stream and associated catchment will be guided by an individual Mauri Ora plan. To start, the intention is to develop Mauri Ora plans for the Kahotea and Takapū Streams.



Mauri Ora Framework, Te Wai Ora o Parirua

Restorative aspects

The Mauri Ora Framework means going beyond superficial attempts at environmental education or improvements. It requires a deep understanding of a whakapapa of resistance and resilience whereby the journey towards future restoration is directed by ngā tapuwae o ngā tūpuna – in the footprints of our ancestors. This involves four related restorative aspects:

1. He wai hokinga mahara – the memory of the harbour.
2. Te ātete ki ngā mahi takahi tikanga, takahi Taiao – environmental and cultural degradation and resistance.
3. Ngā pēhitanga parahanga o nāianei – pollution pressures the harbour is experiencing today.
4. Ka mua, ka muri. Te whakarauoratanga – the past in front of us, restoration and renewal.

Each of these aspects relates to certain time periods and events in the history of Te Awarua o Porirua. As a collective, the restorative aspects will provide insight into mauri – vitality, environmental health, and capacity.

The Mauri Ora model is founded on the belief that the harbour's unique memories are not merely an 'original' state of the harbour existing in 1840 or earlier. But a memory of active kaitiaki, mahinga kai, swimming, diving and other customary activities is alive today. Those memories from the 1950s have been dimmed amid environmental degradation and pollution. And yet, new memories can be recreated. Our tamariki and mokopuna may once again return to the harbour to gather kaimoana, fish and play.

With absolute clarity about the damage to the harbour and the existing pressures today, actions have been developed to achieve the vision – health and mauri of Te Awarua is restored.

The effectiveness of the actions provides pathways to tangible, positive outcomes. It is an intentional system change that recognises that no one agency has the technical capacity, resources or capability to tackle the state of Te Awarua o Porirua.

It is based on indigenous and developmental action evaluation (theories of change), which recognises that the effectiveness of actions will be dependent on the effectiveness and strength of our collaboration.² This is why a key principle of *Te Wai Ora o Parirua* is a commitment to partnership that honours Te Tiriti o Waitangi, demonstration of kotahitanga and manaaki tangata.

Our collaboration has identified actions that will provide a pathway towards achieving the outcomes. These actions are outlined in the section below: *Ka mua, ka muri. Te whakarauoratanga – The past in front of us, restoration and renewal.*

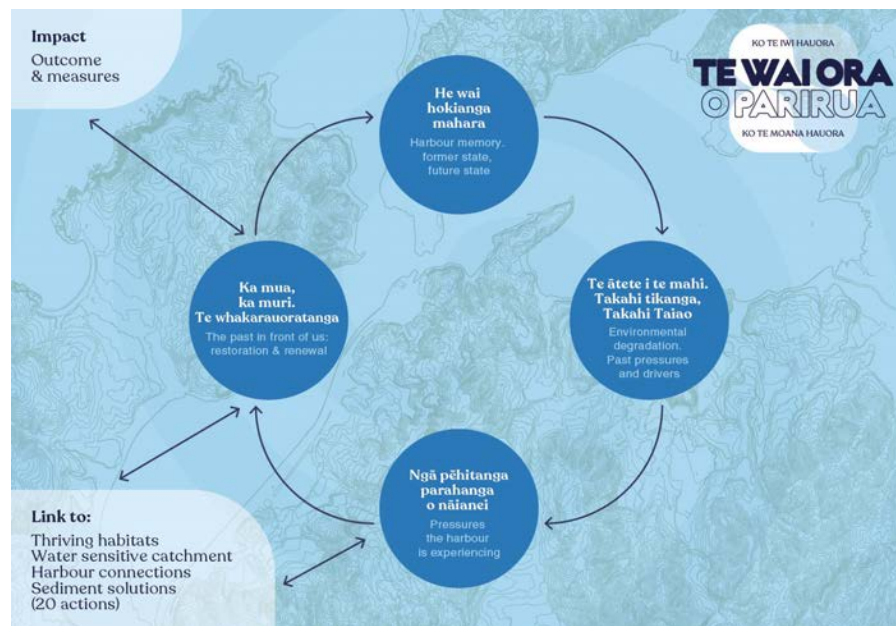
For the purposes of this Action Plan, the following explanations of key terms apply:

- **Outcomes** are tangible expressions of the vision for Te Awarua o Porirua: Oranga, Haumaru, Whānau and Kiritau. These tangible expressions include clean fresh water, mahinga kai restored, ecosystems are resilient, whānau exercising manaakitanga, mana restored, etc.
- Outcomes are associated with specific **measures**, which are used to determine if the outcome is achieved (or progress is being made to achieve the outcome).
- The specific measures of the outcome are recorded in the context of wide environmental **indicators** which are adopted to summarise and communicate the cultural health of the harbour.
- **Pressures** are natural or human influences that result in environmental changes in the state of the harbour. These pressures occur in the context of environmental degradation, pollution, contamination, sedimentation and habitat loss.³

² Latham, Nancy. 2014. A practical guide to evaluating systems change in a human services system context. Centre for Evaluation Innovation, p 15

³ The term pressures closely reflects the definition in the Environmental Reporting Act 2015 which states "natural or human-induced circumstance, factor, element, activity, or process."

- The **state** is a snapshot or summary of the cultural health of the harbour. This involves an understanding of **vitality and wellbeing** based on the indicators, pressures and actions (including an evaluation of the effectiveness of the actions).
- **Actions** are dedicated pathways or programmes by agencies and groups to achieve the outcomes by addressing specific pressures.



Detail of Mauri Ora Framework

In summary, our actions address the pressures confronting the harbour and, in doing so, will make progress towards the outcome of restoration.

Mauri ora restoration aspects	Te ātete ki ngā mahi takahi tikanga, takahi taiao – environmental and cultural degradation and resistance	Ngā pēhitanga parahanga o nāianeī – pollution pressures the harbour is experiencing today	Ka mua, ka muri. Te whakarauoratanga – The past in front of us, restoration and renewal	He wai hokinga mahara – the memory of the harbour
Category	Pressures context	Pressures	Actions	Outcomes and measures
Key themes	Reclamation and damage to shorelines Deforestation Sedimentation Water pollution Habitat loss Highly modified and damaged waterways	Sedimentation Water pollution and contaminants Habitat loss	Water sensitive catchment Thriving habitats Harbour connections Sediment solutions	Oranga – mahinga kai practices restored, international transmission of knowledge. Haumarū , clean and safe waters, healthy ecosystems. Whānau – capacity to exercise manaakitanga. Communities care and interact with the harbour. Kiritau – restored mana, respect and esteem. Fair sharing of benefits, costs and responsibilities.

Measures and indicators

A wide range of measures and indicators are required to understand what the harbour is speaking – they are voices of Te Awarua o Porirua.

Two main types of measures and indicators are specified in this Action Plan:

1. Primary measures that directly track progress towards the outcomes.
2. Indicators that characterise the outcomes generally.

There will also be specific indicators designed for Mauri Ora plans for the individual streams.

Primary measures

The primary measures have been selected based on their strong relationship to the outcomes. They provide an insight into the critical question of progress towards meeting the vision of the Harbour Accord. The measures have been developed as part of the monitoring experience over the past 20 years or so and oral histories and interactions with the harbour going back in time.

The measures are primarily taonga species and associated mahinga kai practices, which provide a window into the harbour's broader cultural and ecosystem health. This reflects that taonga species are sensitive to water quality, habitat condition, and pollution. Declines in shellfish abundance, contamination, or restricted harvesting directly indicate environmental stress in the harbour, such as sedimentation, wastewater overflows, or loss of habitat. Conversely, healthy populations suggest functioning ecosystems with balanced nutrient levels and good water quality.

The specific measures will be assessed in the context of a range of indicators across the catchment relating to freshwater and marine ecology, include sedimentation rates, freshwater quality, etc. While the primary measures will be outlined in the separate monitoring and performance report, the table below provides a high-level, indicative framework.

<i>Cockles collected from the five mahinga kai sites are healthy and free from pollutants and contaminants.</i>	Number of cockles per season suitable for consumption in waters and sediment that have been assessed as safe. Passive samples may be used for this measure.
<i>Seagrass is present and abundant in the tidal estuary.</i>	Change in area weighted average % cover of selected representative seagrass beds.
<i>Birds are present which are reliant on coastal/stream habitat, nesting sites and marine and stream ecosystems. The birds include kotare (kingfisher), tītī (outer harbour), mātaku moana (white-faced heron), māātā (fern bird), poaka (pied stilt).</i>	Measure to be developed based on successful nesting sites and bird observation surveys.
<i>Fish are present and thriving, especially tuna, kōrua (freshwater crayfish), kokopu, (makō) rig, kahawai, pātiki (flounder), aua (yellow eyed-mullet).</i>	Measure to be developed based on fish survey and observations.

These primary measures will inform a hui or wānanga organised by the iwi on marae which involves the serving of kaimoana gathered from the harbour and its catchment. The undertaking of this event will be a major milestone in achieving the outcomes of *Te Wai Ora o Parirua*.

Indicators

Indicators are markers of broader changes in the cultural landscape of Te Awarua o Porirua. They involve three main aspects:

- Indicators of historical degradation. For example, the percentage of the original harbour reclaimed.
- Indicators of pressures. For example, the number of wastewater overflows per annum.
- Indicators of vitality and well-being. For example, number of streams adopted by schools as part of restoration projects.

The indicators and measures require a monitoring approach involving two baskets of knowledge – Mātauranga o Toa Rangatira and He Waka Taurua modern science approaches: Nāu te rourou, nāku te rourou, ka ora ai te iwi. This means that each aspect of the harbour story involves a research and monitoring programme that incorporates both Mātauranga o Toa Rangatira and modern scientific approaches from He Waka Taurua. The table below provides several examples.

	<i>Mātauranga o Toa Rangatira</i>	<i>He Waka Taurua</i>
<i>Original harbour prior to 1846</i>	Oral histories, pūrākau, waiata, tribal histories, letters.	Palynology (pollen samples), sedimentology, archaeological midden analysis, written histories and evidence.
<i>Addressing environmental changes since 1846</i>	Oral histories, submissions, petitions, protests, tribal histories, photographs.	Historical evidence, investigation reports, photographs, etc.
<i>Tackling environmental challenges today</i>	Kaitiaki observations - oral histories, cultural health, mahinga kai.	Bathymetry, consenting data, water monitoring indicators, wastewater and stormwater data, habitat surveys.
<i>Tracking restoration of the harbour into the future</i>	Kaitiaki observations - cultural health, mahinga kai.	Water monitoring indicators, habitat surveys, wastewater and stormwater data, etc.

3. Introducing Te Awarua o Porirua

The Porirua cultural landscape

Names and boundaries express the identity and ahikā of Ngāti Toa Rangatira. Names indicate the complex connections between iwi and whenua (mana whenua) and express whakapapa and rangatiratanga.

Names were applied to specific landmarks and related to general areas or regions. As an example, Tamihana Te Rauparaha, recorded that 'Wairarapa' was the general name for the lower North Island region, including Porirua.⁴ This name reflected the interests of Ngāti Kahungunu (including Ngāti Ira) in the region prior to the arrival of Ngāti Toa Rangatira. Another name used for the west coast of the lower North Island was Te Rā Whiti.⁵

During the Āmiowhenua expedition in 1819, Te Pēhi Kupe set aside the Porirua lands as a 'reserve' for Ngāti Toa Rangatira by erecting a pou at Pukerua.⁶ Te Pēhi Kupe also named the places along the coast at Te Whanganui a Tara and Porirua. Following the arrival and occupation of Ngāti Toa Rangatira and allies after 1820, districts or areas were known as Te Whanganui a Tara (Pōneke), Omere (Terawhiti), Ōhāriu (Makara), Porirua, Kapiti and Ōtaki.⁷

The Ngāti Toa Rangatira settlement at Porirua was not limited to the harbour but extended to the entire coastal area, streams, and associated hill country. Native Land Court evidence records constant movement and coastal occupation, mahinga kai, tauranga waka at coastal locations as Komangarautāwhiri, Wairere and Ōhāriu.⁸ Also closely related to Ngāti Toa Rangatira were the occupations of Ngāti Tama at places such as Komangarautāwhiri, Kaiwharawhara and Ōhāriu along the coastal area south of Titahi Bay.

With the arrival of the New Zealand Company in 1839 and attempts by both the Company and the Crown to acquire the 'Porirua District', the lands north of Te Whanganui a Tara were generally referred to as 'Porirua'. This district name often included Heretaunga or Te Awakairangai (Hutt River). However, as noted by the Waitangi Tribunal, it is 'impossible to delineate precisely' the extent of areas such as Heretaunga.⁹

⁴ Rauparaha, Tamihana, 1819-1876 te. 2020. *He Pukapuka Tātaku i Ngā Mahi a Te Rauparaha Nui / A Record of the Life of the Great Te Rauparaha* by Tamihana Te Rauparaha; Translated and Edited by Ross Calman. Auckland: Auckland University Press, p 69

⁵ *ibid*, p 113

⁶ Evidence of Wi Neera Te Kanae, Minutes of Native Land Court, Komangarautawhiri A, Wellington MB, 12, 24 September 1903, page 13; Evidence of Wi Parata Te Kakakura, Minutes of Native Land Court, Komangarautawhiri A, Wellington MB, 12, 7 October 1903, p 50

⁷ Rauparaha, Tamihana, 1819-1876 te. 2020. *He Pukapuka Tātaku i Ngā Mahi a Te Rauparaha Nui / A Record of the Life of the Great Te Rauparaha* by Tamihana Te Rauparaha; Translated and Edited by Ross Calman. Edited by Ross Calman. Auckland: Auckland University Press, p 67

⁸ For example, Evidence of Pirihana Tungia, Minutes of the Native Land Court, Kahotea, Otaki MB 28, 26 August 1895, p 230

⁹ Waitangi Tribunal, *Te Whanganui a Tara me ona takiwa: report ont eh Wellington district*, Wellington, NZ, 2013, p 188

William Spain investigated the New Zealand Company alleged 'purchase' of Porirua and other pre-1840 land claims in 1843.¹⁰ Spain adopted the New Zealand Company maps and surveys of the district to set out the boundaries of the Port Nicholson block which involved a line from the coast at Papanui Point (Pipinui) (at section 53, Ohariu District), near the Halfway House at Glenside, section 54 Horokiri Road District and across to Heretaunga River.¹¹ This boundary influenced the creation of Wellington City district.

Following a military campaign by Governor Grey in 1846 which resulted in the capture of Te Rauparaha, the Porirua district was alienated from Ngāti Toa Rangatira. Under the 1847 Porirua Deed of Purchase, eastern boundary of Porirua at Te Awa Kairangi (Heretaunga) with the northern-eastern point being Wakataka Pā located at the Te Marua golf course, on the western side of the Mangaroa River and Te Awa Kairangi River.¹² Under the 1847 Deed, 'Porirua' included the coastal lands south to Ōhāriu and beyond and over to the Hutt Valley to the east. This is the cultural context and setting of the physical catchment of Te Awarua o Porirua.

Naming and defining Te Awarua o Porirua

Within the waters of Te Awarua o Porirua, is a taniwha who is known as Te Awarua o Parirua. Te Awarua o Parirua resides near Mana and created the distinctive shape of Te Mana o Kupe ki Aotearoa (Mana Island).¹³ While there is ongoing debate about the name Parirua or Porirua, the Ngāti Toa Rangatira Claims Settlement Act 2014 adopts the name 'Te Awarua o Porirua' (Porirua Harbour).¹⁴

There are two main 'arms' of Te Awarua o Porirua – Pāuatahanui and Parumoana. Parumoana is often referred to as the Te Onepoto Arm of the harbour.

The reclaimed areas of the original harbour are also still considered to be integral parts of Te Awarua o Porirua from the viewpoint of Ngāti Toa Rangatira.

¹⁰ Waitangi Tribunal, *Te Whanganui a Tara me ona takiwa: report on the Wellington district*, 2013, p 163

¹¹ McClean, Robert, *Te Ara Taura and Te Kenepuru, A Report of the Porirua Hospital Lands for Te Rūnanga o Toa Rangatira*, 1997, p 20

¹² While the 1847 Porirua Deed included a map of the three reserves, the actual boundaries of the Porirua district were not mapped and are generally vague. Te Kenepuru Valley was located between the Port Nicholson Block boundary and the Porirua reserves boundary at Te Ara Taura. The alienation of these lands was not investigated by the Waitangi Tribunal in the Wellington District inquiry and the Tribunal's report of 2013

¹³ Statement of Coastal Values, Ngāti Toa Rangatira Deed of Settlement, Documents Schedule, 2.2

¹⁴ The Ngāti Toa Rangatira Claims Settlement Act 2014, changed the official geographic name of the harbour from 'Porirua Harbour' to Te Awarua-o-Porirua Harbour. Generally, this official name is adapted as simply 'Te Awarua o Porirua (Porirua Harbour)' in common usage



Indication of original extent of Te Awarua o Porirua shoreline



Shoreline marker located at the entrance of North City Plaza (eastern doorway)

Whitireia, Toka-a-papa (the Reef) and Te Rewarewa Point are recognised by Ngāti Toa Rangatira (and acknowledged in the Deed of Settlement) as the entrance to Te Awarua o Porirua. These landmarks include the important pou whenua and sea of Hongoeke, Motuhara, Taupō and Tawhitikurī.

Te Awarua o Porirua is also inseparable from Te Ara Taura, Wairere, Komangarautāwhiri (Titahi Bay South Coast). The coast has shared history with Te Awarua o Porirua and the wastewater discharge outfall at Rukutane Point remains an ongoing issue for Ngāti Toa Rangatira relating to Te Awarua o Porirua.

Te Mana o Kupe (Mana Island) is an important guardian of Te Awarua o Porirua. The island is physically and culturally joined to the Porirua landscape. The 'bridge' is a geo-physical reminder of this connection.

Te Awarua o Porirua includes the streams and creeks flowing into the harbour within the catchment. There are 11 coastal areas and catchments as outlined in Appendix 1. The coastal areas have many small creeks running directly into the sea. The catchments generally have one mainstream with many small creeks.

1. Te Rewarewa ki Paremata (coastal area)
2. Taupō catchment
3. Te Kākaho catchment
4. Horokiri catchment
5. Te Noakau catchment
6. Pāuatahanui catchment
7. Waiohata catchment
8. Waiohata ki Kenepuru (coastal area)
9. Kenepuru catchment
10. Kenepuru ki Rukutane (coastal area)

The coastal area between Te Rewarewa (Hongoeka) and Wainui (Paekākāriki) is also closely connected to Te Awarua o Porirua.

Te Kenepuru is the main southern stream flowing into Te Awarua o Porirua and has a number of puna (springs) with the primary source located in the Paparāangi hills (Newlands) within the Seton Nossiter Park.¹⁵ The main branch of Te Kenepuru is often called the 'Porirua Stream'.

The name 'Te Kenepuru' is associated with the alluvial silt flats and the original fertile plains of the stream within Te Kenepuru Valley and the substantial original wetland at Te Awarua o Porirua (Parumoana).¹⁶ As outlined by Te Taku Parai:

The name Kenepuru...takes its name from its association with Parumoana, from Tawa flowing down through to the harbour bringing with it silt and other deposits culminating in the harbour becoming a mātaiai of food sources relevant to the sustaining of Urukahika and Takapūwāhia kāinga.¹⁷

Te Kenepuru has a number of smaller branches including Takapū Stream and Te Rata Stream (Mitchell Stream). From Takapū flowing down to Te Kenepuru and then to Parumoana, the name and sense of the stream changes:

Tracking the Kenepuru stream south it takes on a different name towards the northern tip of the Kenepuru stream, the name Takapū becomes relevant. My observation and example here is that the Kenepuru (Mephram Place) may have had relevance to a certain distance in land to where the

¹⁵ The name 'Te Kenepuru' is common in Ngāti Toa histories, Native Land Court evidence and events such as the rāhui of 1841 at Glenside to stop surveyors and settlers coming north into Porirua. There were temporary camps and occupation sites along the river to access mahinga kai

¹⁶ Proceedings of the Native Land Court, 7 August 1883, R19981317, ADOE, 16612, M1, 621/Apr-69, Porirua Harbour, 1880-1944, Archives New Zealand

¹⁷ Te Taku Parai, pers comm, 2 March 2022

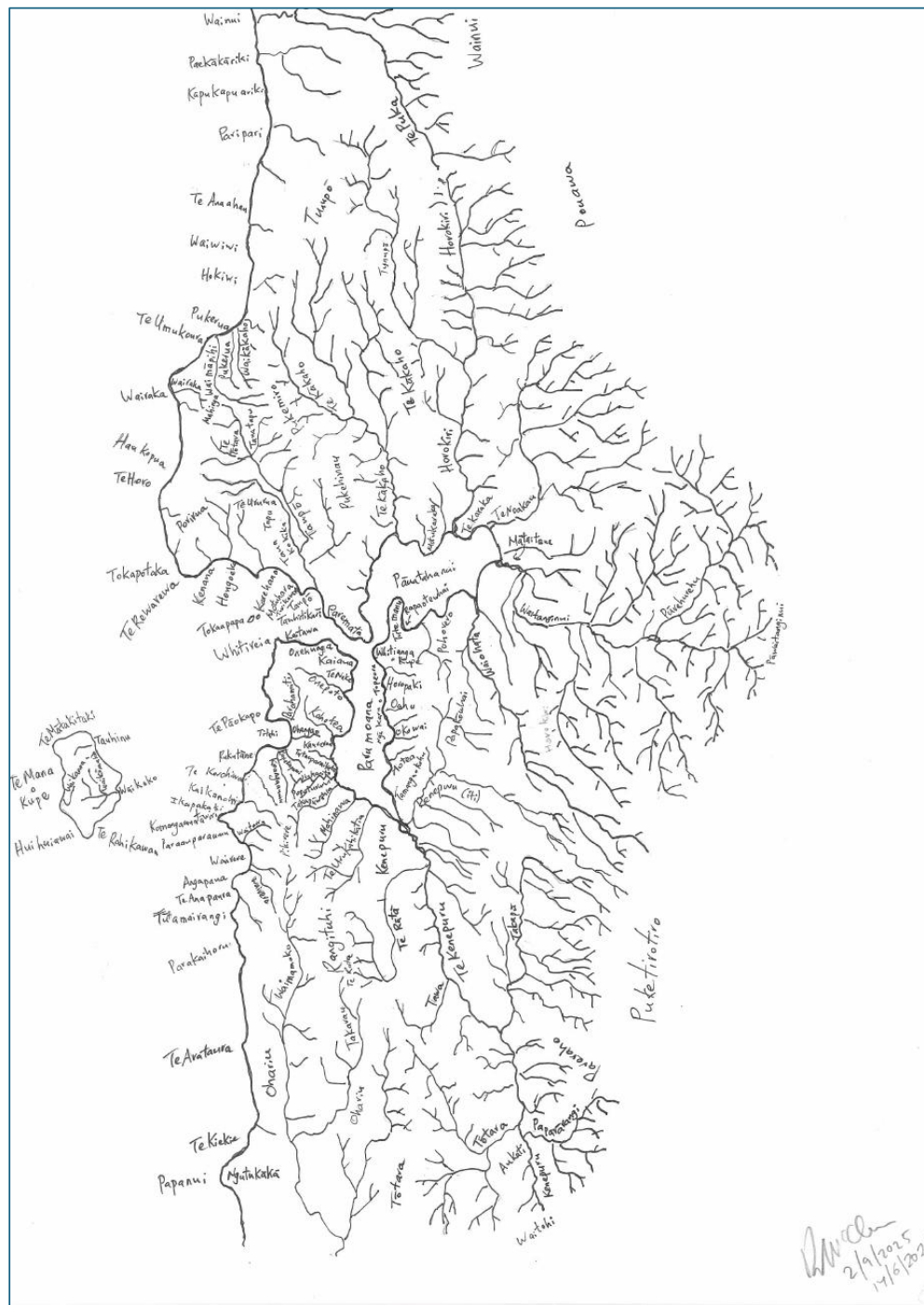
silt and paru ceases. Then from a certain point further up flowing down to where both clearer water and paru water meets takes in the name Parirua stream.¹⁸

For Ngāti Toa Rangatira, the Parumoana wetland and the lower delta of Te Kenepuru was an important mahinga kai site, especially as a significant habitat for īnanga, kōkopu, kōaro and longfin eel.¹⁹

There can be some confusion about the name Te Kenepuru due to the stream from Cannons Creek being officially named 'Kenepuru' and Te Kenepuru officially named 'Porirua Stream'. Te Rūnanga o Toa Rangatira will be working towards clarifying the stream names of Te Kenepuru and future naming process with the New Zealand Geographic Board.

¹⁸ Te Taku Parai, pers comm, 2 March 2022

¹⁹ Kaumatua Taku Parai, quoted in Michael, Keith. Naylor Reyn, 'Shellfish Resources of Porirua Harbour, A Summary of Ngati Toa Kaumatua oral histories and available information'. Prepared for Ngati Toa, NIWA, 2013, p 53



*Te Awarua o Porirua, sketch map of original waterways, R McClean, June 2026.*²⁰

²⁰This map was created for the Mutumutu ki Mukukai exhibition at Pātaka Art + Museum, Porirua.

Recognition of the harbour under Ngāti Toa Rangatira Treaty Settlement

The Ngāti Toa Rangatira Deed of Settlement was signed at Parliament on 7 December 2012. The terms and provisions of the Deed of Settlement were enacted into law on 22 April 2014 under the Ngāti Toa Rangatira Claims Settlement Act 2014.

The acknowledgement states that the Crown “failed to adequately protect the interests of Ngāti Toa Rangatira” in relation to some of the most high-profile breaches of Te Tiriti o Waitangi. These include the acquisition of the Port Nicholson Block, the Wairau incident of 1843, the detention of Te Rauparaha in 1846 until 1848, pressure to agree to land sales, the Native Land laws, loss of the Taupō block, Whitireia and Kapiti Island, taking of land under the Public Works Act and environmental degradation of Porirua Harbour. The acknowledgement states:

The Crown acknowledges that pollution, reclamation and public works have had a damaging impact on the shellfish and other kai moana resources in the Porirua Harbour, and that the loss of this formerly abundant resource has adversely affected the cultural and spiritual well-being of Ngāti Toa Rangatira.

The apology states:

The Crown unreservedly apologises for the breaches of Te Tiriti o Waitangi/the Treaty of Waitangi and its principles which have hurt and caused prejudice to Ngāti Toa Rangatira.

The apology also sets out a foundation for a future relationship:

With this apology and settlement the Crown seeks to atone for these wrongs, restore its tarnished honour and begin the process of healing. The Crown hopes that this apology and settlement will mark the beginning of a new, positive and enduring relationship with Ngāti Toa Rangatira founded on mutual trust and co-operation and respect for Te Tiriti o Waitangi/the Treaty of Waitangi and its principles.

The cultural redress package in the 2012 Deed of Settlement emphasises the marine and coastal environment. This means that many of the cultural redress mechanisms in the Ngāti Toa Rangatira settlement, while common across the country, relate to the coastal environment. These include vested reserve land, statutory acknowledgements, deeds of recognition, place-name changes, and overlay classifications.

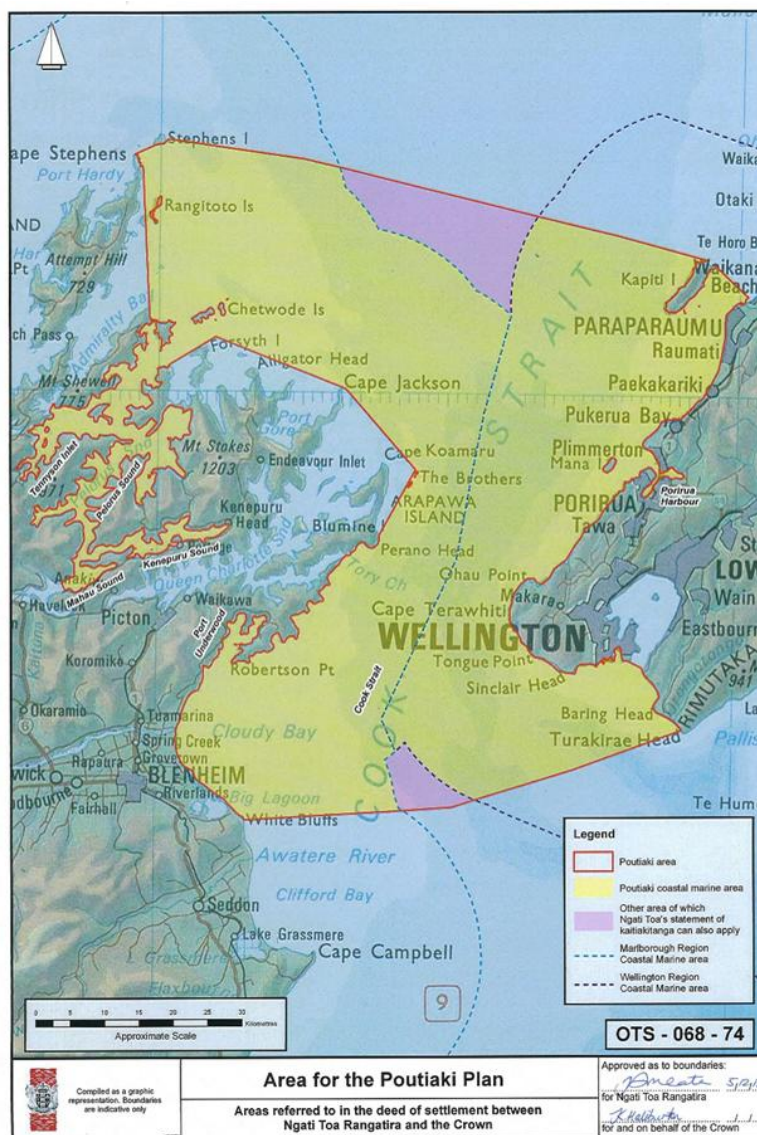
Te Awarua o Porirua is recognised as a key gateway and tauranga waka to Te Moana o Raukawa (Cook Strait). The combination of the Cook Strait statutory acknowledgement, the poutiaki plan, Cook Strait Forum, ngā paihau, vested land and the various coastal statutory acknowledgements establishes one of the largest maritime statutory areas in Aotearoa-New Zealand.

The **poutiaki plan** covers an area similar to the Cook Strait statutory acknowledgement but includes Te Awarua o Porirua, Te Whanganui (Port Underwood) and the Pelorus Sound/Te Hoiere (including Kenepuru Sound, Mahau Sound, and Tennyson Inlet) (see map below).²¹ It is likely that areas such as Queen Charlotte

²¹ It is noted that part of this area includes areas of sea beyond the territorial sea of Aotearoa-New Zealand. These areas are coloured purple and lie outside of the poutiaki coastal marine area.

Sound, the southern Marlborough coast and the eastern seaboard of Rangitoto ki Te Tonga (D'Urville Island) were not included in the poutiaki plan as a result of overlapping negotiations with Te Taihū iwi and Ngāi Tahu. Under the Ngāti Toa Rangatira Claims Settlement Act 2014, the poutiaki plan enables the Toa Rangatira Trust to prepare a plan which must specify:

- (a) the values and principles of Ngāti Toa Rangatira in relation to the poutiaki coastal marine area; and
- (b) the resource management issues of significance to Ngāti Toa Rangatira in relation to the poutiaki coastal marine area; and
- (c) Ngāti Toa Rangatira's statement of kaitiakitanga for fisheries management in the poutiaki area.

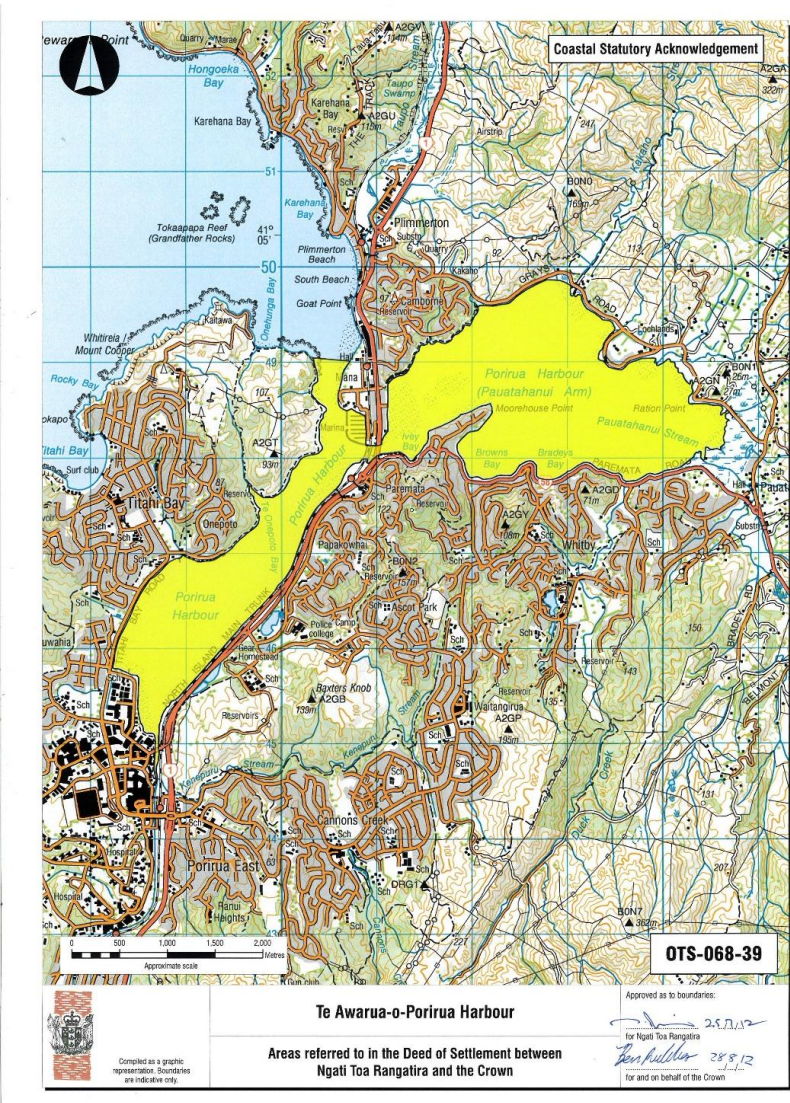


Poutiaki plan area.

Once prepared, the poutiaki plan must be 'taken into account' by the Marlborough District Council and Greater Wellington, who are responsible for environmental planning within the coastal marine area.

This provision applies when the local authorities are preparing or changing a regional policy statement or regional coastal plan that wholly or partly covers the poutiaki coastal marine area. In particular, the local authorities must include in the regional policy statement or regional coastal plan a statement of the resource management issues of significance to Ngāti Toa Rangatira as set out in the poutiaki plan.

In addition to the poutiaki plan, Te Awarua o Porirua is also recognised as a statutory acknowledgement (see map below). Other relevant statutory acknowledgements include Tawhitikurī/Goat Point, Toka-a-Papa Reef, Pāuatahanui Wildlife Reserve, Battle Hill Farm Forest Park Reserve and the Horokiri Wildlife Management Reserve. The Pāuatahanui and Horokiri reserves are managed by the Department of Conservation while Greater Wellington manages Battle Hill Regional Park. Tawhitikurī is a rocky point south of Plimmerton Beach (also known as Goat Point) and Toka-a-Papa is a reef at the entrance of Te Awarua o Porirua. The place name changes are at Te Rewarewa Point, Mount Porirua, Motuhara Point, Taupō Point and Rangituhi/Colonial Knob.



Te Awarua o Porirua coastal statutory area.

4. He wai hokinga mahara – the memory of the harbour

Te Awarua o Porirua is the ancestral landscape of the harbour, a sustained living and breathing entity – Te Wai Ora o Parirua. The harbour is a memorial landscape – a place of memory and memories. He wai hokinga mahara captures not only the memories of the harbour but also the harbour's memory of itself as an original healthy awa.

Te Awarua o Porirua is not an *untouched* environment without the footprint of Māori occupation and use. It is a time of distant pasts when the taniwha known as Te Awarua o Parirua, who resides near Paremata, created the distinctive shape of Te Mana o Kupe ki Aotearoa (Mana Island).²²

There are many and diverse sources of mātauranga and knowledge about the nature of the ancestral landscape. These are the histories of the iwi especially whakatauākī, maramataka, karakia, pepeha, pūrākau and waiata. These forms of knowledge are the basis for tribal histories and clues to environmental change, including fisheries and kaimoana health.²³ This knowledge continues to be sustained up to the present day and into the future.

Knowledge and history are maintained by individuals and whānau of Ngāti Toa Rangatira. As an example, Mātene Te Whiwhi was a distinguished Ngāti Toa Rangatira historian and keeper of sacred stories and traditions. Mātene Te Whiwhi learned many of these stories from Te Rangihaeata and shared some of these histories with Governor George Grey in the 1840s which were published by Grey in 1854 as *Ko Ngā Mahi a Ngā Tūpuna Māori: He Mea Kohikohi Mai*.²⁴

Other sources of documented history include whakapapa books, letters, photographs, recorded oral histories, palynology (pollen samples), sedimentology, archaeological midden analysis and the minutes of the Native Land Court which often recorded mahinga kai, fishing practices, tikanga and other customary rights.

Oral histories

There are myriad stories and histories connected to customary practices of fishing, gathering kaimoana, waterways and waka. The surrounding indigenous forests were sources of timber, mahinga kai, rongoā and hunting grounds. Ngāti Toa Rangatira histories recall the dense forests covering the hills and valleys of the Porirua lands. These forests were mahinga kai sites and sources of customary harvest of birds (ie, pigeons and game birds) and tree berries, especially karaka. Within the forest, there were isolated clearings for cultivations.²⁵

²² Statement of Coastal Values, Ngāti Toa Rangatira Deed of Settlement, Documents Schedule, 2.2

²³ Keith, Michael and Naylor Reyn, *Shellfish Resources of Porirua Harbour, A Summary of Ngāti Toa Kaumatātua oral histories and available information. Prepared for Ngāti Toa, NIWA, January 2013*

²⁴ Grey, George. *Polynesian Mythology and Ancient Traditional History of the New Zealand Race and Ancient Traditional History of the New Zealand Race: as Furnished by Their Priests and Chiefs, Ko Ngā Mahi a Ngā Tūpuna Māori: He Mea Kohikohi Mai*, George Willis, 1854. Simmonds attributes a substantial part of the legend to Matene Te Whiwhi who obtained the story from Te Rangihaeata: Simmons, D. S. "The Sources of Sir George Grey's Nga Mahi a Nga Tūpuna." *Journal of the Polynesian Society* 75.2 (1966): 181

²⁵ Evidence of Tamihana Te Rauparaha, Haukopua Block, Translation of Maori Verbatim Evidence, Wellington Native Land Court Minute Book 1H, 2 November 1871, page 279-280

Ngāti Toa Rangatira were renowned for kaimoana from Te Awarua o Porirua. In fact, it was very much expected that Ngāti Toa Rangatira would arrive at events such as tangi with kaimoana as an expression of the mana of the iwi. Ariana Eileene Rene said 'You know in lots of places when you go to and you hear tales that are spoken of after the event. And they say: 'Ka haere mai a Toa me ngā kai – and all that sort of thing.'²⁶

In 1937, in all those years from 1937 till we moved away to D'Urville Island in the early nineteenth fifties – we used to gather pipis and pūpūs, flounders, conger eels and all those sorts of things from out here [Porirua] – to take up the line to our relations or to tangihangas or hui and that – up the line, you know. I could recall when they used to have what they called hangis out on the mud flats. They used to go and build the rocks all around up about that high. When the tides were good and there was nothing on we used to have to go out there and fill those things up with pipis. Gather the pipis and put it in there and if there was anything happening you could go out there at half tide – it didn't have to be low tide, - and just fill the bags up to take away. You know when Dave Tatana died in Poroutawhao – we took ten bags of pipis up and that's what we'd done before – the weeks before – filled the hangis up with pipis and all they had to do was to go and fill them up – to take up to the tangihanga. And during the opening of Raukawa [Marae] in 1936 – that was before my time, but I can remember the crowd from here coming up – bringing pipis and that from here, and dried conger eels.²⁷

Te Rangihoungariri (Joe) Solomon also recalled in 1960 the connection between Te Awarua o Porirua and the coast and the exchange between iwi:

Whenever there was a tangi or other feast, there was an abundant supply of food to be had from the harbour. The Tribe also used the food obtained from the Harbour by putting it in sacks and sending it up country. In return they would receive flour, bacon, sugar and other stores. I recall the Tribe receiving flour from Māori who used to mill it in the Rangitīkei District.²⁸

The kaimoana of Te Awarua o Porirua was so plentiful that if kai for manuhiri was running out during an event, the answer was that 'you whipped down to the beach and you got another feed of pipis you know – so that was our saviour.'²⁹ Oral histories also record that Ngāti Toa Rangatira received less unemployment support from the government than Pākehā due to amount of kaimoana that could be harvested. According to Ihakara Arthur:

²⁶ Eileen Rene, Ngāti Toa Rangatira Traditional Oral History Report, Recorded at Takapūwāhia by Josephine Paul, 24 February 1999, TR 77, Box 77, Te Rūnanga o Toa Rangatira

²⁷ Ariana Eileene Rene, Ngāti Toa Rangatira Oral History Report, Recorded at Takapūwāhia by Miria Pomare, 1999, pp 10-11, TR77, Box 77, Te Rūnanga o Toa Rangatira

²⁸ Te Rangihoungariri (Joe) Solomon, Fishing - Policy And General - Porirua Harbour - Pollution Of Shell Fish Beds, 1960, R22156828, Archives NZ

²⁹ Hinerau Wineera, Ngāti Toarangatira Traditional Oral History Report, Interview by Taku Pārai, Pukearuhe 1999, TR77, Box 77, Te Rūnanga o Toa Rangatira

During the depression, our people got a few dollars less than Pākehā relief workers. And it was based on that the Māori could go to the sea and subsidise their diets where the Pākehā couldn't.³⁰

By all accounts, there was extensive customary harvesting of shellfish and fish:

When I was a child there was a large bed of pipis running from Onepoto to the Porirua end of the Harbour and the bed was known as Kongakaru o Topeora, which translated means the eyes of Toperoa. Toperoa was the niece of Te Rauparaha. There was another bed of pipis close by the farm of J.F.B Stevenson and which was known to the ancient Maori as Ngakaru o hoani te rana, which being translated means the eyes of Hoani te rana.³¹

When I was a boy, the pipis extended from Porirua to Onepoto continuously, the pupus existed mainly on the mud flats at the Porirua end of the Harbour, and the whole Harbour abounded in an abundance of fish.³²

Each whānau within Ngāti Toa Rangatira managed the shellfish by using pools and rings of stones:

One of the best beds for pipis and pupus was where the Radar Station now is. Another was about a couple of hundred yards North of this. And another about two hundred yards before turning off from the Harbour to Titahi Bay, and other towards Onepoto. One each of these sites there were areas which apparently belonged to particular families, as they had gathered large stones or boulders with which they made a ring on the bed of the Harbour and they usually gathered their shellfish from inside the ring.³³

In addition to the shellfish, the harbour was valued for fishing:

When I was a boy fish abounded in the Harbour, especially flounder, mullet, kawai and snapper, all of which used to come into the shallow water and one could see the snapper digging for pipis in the shallow water. There were a large number of conger eels. In the early morning the Harbour was alive with rings caused by jumping fish.³⁴

³⁰ Ihakara Arthur, Ngāti Toa Contemporary Oral History Project, Interviewed by Miria Pomare, 26 June 1999, p 7, TR 77, Box 77, Te Rūnanga o Toa Rangatira. Hinerau Wineera also recounted a similar history during the depression: Hinerau Wineera, Ngāti Toarangatira Traditional Oral History Report, Interview by Taku Pārai, Pukearuhe 1999

³¹ Evidence of Mata Kotua Wharahuia Rei, Petition of The Ngātitoa Tribe and the respective families and individuals the of Porirua in the Dominion of New Zealand, Compiled by Tutuira Wineera and 88 others. Fishing Policy and General, Porirua Harbour, Pollution Of Shellfish Beds, R22156828, 1960, Archives New Zealand

³² Evidence of George Katene, Petition of The Ngātitoa Tribe and the respective families and individuals the of Porirua in the Dominion of New Zealand, Compiled by Tutu Ira Wineera and 88 others. Fishing Policy and General, Porirua Harbour, Pollution Of Shell Fish Beds, R22156828, 1960, Archives New Zealand

³³ Evidence of John Francis Barr Stevenson, Petition of The Ngātitoa Tribe and the respective families and individuals the of Porirua in the Dominion of New Zealand, Compiled by Tutu Ira Wineera and 88 others. Fishing Policy and General, Porirua Harbour, Pollution Of Shell Fish Beds, R22156828, 1960, Archives New Zealand

³⁴ Evidence of Tutu Ira Wineera, Petition of The Ngātitoa Tribe and the respective families and individuals the of Porirua in the Dominion of New Zealand, Compiled by Tutu Ira Wineera and 88 others. Fishing Policy and General, Porirua Harbour, Pollution Of Shellfish Beds (R22156828), 1960, Archives New Zealand

Matua-a-iwi Solomon recalled the diversity of the harbour fishery:

In the harbour, here there were mullet, flounders, there were always heaps of flounders out there and snapper, red cod, elephant fish, shark, mackerel, kahawai, kingfish and hearings. The herrings they used to catch in those days – some of them were actually eighteen inches long and that's a big fish. We used to catch them in our net and especially hauling for them. They'd go out and haul for herrings.³⁵

Travellers, explorers and survey

European travellers and explorers travelled the Porirua Road and commented on the 'scenery' and kaimoana at Porirua. George Angus, for example, recorded his impressions of Porirua in 1847:

On emerging from the forest, we came upon the shores of the harbour; low sandy flats stretch out for some distance, and the hills around are covered with fern and belts of forest descending to the shore. Many native houses are scattered along the margin of the harbour; and as the tide was out, the women were busily employed in gathering pipi, a species of cockle, from the uncovered flats. The *pinna mussel* (*pinna Zealandica*) was found in considerable abundance, sticking in the mud at the mouth of a small river that discharged itself into the harbour. To the left were extensive native cultivations and a small kainga or Maori settlement, at which we halted.³⁶

William Mein-Smith, Surveyor of the New Zealand Company and others travelled from Wellington in March 1841 in order to survey a road. A report of this journey was published in the local newspapers describing the Porirua-Aotea landscape:

The character of the timber near the mouth of this stream is the same as that at the mouth of the Ki-na-poura [Kenepuru], chiefly tawa; as we proceeded further up it the soil appeared to improve.

We climbed a steep and rocky spur of the hills on the right bank in the hopes of getting a view, but could see little of the surrounding country. We met with a great many fine totara trees, one of which we measured, and found it to be twenty-three feet³⁷ in circumference; fine timber abounded.³⁸

From Porirua, the Mein-Smith travelled from Paremata over to Pāuatahanui and described the view looking up the Horokiri Valley:

Beyond this is an extensive valley which our guide told us abounded with fine timber, and our experience in the appearance of this country taught us to believe him, in this instance, at least. The hills bounding this valley (called Horoki) to the north-east, trend towards the north-west.³⁹

³⁵ Interview with Matua-a-iwi Solomon, Harata Ria Te Uira Solomon and Joan Ropiha, Ngāti Toa Rangatira Oral History Project, 18 October 1989, Te Rūnanga o Toa Rangatira

³⁶ Angus, George. *Savage Life and Scenes in Australia and New Zealand*, Smith Edler & Co, London, 1847, p 246

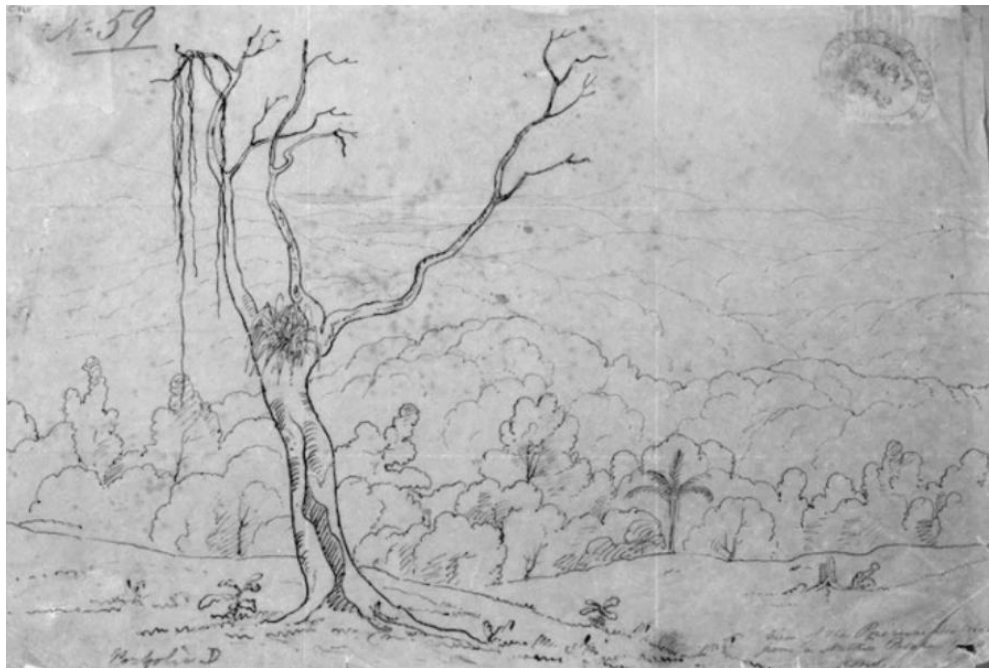
³⁷ 7 metres

³⁸ *New Zealand Gazette and Wellington Spectator*, Vol 1, Issue 48, 13 March 1841, p 2. National Library of New Zealand

³⁹ *ibid*

Near the top of the Pā Waitanginui Stream (Pāuatahanui), the travellers proceeded along the Purehurehu track amongst tawa and tōtara forest before looking down on Te Awakairangi:

We found a plateau of flat land with fine timber, and very little underwood; shortly afterwards we found ourselves in a grove of black birch, which had a most park like appearance; there were some ferns on the ground but no brushwood whatever. We now passed the ruins of an old pā, when our path began to descend. At a short distance below the pā we were delighted with a beautiful view of the valley of the Hutt and the Tararua.⁴⁰



Overlooking Porirua, W.M. Smith.⁴¹

Edward Jerningham Wakefield published an account of his 'adventure' of walking from Paremata to Pukerua which described bush extensive cultivations:

We now ascended a wooded ridge, through forests of much smaller timber and less impeded by *kareau*⁴² than that between *Pitone* and *Porirua*. Four or five miles of easy travelling brought us on to an extensive and somewhat tabular amphitheatre, cleared to the extent of two or three hundred acres for native potato-gardens; and whence we looked, through the naked trunks of the trees left standing in the clearing, upon the island of *Kapiti*, and a long reach of the sandy beach and level country opposite. Penetrating through

⁴⁰ *ibid*

⁴¹ 1840 – 1841, Smith, William Mein, 1799-1869; New Zealand Company; Turnbull, Alexander Horsburgh, 1868-1918, C-011-007. The hill in the left background is probably Rangitui (Colonial Knob), with Titahi Bay in the centre background and Whitireia, the highest hill in the right background. National Library of New Zealand

⁴² Most likely Kareao or Supplejack

the gardens to the edge of a steep declivity overlooking the beach of a semi-circular bay, we saw, on a spur of the table-land separated by two deep gullies through which streams run to the sea, a native *pā* or fort.⁴³⁴⁴

Thomas Bevan made the same journey in 1845 as a child and published his account in 1907:

We continued our journey northward through the Pukerua Bush ranges, looking down, as we climbed the long leading spur, upon the beautiful bay enclosed by forest-covered hills, its waters glistening in the rays of the sun. Beneath us on the beach we saw the old-time kaingas—Hongoeka, Motuhara, and Turikawera...

Throughout the day we toiled through the dense bush and clambered up the rocky ridges, until, towards evening, we emerged from the forest and entered on the old summit of Pukerua Hill. On the hill, where the range descends abruptly to the sea, and isolated on the island side by miles of tangled forest and rugged mountains, was one of the strongholds of the Ngātiitoa.⁴⁵

One of the earliest trading and ferry locations was Jackson's ferry. Jackson's ferry was based at the mouth of the Te Kenepuru Stream and the general place name/location was often called 'The Ferry' or 'Jackson's Ferry'. This was close to the cultivations of Te Hiko o te Rangi on the east bank of the Kenepuru Stream.⁴⁶⁴⁷ Later Jackson's Ferry was taken over by Brown's Inn. This inn was run by Charles Radford who obtained a publican's license in July 1847.⁴⁸ Andrew Brown took over this hotel and the ferry service in 1850 and also ran a schooner for hire called *Matilda*.⁴⁹⁵⁰

The sketch by Walter Mantell of Brown's Inn about 1850 (see below) gives clues to the original forest at Porirua with two houses with a bridge over the Kenepuru Stream to the right of the drawing. Directly behind the Inn is a grove of Tawa trees.⁵¹

⁴³ Wakefield, E.J. *Adventure in New Zealand* [Vol 1]. John Murray, London, 1845, p 224

⁴⁴ J.C. Crawford also recorded cultivations along the Kenepuru Valley (Tawa area) among the bush when travelling between Porirua and Te Whanganui a Tara in 1839. Crawford, J. C. *Recollections of Travel in New Zealand and Australia*, 1880 p 27

⁴⁵ Bevan, Thomas, *The Reminiscences of An Old Colonist, My arrival in New Zealand – 'How four pakeha children travelled from Port Nicholson to Waikanae in 1845'*, In: [The Pamphlet Collection of Sir Robert Stout: Volume 78, Victoria University of Wellington Library, Wellington](#), 1907

⁴⁶ In relation to a contemporary location of Jackson's ferry, the 'best guess' would be about Hartham Place at Porirua

⁴⁷ Evidence of Raiha Puaha, Kenepuru Hearing, Minutes of the Native Land Court, Wellington Minute Book, No.14, 29 November 1905, p 84

⁴⁸ *New Zealand Spectator and Cook's Strait Guardian*, Voll III, Issue 203, 10 July 1847, Papers Past, National Library of New Zealand

⁴⁹ *Wellington Independent*, Vol 6, Issue 483, 29 June 1850. Papers Past, National Library of New Zealand

⁵⁰ *Wellington Independent*, Vol 8, Issue 761, 26 January 1853. Papers Past, National Library of New Zealand

⁵¹ In terms of the contemporary location, Brown's Hotel was located on the intersection of the old Porirua Road. Travelling from the south, the old Porirua Road turned to the right and crossed a bridge over the Kenepuru Stream. The hotel was located just before the bridge. This site is now approximately the northern area of the MacDonald's carpark, opposite No.6 Kenepuru Drive



*Browns Public House, 1850s, Te Kenepuru*⁵²

Other early explorers described the environment of the district using terms such as 'impenetrable forests'⁵³⁵⁴ or 'entangled with supple jack.'⁵⁵ The existence of cultivations, however, on the hills above the Horokiri Valley was often noted by travellers and explorers.⁵⁶ Brees noted on a 1843 survey map of the Horokiri that the hills were covered by 'tawa, white pine,⁵⁷ rewarewa and pukatea.'⁵⁸ William Anson McCleverty painted the Horokiri Valley in 1854 (see below).

⁵² Mantell, Walter Baldock Durrant (Hon), 1820-1895; Andersen, Johannes Carl, 1873-1962 Ref, E-281-q-026, National Library of New Zealand

⁵³ *New Zealand Spectator and Cook's Strait Guardian*, Vol III, Issue 209, 31 July 1847

⁵⁴ *New Zealander* Vol 2, Issue 65, 29 August 1846, p 11

⁵⁵ *Wellington Independent*, Vol V, Issue 449, 30 January 1850, p 2

⁵⁶ *Wellington Independent*, Vol III, Issue 227, 15 December 1847, p 3

⁵⁷ Most likely Kahikatea or White Pine

⁵⁸ SO 10423, Landonline



*Horokiri Valley, 1854.*⁵⁹

In the Kenepuru Valley (between Johnsonville and Porirua), there were also extensive forests, especially tawa, rata and kahikatea. The painting below of the Kenepuru Stream of 1868 by Nicholas Chevalier portrays a fresh stream surrounded by native forest.

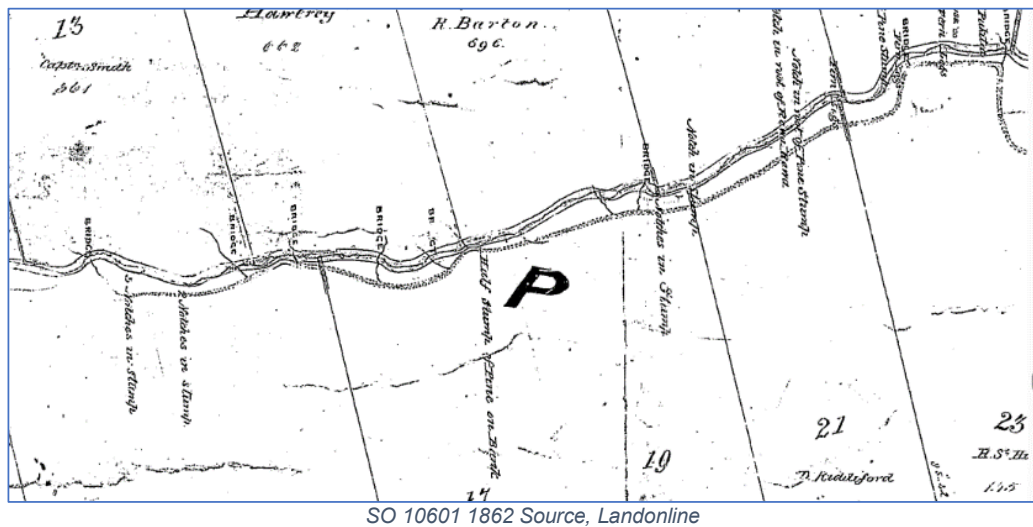
⁵⁹ Watercolour on paper, 305 x 428 mm. National Library of Australia REF. T3028 NK 2005/A



*Kenepuru Stream, 1868*⁶⁰

Survey Plan SO 10601 from 1862 (see below) indicates the realignment of the Old Porirua Road and shows the Kenepuru Stream running along the eastern side of the road. A detailed view of this survey indicates a series of bridges built along the road from Johnsonsville to Glenside. It is noted that the 1862 plan includes survey marks using trees and tree stumps along the track, which give clues to original vegetation, including rata, tawa, ferns, rewarewa, pukatea and kahikatea (white pine).

⁶⁰ Front cover, Nicholas Chevalier; 1868, Registration Number 1912-0044-266, Gift of Mrs Caroline Chevalier, the artist's widow, England, 1912, Te Papa Tongarewa collection



5. Te ātete ki ngā mahi takahi tikanga, takahi taiao – environmental and cultural degradation and resistance

Te ātete ki ngā mahi takahi tikanga, takahi taiao captures a time of progressive environmental and cultural degradation of the harbour since 1846.

On 3 March 1846, Governor Grey declared martial law in the Wellington region south of the Wainui stream (north of Paekākāriki). Soon after the declaration, a detachment of 220 soldiers of the 99th Regiment under the command of Major Last crossed the Kenepuru Stream (the aukati) at Glenside and arrived at Paremata Pā, near Thoms whaling station.

The occupation of the Porirua district by the colonial authorities changed the environmental landscape forever. The first action of the soldiers was the building of the Porirua Road from Kaiwharawhara to Pāuatahanui and onwards to Wainui. The construction of the road at Porirua involved the first reclamation of the harbour for transportation purposes.

Addressing environmental changes since 1846 involves confronting a legacy of land alienation, removal of indigenous forests, construction of roads and railways, reclamation, urban development, sewerage and stormwater discharges, water pollution, overfishing, waste and litter, etc. Roads, housing developments, and infrastructure replaced permeable surfaces with impervious ones, fundamentally altering hydrological processes.

A particularly significant impact has been the widespread reclamation of harbour margins and modification of natural waterways. In many parts of the catchment, streams have been piped, straightened, or channelled to accommodate urban development. These modifications reduce ecological complexity, increase flow velocity, and limit waterways' capacity to trap sediment and pollutants before they

reach the harbour. Similarly, reclamation has removed or constrained valuable coastal habitats such as salt marshes and tidal flats, which play critical roles in filtering contaminants and supporting biodiversity.

Much of the historical degradation involves 'hard' engineering works such as railways, roads and reclamation which cannot be easily undone or reversed. The 'best' outcome for these places is often changes involving adaptation. For example, foreshore riparian planting on reclaimed land will not restore the original shoreline of the harbour but can make a positive contribution towards habitat ecosystem health.

Exclusion of Ngāti Toa Rangatira from Te Awarua o Porirua

Following military action, the Wairau and Porirua districts were alienated from Ngāti Toa. The Wairau Deed dates from 18 March 1847 and the Porirua Deed was signed on 1 April 1847. The alienation of the Wairau and Porirua lands in 1847 to Governor Grey was the 'price' for the release of Te Rauparaha.⁶¹ As Karanama Kapukai stated in 1871, the alienation of the Porirua district was 'given as a condition required by Sir George Grey for the release of Te Rauparaha and others detained on board the Man of War.'⁶²

For the Porirua reserve lands, the Native Land Court facilitated survey and subdivision to create small individual blocks. Once individualised, restrictions on alienation were removed and the land passed out of Ngāti Toa Rangatira ownership. By the 1940s, the remaining land held by Ngāti Toa Rangatira was limited to Hongoeka and Porirua (ie, Te Uru Kahika, Mahinawa, Takapūwāhia, Tutae Paraikete, and Rangituhi).⁶³

Loss of land by the Native Land Court process was accompanied by alienation of riparian access and rights. As development pressure grew in the early 20th Century, the Crown started to set aside land adjoining the foreshore for future roads or railway in the southern part of the harbour. Roading and railway created legal and physical barriers and served to disconnect riparian owners from Te Awarua o Porirua.

The development of state housing for the 'new' Porirua City in the 1940-1950s also targeted Ngāti Toa Rangatira reserves with the taking of (in full or part): Tutae Paraikete, Popoteruru, Rangituhi, Mahinawa, Komangaaumu, Onepoto and Kenepuru under the Public Works Act.⁶⁴ The Porirua development and the taking of land during this time restricted Ngāti Toa Rangatira lands to the small area surrounding Takapūwāhia Marae and Hongoeka.

The military campaign, land dealings, the Native Land Court and foreshore development have served to exclude Ngāti Toa Rangatira from Te Awarua o Porirua. The iwi cannot live close to the harbour and much of the foreshore is inaccessible.

Removal of forest cover and agriculture

Following the alienation of most of the Porirua district in 1847 and the arrival of settlers, large tracts of forest was destroyed. Sawmills were established to log the forests at

⁶¹ Waitangi Tribunal, *Te Tau Ihu o Te Waka a Māui: Report on Northern South Island Claims*. Legislation Direct, 2008, p 329

⁶² Evidence of Karanama Kapukai, Motuhara, Minutes of the Native Land Court, Otaki Minute Book, 1H, 31 October 1871, p 242

⁶³ Boast, R. Gilling B.D., *Ngāti Toa Lands Research Project. Report Two: 1865-1975*, September 2008

⁶⁴ *ibid*

locations such as Johnsons Clearing (Johnsonville), Waiohata and Pāuatahanui. Sheep and beef farming followed the removal of the forests in the hill country and a number of dairy farms were established in the valley areas.

In 1886, the construction of the Wellington-Manawātū Railway Line reached Paekākāriki.⁶⁵ The railway triggered the expansion of villages such as Tawa, Porirua, Plimmerton, Pukerua Bay and Paekākāriki with forest removal and farming in the rural area.

The conversion of the land for farming involved widespread removal of the indigenous forest through both the burning of forest and logging. In the Pāuatahanui district, forest removal increased at pace after 1870. An example of this transformation are the paintings of Christina Gray of Kākaho Farm in 1870 and 1890. In the 1870s, bush remained undisturbed on the hillsides of Kākaho but by 1890 large areas of bush on the hillsides had been removed.⁶⁶ Generally, photos from 1900 indicate that most of the district had been cleared of native bush except for the Moonshine Hill country, Akatawara Forest and the Mt Wainui district.



Figure 1 Horokiri Valley [ca 1903], PA1-o-301-869, National Library of New Zealand

Sedimentation

Removal of the forest resulted in the exposure of the whenua and high rates of erosion and, consequently, sedimentation of Te Awarua o Porirua. Sedimentation continues

⁶⁵ Vaughan Wood, et al, 'Environmental and Natural Resource Issues report', A Report Commissioned by the Crown Forestry Rental Trust for the Waitangi Tribunal's Porirua ki Manawātū District Inquiry, September 2017

⁶⁶ Reilly, Helen, *Pāuatahanui, A local history*, Pāuatahanui Residents Association, 2013, p 68

to be a major issue for Ngāti Toa Rangatira due to erosion on steep hillsides, exotic forest harvesting and stream bank erosion.

In addition to the removal of forest, erosion accelerated during the earthworks for Porirua City and the construction of the surrounding suburbs. Matua-a-iwi Solomon recalled:

The pollution that we've got out here in the harbour is not only from the sewage and different works like that – it's from the development of Porirua City...when they developed the area, it was all just a mass of clay around here where they dug into the hills and most of the runoff runs straight into the harbour...During that period with all the runoffs from the subdivisions...most of the shellfish out here, either died or shifted.⁶⁷

Contamination of the sea and kaimoana

Wastewater pollution of Te Awarua o Porirua has been a major issue for Ngāti Toa Rangatira since the 1880s. A primary source of pollution was the Porirua Asylum built in 1884. By the 1920s/30s, approximately 40,000 to 60,000 gallons of sewage each day was being discharged into the Te Kenepuru stream.

Ngāti Toa Rangatira advocated tirelessly to protect kaimoana from the pollution coming from the asylum. In 1940, the lawyer acting for the iwi, stated that '[Ngāti Toa Rangatira] still exercise these [fishing] rights, and have definite demarked pipi beds, and take fish, pipis, pupus as food from the harbour. Besides taking these for the residents of the pā, considerable additional quantities are taken at the time of native gatherings and tangi at the pā.' It was commented that 'there is grave danger that the pipi beds and pupus may become dangerous to consume as food.'⁶⁸

During this period, the 1930s/40s, there were outbreaks of typhoid at Takapūwāhia that were suspected to be caused by contaminated shellfish.⁶⁹

In addition to the hospital, there were other sources of pollution at Porirua. Tutu Ira Wi Neera reported the discharge of night cans, raw meat and other offal into Te Kenepuru and the estuary.⁷⁰ Also during World War II, the American Camp at Titahi Bay contributed towards pollution with a sewerage pipe discharging into the harbour at Te Onepoto.⁷¹

⁶⁷ Interview with Matua-a-iwi Solomon, Harata Ria Te Uira Solomon and Joan Ropiha, Ngāti Toa Rangatira Oral History Project, 18 October 1989, Te Rūnanga o Toa Rangatira

⁶⁸ J.F.B Stevenson to Sec, Health, 6 March 1940, Porirua Harbour, Sewerage outfall, Possible pollution - Maori Fishery Rights - Court decisions (1880, 1883), plans, complaints, reports, Porirua Mental Hospital, 1880-1944, Archives New Zealand

⁶⁹ J.F.B. Stevenson to Sec, Marine, 7 December 1943, Porirua Harbour, Sewerage outfall, Possible pollution - Maori Fishery Rights - Court decisions (1880, 1883), plans, complaints, reports, Porirua Mental Hospital, 1880-1944, Archives New Zealand

⁷⁰ Evidence of Tutu Ira Wineera, Petition of the Ngātitoa Tribe and the respective families and individuals of Porirua in the Dominion of New Zealand, Compiled by Tutuira Wineera and 88 others. Fishing Policy And General, Porirua Harbour, Pollution Of Shell Fish Beds (R22156828), 1960, Archives New Zealand

⁷¹ *ibid*

With population growth at Tawa and Porirua, a sewerage pipeline was built in 1958 from Tawa, connecting up with Porirua, the hospital and discharging south of Titahi Bay beach. This system, however, did not mean that all the wastewater was discharged into Titahi Bay, as the Commissioner of Works informed the Health Department in 1958 that excess sewage was often diverted into the harbour during storms.⁷²

The discharge of sewage into Te Awarua o Porirua resulting from overloading of aged infrastructure pipes during heavy rainfall events remains an issue up to the present day.

The outfall at Titahi Bay caused unacceptable pollution of the coast. This issue encountered major public interest and continued protest by Ngāti Toa Rangatira when a new milli-screening plant and outfall was proposed at Komangarautāwhiri in 1973. Komangarautāwhiri is a significant pā, wāhi tapu and burial ground. Ngāti Toa Rangatira and the local community embarked on a seven-year campaign against the outfall involving an appeal to a Special Tribunal of the Wellington Regional Water Board and the Planning Tribunal in 1980. Consequently, the proposed outfall at Komangarautāwhiri was abandoned and a new treatment plan was built in 1989 and continues to operate today with ongoing issues of spillage of untreated sewage during heavy rainfall events.

Reclamation

Reclamation has been a massive and destructive activity at Te Awarua o Porirua since the construction of the Porirua Road in the 1840s.

While railway, roading and urban development have been the major causes of reclamation at Porirua, there has also been significant rural reclamations and drainage of low-lying saltmarsh areas around the stream. Significant reclamations and drainage occurred at Te Onepoto, Kākaho, Horokiri, Pāuatahanui and Waiohata (Duck Creek).⁷³

The first 'official' reclamation occurred in association with the construction of Porirua Road in the late 1840s at Waiohata and other bays of the eastern harbour. Major reclamation, however, occurred with the building of the railway in the 1880s. The Wellington Manawatu Railway Company was a private company that built the railway from Wellington to Palmerston North. Construction of the line started in 1882 and the railway reached Whitianga (Paremata Railway Station) by 1885.

The 1880s railway line had a major impact on the eastern shore of Te Onepoto arm of the harbour and at Horopaki, Tawhitikurī and the Taupō wetland. Streams were

⁷² Commissioner of Works to Director of Public Hygiene, Health Dept, 22 January 1958, Porirua Development - Reclamation; Porirua Harbour (R17214000), 55-62, Archives New Zealand

⁷³ Detailed archival documentation about farm drainage and reclamations (especially incremental reclamations) appears absent which indicates many reclamations were undertaken by adjoining landowners without a permit from the Marine Department. As an example, the site of Te Onepoto Park was originally a wetland within the Kahotea Block but it is unclear when this wetland was drained and reclaimed. Evidence of Pirihana Tungia, Minutes of the Native Land Court, Kahotea Block, Otaki Minute Book, No.28, 26 August 1895, p 230

diverted and piped, foreshore destroyed, large retaining walls were built and the original shores of the eastern harbour were highly modified.

The damage caused by the railway remained in the memory of Ngāti Toa Rangatira and was a matter of grievance raised by the iwi in meetings with the government during the time of Prime Minister Peter Fraser and the radar station dispute in the 1950s.⁷⁴

In 1944, a major housing scheme for western Porirua was announced by the Department of Housing Construction. The proposal developed to become the 'Porirua New Town' with extensive plans for commercial, housing and industry and transportation (the Porirua development). The construction of Porirua City heralded a major period of reclamation and destruction of Te Awarua o Porirua. The main reclamation and associated works involved:

1. Construction of the radio range reclamation.
2. Realignment of Te Kenepuru Stream with building of new stopbanks.
3. The reclamation of the foreshore and seabed at Te Onepoto Arm of the harbour for the Porirua Town Centre and associated land.
4. The construction of coastal transportation barriers such as roads and railway, including:
 - a. Duplication of the Main Trunk Railway (realignment from Porirua to Paremata)
 - b. Construction of the new State Highway from Porirua to Paremata
 - c. New Porirua to Titahi Bay Highway.

It is difficult to express the impact of the Porirua City development on Ngāti Toa Rangatira and Te Awarua o Porirua. In the words of Ngāti Toa Rangatira:

We claim that this land [the harbour] originally belonged to the Ngāti Toa tribe who acquired it by conquest from the Ngāti Ira Tribe and other aboriginal owners before the coming of the Pakeha. The Ngāti Toa Tribe has exercised fishing rights over the land continuously since the Treaty of Waitangi, and its rights have never been disputed, nor have the rights of the tribe ever been given up whether by way of sale or otherwise...

Recently, it has come to the knowledge of Māori that the Public Works Department is contemplating an extensive programme of works at Porirua Harbour, and already a start has been made by dumping metal and spoil on the foreshore adjacent to the Pā. The Māori are gravely disturbed over this

⁷⁴ Evidence of John Arthur Elkington, Petition of The Ngātitoa Tribe and the respective families and individuals of Porirua in the Dominion of New Zealand, Compiled by Tutuira Wineera and 88 others. Fishing Policy And General, Porirua Harbour, Pollution Of Shell Fish Beds (R22156828), 1960, Archives New Zealand

interference with their fishing rights because already the beach is covered and access to the pipi beds is seriously threatened.⁷⁵

'The best pupu grounds used to be where the Radar Station now is and are covered over by the reclamation made for it (Joe Solomon).⁷⁶

'The best pupu grounds have been totally destroyed by the building of the radar (George Katene).⁷⁷

'The new Porirua-Titahi Bay Road cuts through and has reclaimed Harbour and foreshore areas that previously were excellent places for floundering and gathering pupu and pipi. Some of the best of our shellfish beds are now under the reclamation works (John Arthur Elkington).⁷⁸

JI addressed the Prime Minister on this visit and informed him of the case of 1883 and of various other matters concerning our grievances in the Porimoana as to our fishing rights. I also informed the Prime Minister that the Tribe had a right to ownership of the land laying between high water and low water and requested a hearing of the case by some tribunal in order to establish the proper ownership of the whole of Porimoana...The Prime Minister said that he was unable to give an answer to the matters put before him at this time but that he would make another date on which he would return and discuss the matter of the Porimoana with the members of the Tribe.

Mr Joe Rene, a member of the Tribe, also addressed the Prime Minister and informed him that the Tribe under the law owned the land on which it lived and the rights in the Harbour by right of conquest and that it had originally decided to settle at the Porirua Pā because of the shellfish beds and fish in the harbour and foreshore. Mr Rene received the same reply as I had from the Prime Minister...very good pupu beds where the radar station now is and have been destroyed by the reclamation for this station (Tutu Ira Wi Neera).⁷⁹⁸⁰

⁷⁵ Petition of David Prosser and 32 Others, 18 May 1947, Porirua, Land Compensation for Aeradio Receiver Transmitter Station, R20121703, AAQB,889, W3950,149/23/432/26/1, Archives New Zealand

⁷⁶ Evidence of Joe Solomon, Petition of the Ngātitoa Tribe and the respective families and individuals of Porirua in the Dominion of New Zealand, Compiled by Tutuira Wineera and 88 others. Fishing Policy And General, Porirua Harbour, Pollution Of Shell Fish Beds (R22156828), 1960, Archives New Zealand

⁷⁷ Evidence of George Katene, Petition of the Ngātitoa Tribe and the respective families and individuals of Porirua in the Dominion of New Zealand, Compiled by Tutuira Wineera and 88 others. Fishing Policy And General, Porirua Harbour, Pollution Of Shell Fish Beds (R22156828), 1960, Archives New Zealand

⁷⁸ Evidence of John Arthur Elkington, Petition of the Ngātitoa Tribe and the respective families and individuals of Porirua in the Dominion of New Zealand, Compiled by Tutuira Wineera and 88 others. Fishing Policy And General, Porirua Harbour, Pollution Of Shell Fish Beds (R22156828), 1960, Archives New Zealand

⁷⁹ Porirua Titahi Bay MH. Main Highway. Legalisation, 1939-72, R11393738, AAZZ,889, W4923,17/62/9/458/0, Archives New Zealand

⁸⁰ Evidence of Tutu Ira Wineera, Petition of the Ngātitoa Tribe and the respective families and individuals of Porirua in the Dominion of New Zealand, Compiled by Tutuira Wineera and 88 others.

Stream stopbanking, piping and realignment

Te Kenepuru was a major mahinga kai site for Ngāti Toa Rangatira. While stream realignment started in the 1930s, major work began in the late 1940s with diversion and realignment occurring from Tawa down to Porirua. At Porirua, the stream originally involved a major river loop and salt marsh. Diversion works in the 1950s removed the loop, reclaimed the salt marsh and constructed a straight channel to the sea. The approved plan for the stream involved a design channel to cater for a flood of 8,000 cusecs (226.5 cubic metres/sec).⁸¹

Realignment and stop banking have turned Te Kenepuru into a sterile channel devoid of vegetation and natural stream life.

A multitude of other streams have been impacted by reclamation and harbour works. All the streams from Porirua to Titahi Bay were realigned and piped at Elsdon and Takapūwāhia, including Kahotea, Kaureroa, Hukarito, Tangare, Mahinawa and Te Uru Kahika. These streams are all highly significant for Ngāti Toa Rangatira.

On the eastern side of the harbour, similar piping works were undertaken involving the Aotea Stream (located just south of Gear Homestead), Manawapiha Stream and the Tamanga-o-kohu Stream which flowed from Kenepuru Hill.

In many cases, reclamation work trapped the streams and enclosed the foreshore to create a number of 'lagoons' disconnected from natural flushing of the tides. These lagoons became 'dead water' and some of these degraded lagoon environments continue to exist today.

At Taupō (Plimmerton), the Taupō Stream was realigned during works for the railway in the 1880s and reclamation of the stream and wetland occurred during the 1940s for the Winstones Clay Factory and other industry. Reclamation of the wetland continued until the late 1980s.

Pollution of streams

Industrial development from the 1940s onwards resulted in high levels of water pollution. At Tawa, industries such as A. C. Hatrick chemical factory caused heavy pollution of Te Kenepuru Stream.⁸² Jane Edwards recounted (in 2012) that from 1947:

Things started to change. Factories in Tawa (or environs on the Porirua stream) were discharging pollutants (paints, chemicals and dyes). The

Fishing Policy And General, Porirua Harbour, Pollution Of Shell Fish Beds (R22156828), 1960, Archives New Zealand

⁸¹ Porirua Stream diversion, approved by Commissioner of Works, PW 96/2999000, 27 April 1954, R17214013, AATE, W3387, 28026, Box 24 Porirua/Titahi Bay Development, Porirua Town Centre, Archives New Zealand, 1955-61. Note, a cusec is an imperial unit of flow equal to 1 cubic foot per second. 1 cusec is equivalent to 0.028 317 cubic metre per second

⁸² Kaumātua Taku Parai, quoted in Michael, Keith. Naylor Reyn, 'Shellfish Resources of Porirua Harbour, A Summary of Ngāti Toa Kaumātua oral histories and available information'. Prepared for Ngāti Toa, NIWA, 2013, p 54

water would be a milky grey and it smelt bad. The seafood started to move away (was no longer locally abundant), especially 'pipi' and bubus.⁸³

Other significant pollution occurred in Mitchell Stream from Spicer Landfill, Te Uru Kahika at Elsdon and Winstones Clay Factory at Taupō contaminated the stream and the waterway remains degraded despite the closure of the factory in the 1980s.

Over-fishing

With the construction of Porirua City in the 1950s and the expansion of new suburbs, kaimoana along the coast became overfished by recreational fishers. Ngāti Toa Rangatira histories recall a dramatic decline and depletion of paua, shellfish, crayfish and fish along the coast especially between Mākara and Paekākāriki.⁸⁴ As an example, the shoreline between Tawhitikurī (Goat Point) and Karehana Bay has become devoid of fish and shellfish, especially paua and crayfish. At Pukerua Bay, Ngāti Toa Rangatira issued a rāhui to protect the fishery and this legislative rāhui remains in force. Overfishing continues to be a major concern of Ngāti Toa Rangatira.

Trawl fishing

The advent of trawl fishing in the 1920s was a major threat to the kaimoana of Ngāti Toa Rangatira at Te Awarua o Porirua. Joe Solomon recounted that protecting the fish involved closure of the harbour to seine net trawling:

The members of our Tribe always believed and acted upon the belief that they were entitled to the fish and shellfish in the whole of the Porirua Harbour. I had been told and lived by the fact that by ancient Māori usage and custom, the Māori were entitled to the fishing and shellfish in the Porirua Harbour. As a result, whenever in the years gone by a strange boat appeared in the Harbour and if necessary, would foul its nets. We were particularly hostile to any fishermen, especially commercial fishermen from the Paremata region. At one time a trawler with a seine net came into the Harbour and we immediately told the Marine Department and made sure that he was removed. At night, if there was a stray torchlight fishing for flounders somebody from the Pā would go out to check and that he was a Māori. If he were not a Māori, we would ask him to leave.⁸⁵

Matua-a-iwi Solomon also shared a similar account:

My earliest memory...they wouldn't let commercial fishermen into the harbour at all – only amateur fishermen. And the iwi controlled who those might be as well. I can remember as a child our parents going down and asking people to leave who were fishing with dragnets down in the harbour. And they would go without question. There were no arguments or anything,

⁸³ Kuia Jane Edwards, quoted in Michael, Keith. Naylor Reyn, 'Shellfish Resources of Porirua Harbour, A Summary of Ngāti Toa Kaumātua oral histories and available information'. Prepared for Ngāti Toa, NIWA, 2013, p 46

⁸⁴ Interview with Matua-a-iwi Solomon, Harata Ria Te Uira Solomon and Joan Ropiha, Ngāti Toa Rangatira Oral History Project, 18 October 1989, Te Rūnanga o Toa Rangatira

⁸⁵ Statement of Joe Solomon, Fishing - Policy and General - Porirua Harbour - Pollution of Shellfish Beds (R22156828), 1960, Archives New Zealand

they just left. They worked like that for quite a long time. As a member of fact, they even linked arms right across the harbour to stop trawlers from coming in here.⁸⁶

The communication with the Marine Department to exclude commercial fishing from Te Awarua o Porirua may have occurred in 1928. At the time, Māori communities around Aotearoa were expressing significant concerns about the impact of commercial seine nets on fisheries within estuaries and harbours.⁸⁷

The Chief Inspector of Fisheries for the Marine Department supported the closure of the harbour to seine netting. The Inspector was concerned about over-fishing caused by large commercial trawling and the need to protect fish spawning grounds.⁸⁸ The Marine Department agreed with this advice, and a ban was established in 1928 when Danish seine nets, purse seine nets and trawl nets were prohibited from Porirua Harbour.⁸⁹ At the time, officials from the Marine Department acknowledged the fishery rights of Ngāti Toa Rangatira at Te Awarua o Porirua.⁹⁰

Loss of an indigenous landscape

Urban development, reclamation and reserve management combined to create an alienated landscape. Much of the harbour edge is occupied by roads and railway which exclude tangata whenua and the public from Te Awarua o Porirua.

The State Highway and Main Trunk Railway Line, in particular, create an inaccessible barrier between the iwi, whenua and the streams along the eastern foreshore of Te Awarua o Porirua. Other roads such as State Highway 58 and the Titahi Bay Main Road make access to the sea dangerous and very difficult.

In August 1968, the Town and Country Planning Division published 'Development of Porirua Harbour'. The report found there 'is a denial of access to the shore in many places as a result of the location of the roads and railway' and stated that 'through the years reclamation has been carried out without thought being given to its effect on the harbour'.⁹¹ It is an offence that little has been done by central or local government to change this situation since the 1960s.

In some areas, construction material has been dumped along the foreshore as a form of foreshore protection. The foreshore at Tawhītikurī between Ngāti Toa Domain and Taupō (Plimmerton) is an example of this desecration.

In other foreshore areas, hard erosion protection edging such as the use of riprap suppresses indigenous vegetation and is ineffective at removing pollutants from entering Te Awarua o Porirua. Various forms of riprap and other hard rock material

⁸⁶ Interview with Matua-a-iwi Solomon, Harata Ria Te Uira Solomon and Joan Ropiha, Ngāti Toa Rangatira Oral History Project, 18 October 1989, Te Rūnanga o Toa Rangatira

⁸⁷ McClean, Robert, *Tauranga Moana, Fisheries, Reclamations and Foreshores Report*, Report for the Waitangi Tribunal, Wai 215#D7

⁸⁸ Chief Inspector of Fisheries to Secretary, Marine Department, 7 May 1928, Danish Seining Trawling Porirua Harbour - Prohibition of (R19979117), 1928, Archives New Zealand

⁸⁹ *New Zealand Gazette*, Prohibiting the Use of Danish-Seine, Purse-Seine, and Trawl nets in Porirua Harbour, 1928, page 1868

⁹⁰ Porirua Harbour - Reclamation and Wildlife, R8578413, Archives New Zealand

⁹¹ R1756969, AATE, 28026, W3395, 5/18/02/2012, Porirua Harbour, 1931-75, Archives New Zealand

dominates southern Te Awarua o Porirua. This foreshore is also accompanied by the absence of buffer areas between roads and railway and the sea, which results in pollution from contaminants such as brake pad run-off.

Despite large areas of 'green space' formed by reclamation and infilling of the foreshore and seabed, the reserves of Te Awarua o Porirua are dominated by open grass fields and the dominance of Norfolk Pine or other exotic plants. Te Onepoto Reserve, Tangare Drive, Wi Neera Reserve, the Porirua Town Centre, Aotea Lagoon, Papakowhai, Bothamley Park, Ngāti Toa Domain and multiple road reserves are all governed to maintain an alienated landscape devoid of an indigenous footprint.

Recreation and leisure activities

With the creation of Porirua City and the expanding suburbs, Te Awarua o Porirua became a centre for a range of recreational activities such as boating, sailing, swimming, etc. These activities were catered for by the construction of boating clubs and private boat sheds and access ramps.

Reflecting the rise of the leisure class, the harbour was declared to be a 'recreational asset' and 'playground' by the Prime Minister Keith Holyoake in 1968. The Prime Minister informed the Porirua City Council that as a valuable recreational asset, reclamation should be only allowed in relation to dredging works.⁹²

For Ngāti Toa Rangatira, the rise of recreational activities pushed indigenous values to the margin and impacted on access and customary use. Matua-iwi-Solomon commented in 1989:

You've got the speed boats out here. They've got yachts, rowers and all sorts of activities here on the harbour. They've got marinas and float planes. All around the harbour, there are water activities occurring. All of these activities affect the Māori people here. You can't set a net anywhere down there because you might be in the lane of water sports activities.⁹³

Whakapapa of resistance

Ngāti Toa Rangatira embarked on a series of protests, hui and petitions regarding the protection of Te Awarua o Porirua. In the context of the loss and alienation of land in the Porirua district during the 1870s, Ngāti Toa Rangatira sought confirmation of ownership of the foreshore and seabed of Te Parumoana of Te Awarua o Porirua before the Native Land Court.⁹⁴ On 27 March 1880 Wi Parata Te Kākākura⁹⁵ submitted the claim to the Native Land Court stating:

⁹² Prime Minister to Porirua City Council, 26 January 1968, R1756969, AATE, 28026, W3395, 5/18/02/2012, Porirua Harbour, 1931-75, Archives New Zealand

⁹³ Interview with Matua-a-iwi Solomon, Harata Ria Te Uira Solomon and Joan Ropiha, Ngāti Toa Rangatira Oral History Project, 18 October 1989, Te Rūnanga o Toa Rangatira

⁹⁴ Note, there was some difference between the Parumoana map and the actual application before the Native Land Court. Wi Parata stated that the map didn't show the low water and had made a pencil drawing on the map to show the true extent of the land between the high and low tide marks. Wi Parata stated that the plan should be altered [to show the true extent]. Evidence of Wi Parata Te Kākākura, Parumoana, Wellington MB, 1, pages 74-75, 27 March 1880

⁹⁵ Wi Parata Te Kākākura claimed Parumoana with Wi Neera, Ngahuke Tungia, Raiha Puaha, Hemi Matenga, Hopaia Pokaitara and Hopepa Horomona on behalf of Ngāti Toa.

I belong to Ngatitōa and live at Waikanae. We claim from one side of the harbour to the other because it gives the Ngatitōa their food. Therefore, we ask the Court to secure it to the Tribe in case it should be taken from us in after years...The Treaty of Waitangi lays down all land, water and fishing grounds are left to the Natives under their control.⁹⁶

The Parumoana claim returned to the Court in 1883 and Wi Parata Te Kākākura further added that tidal area had been occupied for a racecourse and 'we live all around it...Pipis and pupus grow there and these are protected by us in their season.'⁹⁷

On 7 August 1883, the Native Land Court in 1883 held that 'it appeared that the applicants had from time immemorial and certainty before the making of the treaty of Waitangi and down to the present time been accustomed to collect pipis on the land but had never exercised any other rights over it.'⁹⁸ On this basis, while the Court, declined to issue title to the Parumoana foreshore, the Court stated that the iwi had a 'right of fishery' in relation to the collection of pipis.⁹⁹

The historical overview outlined above has already referenced several petitions and submissions opposing the degradation of Te Awarua o Porirua. The following list summarises key petitions and protests prepared for the Mutumutu ki Mukukai exhibition at Pātaka Art + Museum.

Primary Ngāti Toa Rangatira petitions and protests to safeguard Te Awarua o Porirua

1928. Ngāti Toa Rangatira opposition to commercial fishing in the harbour. The iwi 'link arms' across the harbour entrance in an effort to stop trawlers. Danish seine nets, purse seine nets and trawl nets are prohibited from Porirua Harbour.

1940. JFB Stevenson submits letters of opposition on behalf of Ngāti Toa Rangatira in opposition to the pollution of Parumoana by Porirua Hospital.

May 1947. Petition of Ngāti Toa Rangatira to the Rt Hon Mr Peter Fraser, Prime Minister in opposition to the Radio Range reclamation, loss of pipi beds and other plans to reclaim the harbour.

8 June 1947. Major tribal assembly between Ngāti Toa Rangatira and Prime Minister Peter Fraser. The Prime Minister promises compensation for loss of the harbour fishery and the impact of reclamation and railway works.

18 June 1950. Tribal hui at Takapūwāhia in opposition to the taking of land under the Public Works Act.

15 November 1957. Major tribal assembly calls for halt to reclamation of the harbour. The Porimoana Committee of Ngāti Toa Rangatira was established to preserve the tribe's traditional fishing areas and to organise resistance and opposition.

⁹⁶ Evidence of Wi Parata Te Kākākura, Parumoana, Wellington MB, 1, pages 74-75, 27 March 1880

⁹⁷ Evidence of Wi Parata Te Kākākura, Parumoana, Wellington MB, 1, page 147, 24 July 1883

⁹⁸ Porirua Foreshore, Judgement of the Native Land Court, Parumoana, Wellington MB, 1, page 158, 7 August 1883

⁹⁹ *ibid.*

30 April 1959. Major hui with Prime Minister Walter Nash and the Minister of Works at Takapūwāhia marae to restate opposition of the iwi to harbour reclamation and pollution.

11 March 1960. Deputation of over 50 kaumatua to Sir Eruera Tirikatene (MP for Southern Māori) at Parliament on 11 March 1960 regarding concerns about reclamation and pollution of the harbour.

June 1960. Another deputation to the Prime Minister to again protest about the ongoing reclamation works.

August 1960. Major Ngāti Toa Rangatira petition to Parliament. Tutuira Wineera, Chairman of the Committee and 88 others are praying for compensation for the loss of fishing rights in Porirua Harbour petition 1960/16 dated 2 Sept 1960 to the Department of Maori Affairs.

1973-1980. Seven-year campaign against the outfall involving an appeal to a Special Tribunal of the Wellington Regional Water Board and the Planning Tribunal. Submission and petitions from Ngāti Toa Rangatira and Raukawa Marae Trustees.

1973. Submission by Takapūwāhia Marae Committee of Ngāti Toa Rangatira to Hon' Duncan MacIntyre, Minister of Māori Affairs concerned about the proposal by the Porirua City Council to construct a sewerage treatment plant at Kaumanga Point.

16 May 1974. Parumoana (Porirua Harbour) petition to the Minister of Māori Affairs the Hon. Matiu Rata, M.P. by Harata Ria Te Uira Solomon (nee Parata) on behalf of the Ngati Toa Rangatira presented at Raukawa Marae, Ōtaki.

1 May 1976. Matuaiwi Solomon, Secretary of the Takapūwāhia Committee, petition to the Hon' Minister of Maori Affairs. Opposition to proposed site new sewer outfall, extension of tribal burial ground, Parumoana and disposal of road reserves Takapūwāhia township.

7 August 1987. Atarangi Clothier, Secretary of the Ngāti Toa Rangatira Tribal Trust petition to John Paki, Department of Māori Affairs. Petition included opposition to degradation of Porirua Harbour and loss of tribal control to sources of kaimoana.

6. Ngā pēhitanga parahanga o nāianeī – pollution pressures the harbour is experiencing today

Ngā pēhitanga parahanga o nāianeī – degradation of the harbour is not a static condition, but an ongoing challenge that demands response, effort and responsibility.

Te Awarua o Porirua is a complex estuarine system set within a rapidly urbanised catchment. As outlined in the previous section, the harbour has long been subject to cumulative environmental pressures, including pollution discharges, sedimentation, and habitat degradation.

Understanding the current state of the harbour requires recognising how these pressures have evolved historically and continue to operate today, as well as how effective monitoring relies on integrating diverse information sources across multiple spatial scales.

The legacy of historical degradation and reclamation continues to shape current environmental conditions.

Sediment

Sedimentation remains one of the most pressing issues facing the harbour. Fine sediments carried by stormwater accumulate in the inlet and arm, smothering benthic habitats, reducing water clarity, and altering ecological functioning. Much of this sediment originates from ongoing land disturbance, including construction, earthworks, forestry and poorly managed rural land.

Seagrass beds and shellfish populations, which once contributed to water filtration and habitat complexity, have declined or shifted in distribution. These ecological changes further reduce the harbour's resilience to additional stressors. The 2019 *Whaitua Implementation Programme* report stated:

Issues in the rural areas of Porirua are also significant, particularly the contribution of sediment into streams and the harbour as a result of land erosion. Much of this erosion is related to historical forest clearance, but is exacerbated by unsustainable farming practices such as the grazing of stock on very steep sloping land. Stock access to waterways increases pathogen loads in streams and the harbour and the associated trampling of streambanks further adds to the sediment load as well as affecting habitat and natural character of streams.¹⁰⁰

Stormwater and wastewater

Stormwater discharges are another major vector for pollution. In urban areas, stormwater systems efficiently transport contaminants such as heavy metals (e.g., zinc, copper), hydrocarbons, nutrients, and litter directly into streams and the harbour. Because many waterways are piped or modified, there is limited opportunity for natural attenuation processes to occur. Wastewater overflows during heavy rain events also contribute episodic pulses of contaminants, further degrading water quality. To quote from 2019 *Whaitua Implementation Programme* report:

¹⁰⁰ Greater Wellington Regional Council, *Te Awarua-o-Porirua Whaitua Implementation Programme*, 2019, p 9

...signs warning people not to swim or collect food create a further sense of disconnection from people's sense of place. Degradation of water bodies may also have financial and social implications because it compels people to travel to alternative swimming/food sources or to purchase food that could otherwise have been collected. Water pollution also exposes people to unnecessary health risks, because, despite the health warnings, they may choose to swim and collect food from the harbour and streams. The species of native fish and other freshwater fauna originally found in the streams are under stress; some are no longer present or are in decline.¹⁰¹

In March 2026, PHF Science provided a summary of mahinga kai research and the use of passive samplers compared with large-scale shellfish collection.¹⁰² The study zeroed in on three mahinga kai sites at Tangare (Te Hiko Street), Motukaraka and Te Onepoto. The torpedo-shaped passive samplers were deployed weekly over 30 weeks and compared with monthly cockle samples. The research showed that passive samplers can be used to detect human-sourced contamination in estuarine waters. As outlined in the PHF Science report:

The frequent detection of faecal indicators, including crAssphage and the enteric viral pathogens, norovirus and rotavirus also confirmed results of earlier studies that showed evidence of human faecal contamination in the catchment.¹⁰³

In association with the estuarine study, PHF Science and Te Rūnanga o Toa Rangatira conducted a dedicated freshwater monitoring programme that investigated human-sourced contamination in several streams, including Kenepuru (Porirua), Mahinawa, Hongoeka, Kahotea, Kenepuru Iti (Bothamley), and Waiohata (Duck Creek).¹⁰⁴ The monitoring involved a collaboration with Greater Wellington and Porirua City Council and sampled a range of freshwater monitoring indicators. For PHF Science, the samples were analysed for two human-associated faecal source tracking (FST) markers, HF183 and crAssphage and *E. coli*. This monitoring was conducted alongside a Kaitiaki Monitoring Assessment involving observations of mauri, wairua, habitat condition, cultural access, and the presence or loss of mahinga kai. Results from microbial monitoring and kaitiaki monitoring assessments were integrated to develop an Integrated Awa Hauora Assessment tool, combining laboratory-based indicators with field based kaitiaki observations (see table below).¹⁰⁵

¹⁰¹ *ibid*, p 8

¹⁰² Joanne Hewitt, Russleigh Parai, Daniel Rexin, Andri Rachmadi, *Expanding Knowledge on Health of Recreational Fisheries: Te Awarua o Porirua as a Study Case*, PHF Science, March 2026

¹⁰³ *ibid*, p 20

¹⁰⁴ PHF Science and Te Rūnanga o Toa Rangatira, *Ngā tātaritanga me ngā arotakenga wai o ngā awa e rere atu ana ki, Te Awarua o Porirua, Water analyses and assessments of awa flowing into Te Awarua o Porirua*, PHF Science, March 2026

¹⁰⁵ *ibid*, p 4

Awa	Microbial Contamination	CHA Score	Traffic Light Rating
Porirua	High	E Kino Ana	● High concern
Kenepuru Iti	High	E Kino Ana	● High concern
Kahotea	High	E Kino Ana	● High concern
Mahinawa	Moderate	Āhua Pai	● Moderate–high concern
Wai-o-Hata	Moderate	Āhua Pai	● Moderate–high concern
Takapūwāhia	Spike event	Āhua Pai	● Moderate (event-based)
Hongoeka	Low	E Kino Ana	● Low risk (scientific); cultural concern

Microplastic pollution

PHF Science has also worked with Ngāti Toa Rangatira to build the kete of knowledge of waste contamination within Te Awarua o Porirua through a 2023 study to build a snapshot of the impact of microplastics pollution.¹⁰⁶ Microplastics (plastic <5mm in size) reach fresh and coastal waterways through stormwater, wastewater and littering/dumping. Microplastics can be ingested by marine creatures or accumulate in sediments, leaching toxicants as they degrade.

The PHF report states:

Wastewater treatment plants are considered “hotspots” of microplastics pollution due to the large number of these particles which enter through household and industrial waste and the inability of treatment plants to completely remove them. In Aotearoa New Zealand, wastewater treatment plants which discharge wastewater into the moana have been shown to be a key source of microplastics pollution in this water body.”¹⁰⁷

The microplastics testing was undertaken at 11 sites throughout Te Awarua o Porirua, including those sites used in the faecal contamination research, and sampled sand at beaches and water samples in three streams and in Parumoana. The harbour surface water sample was undertaken through a waka trawl where a plankton net was dragged behind a waka while paddling for five minutes at a time.

¹⁰⁶ Grace Feltham, *Investigating the presence of microplastics in Te Awarua o Porirua*, PHF Science, October 2024

¹⁰⁷ Ibid, p3

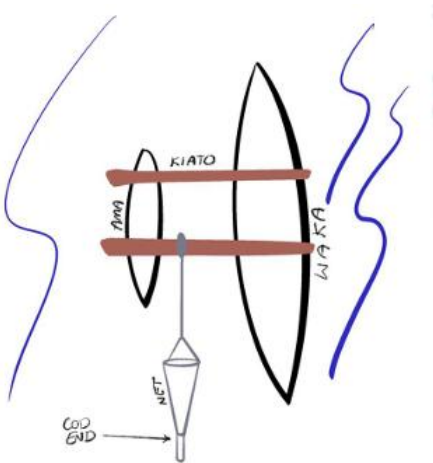


Figure 2: Diagram of plankton net setup for the waka trawl.

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Analysis of the sand samples found microplastics in all sites. The highest number and density of microplastics found occurred at Titahi Bay; other areas with high densities included Kaiaua Bay, Te Neke and Tangare. In Te Awarua o Porirua, the Porirua Wastewater Treatment Plant discharges treated effluent at Rukutane Point, immediately to the south of Titahi Bay.

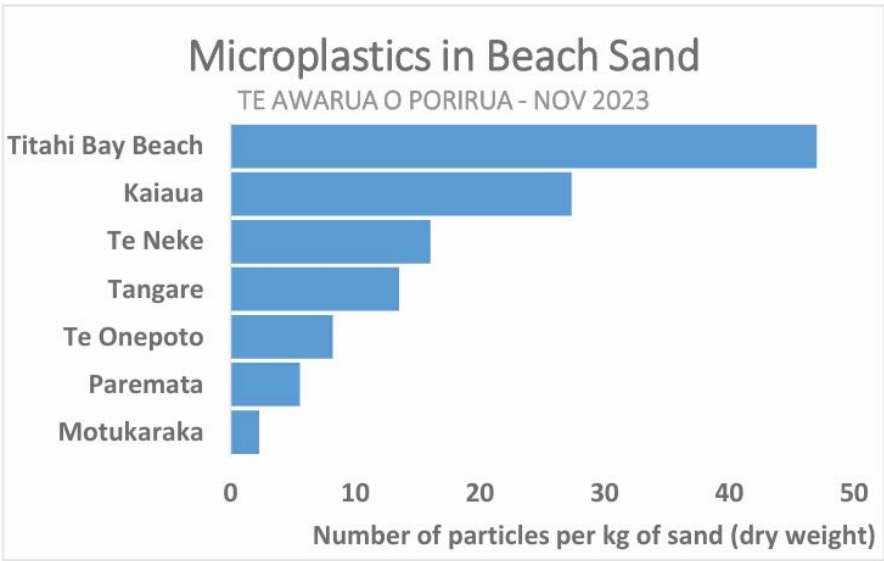


Figure 4: Average number of microplastic particles per kg (MP/kg) in beach sand (dry weight) for each site.

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Analysis of the types of microplastics found indicated a high proportion (63%) were fibres (from clothing) “suggesting that textile waste may be a key source of pollution” in Te Awarua o Porirua. The most common plastic type identified in the analysis was polyester. The report concludes:

108 Ibid, p8

109 Ibid, p11

This project was the first to document microplastics pollution in Te Awarua o Porirua. Our results confirmed the knowledge of Ngāti Toa Rangatira and the Porirua community that plastics pollution is a key issue in their rohe. We found evidence of microplastics in beach sand, freshwater, and in the harbour, confirming that this is a widespread issue with potentially broad environmental and cultural impacts. This study also demonstrated that fabric waste is a key component of plastic pollution in Te Awarua o Porirua, in addition to the already recognised issues of littering.¹¹⁰

Habitat loss

Habitat loss is both a direct and indirect consequence of reclamation, sedimentation, and pollution. Draining and filling of wetland areas, alongside the straightening and piping of streams, has reduced habitat diversity and connectivity. In-stream habitats such as riffles, pools, and vegetated margins are often absent in modified channels, limiting their suitability for native fish and invertebrates. The 2019 *Whaitua Implementation Programme* report stated:

The harbour also has the highest density of adjacent roading of any harbour or estuary in New Zealand and has a comparatively small opening to the sea, making it vulnerable to many pressures.

Today, many people perceive the harbour and streams as dirty and undesirable places to be. This perception and disconnection diminish people's sense of responsibility for sustaining and caring for the wellbeing of Porirua's waterways and estuary. Many people no longer see or know where streams come from or go to, and access to them and many parts of the harbour is difficult.

Suitable habitat has decreased, the stream channels along which fish move to feed or spawn have become more difficult to navigate due to barriers and other impediments, water quality has become increasingly degraded and toxic in several cases, and introduced and invasive aquatic and riparian species compete for space and food. These pressures all combine to reduce species' resilience to future changes in the environment such as climatic conditions.

There are multiple pressures on water bodies throughout Te Awarua o Porirua – some historical and others new. In urban areas, extensive areas of impervious surfaces created by roofs, roads, parking lots and driveways increase water volumes and flow peaks when it rains, flooding streams and causing streambank erosion. Many of the lower urban reaches of streams have been modified, channelled, straightened, piped and/or concreted, and offer limited habitat for aquatic life. Stream mouths have been modified by reclamation, earthworks and the building of the railway line and state highways, resulting in the loss of important spawning, nursery and feeding grounds for freshwater and marine life as well as birds.¹¹¹

¹¹⁰ Ibid, p20

¹¹¹ Ibid, pp 8-9

Snapshot of pollution pressures in Te Awarua o Porirua

How land uses in the catchment have changed, and continue to change, impacts the health of the harbour and waterways. It is not just the types of land uses and activities in the catchment, but the extent of change that informs the nature of pollution pressures.

Land cover changes across Te Awarua o Porirua over 20 years show a small but distinct reduction in grassland and an increase in urbanised land area (Figure 2).¹¹² Increases in urban land cover has been particularly pronounced in the Aotea/Paremata, Waiohata (Duck Creek) and Horokiri sub-catchments, driven by increasing subdivision and development and road building.

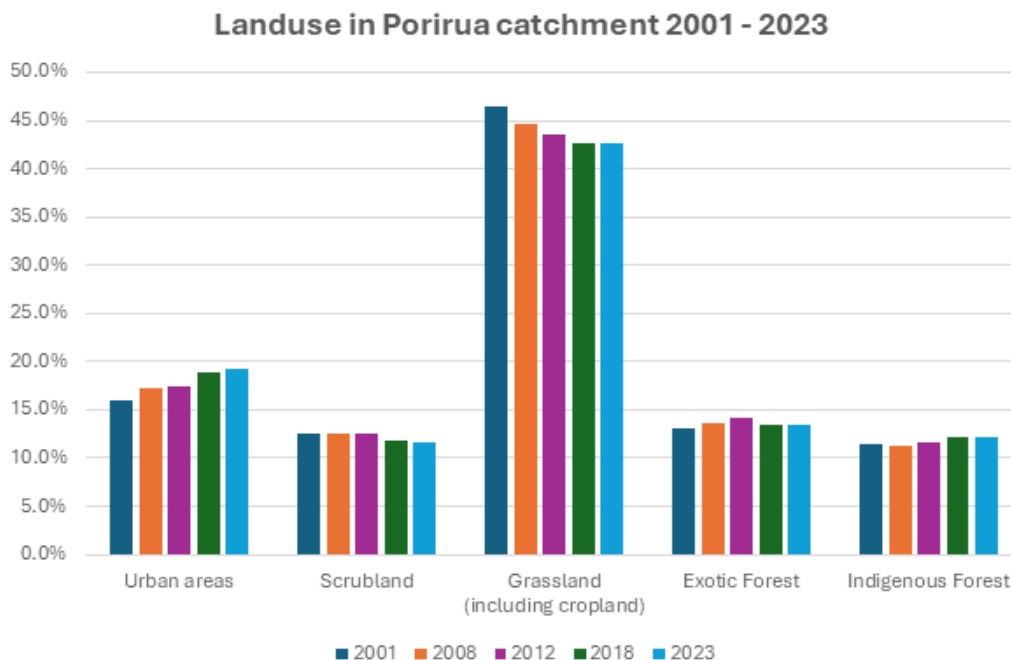


Figure 2. Changes in land cover in Te Awarua o Porirua between 2001 and 2023.

Land cover change in Te Awarua o Porirua affects waterway health in two main ways: by reducing vegetation and increasing impervious surfaces such as roads, roofs, and pavements. Together, these changes cause more stormwater to run off the land and enter streams more quickly, which can harm stream health. Urban growth also brings more people, vehicles, buildings, and hard surfaces, increasing the amount of contaminants that can be washed into waterways.

Activities with consent to discharge contaminants to waterways

As required under the Resource Management Act (RMA), Greater Wellington grants resource consent for activities that will discharge contaminants into fresh and coastal water bodies. This can include many different types of activity, but often these are associated with large-scale activities, e.g. earthworks as part of new road building and

¹¹² Based on land use cover classifications from New Zealand Land Cover Database (LCBD) models between 2001 and 2023.

new urban development or discharges from the local stormwater and wastewater networks.

There are currently 80 active sites or activities across Te Awarua o Porirua that have been granted resource consent by Greater Wellington for these types of activities, with 190 consents granted between them. Of these:

- Earthworks are the most frequently consented activity, making up approximately 70% of active resource consents issued by Greater Wellington in the catchment.
- Resource consent for the discharge of stormwater from new development and existing stormwater networks is the second-most frequently consented activity (Figure 3).

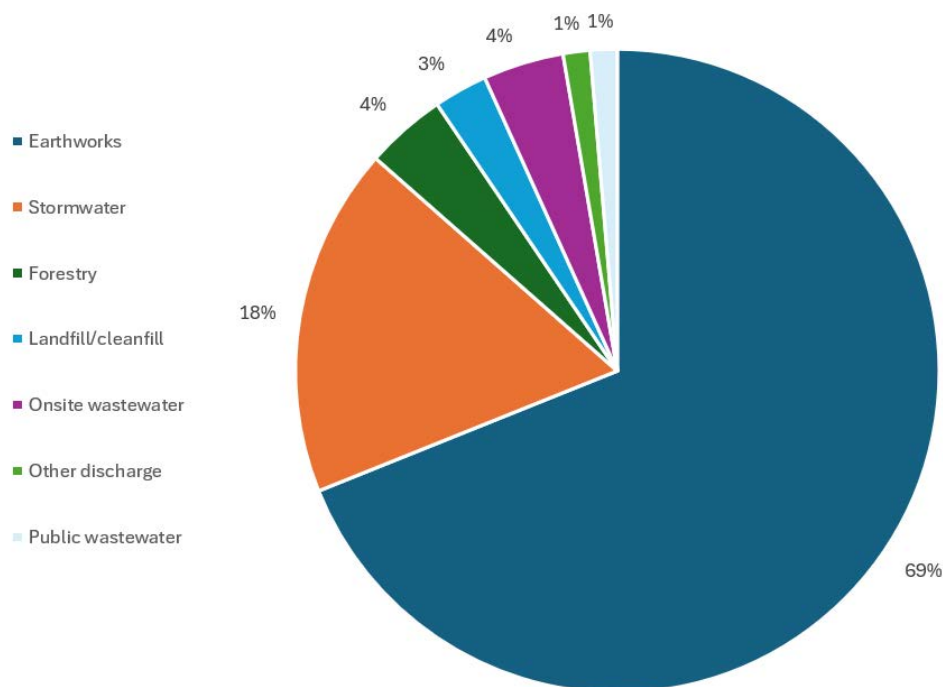


Figure 3. Activities with resource consent to discharge contaminants to water (or land entering water) in Te Awarua o Porirua. Based on Greater Wellington data and showing all consents where there is active compliance monitoring.

Consent monitoring

All consented activities have some form of monitoring requirement that reflects the nature of the activity and the conditions of consent to be adhered to. Looking at compliance ratings for different activities within Te Awarua o Porirua shows varying levels of compliance (Figure 3).

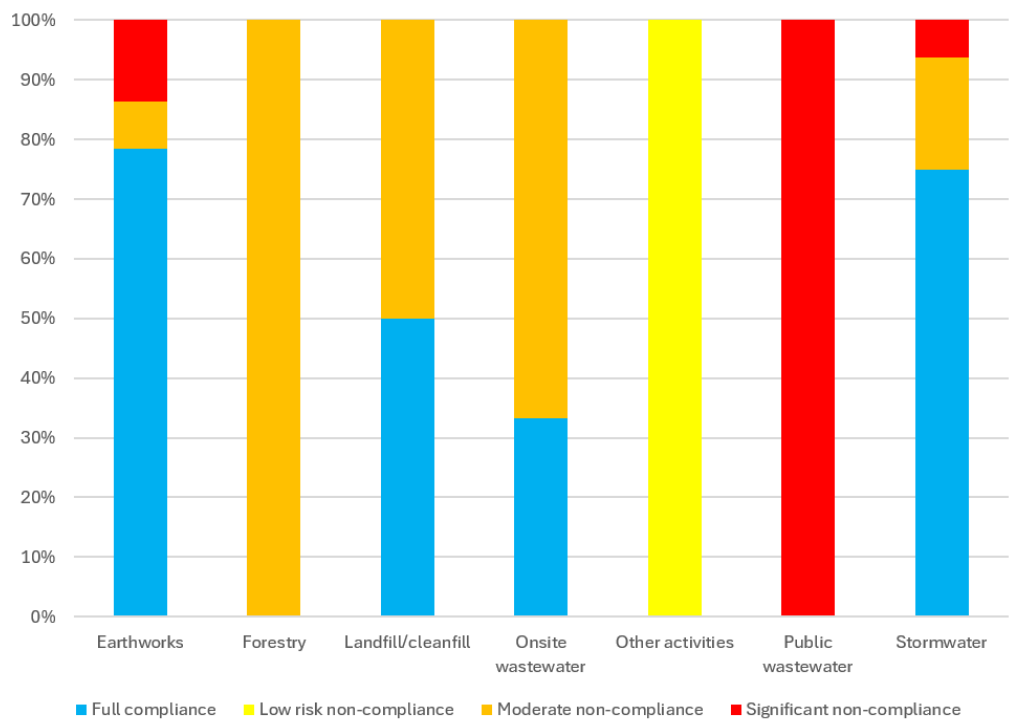


Figure 4. Compliance rating (%) for all inspected activities with consent to discharge contaminants to water, or land entering water, in Te Awarua o Porirua (25/26). Based on Greater Wellington data.

The impact of consented pollution can also be examined through looking at the location of activities and discharges around the catchment. Consented discharges occur widely across the catchment, most frequently in the two major sub-catchments of Te Awarua o Porirua (Parumoana): the Kenepuru Stream (Porirua Stream) sub-catchment and Te Mara o Te Hiko o Te Rangi (Kenepuru Stream) sub-catchment.



Figure 5. Proportion of current resource consents that discharge contaminants to water, or to land that then enters water, in each stream and coastal water catchment of Te Awarua o Porirua. Any stream named in the outside ring are arranged by the coastal catchment they then discharge into.

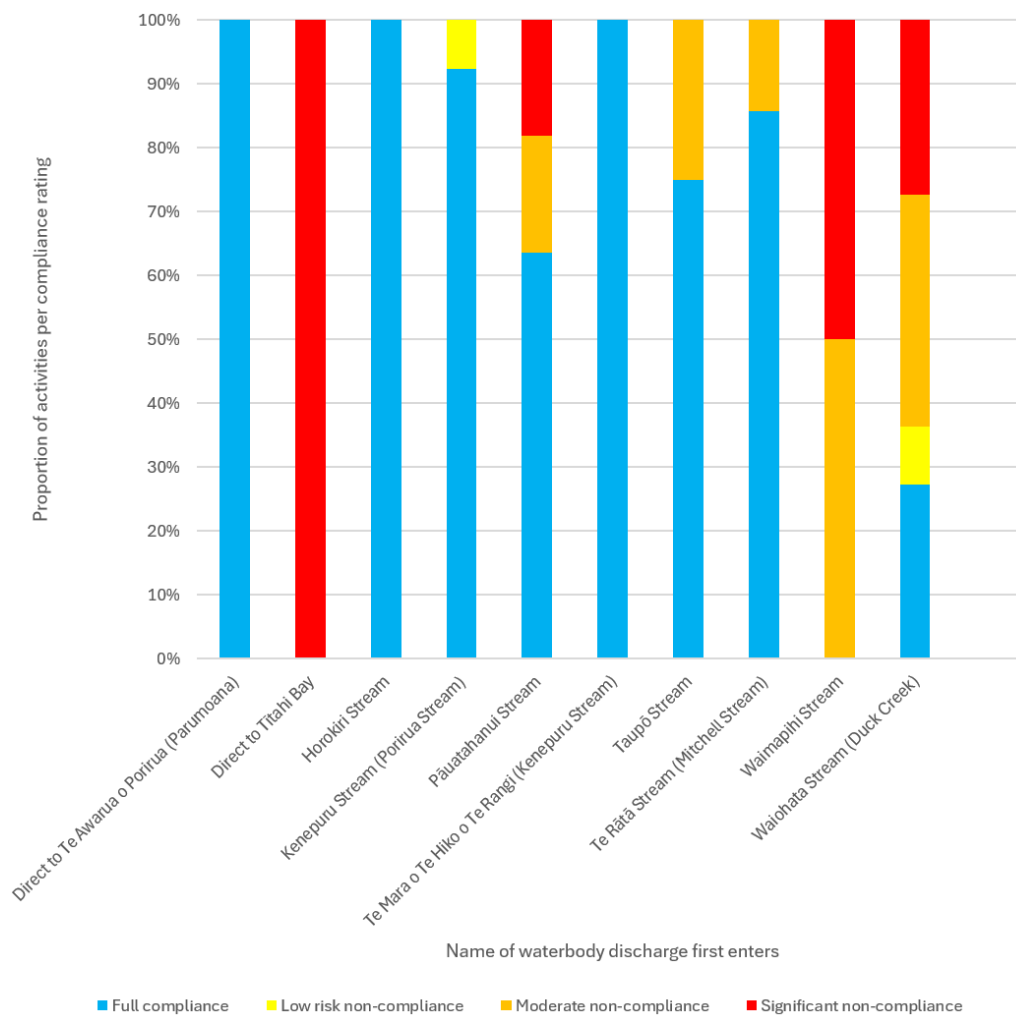


Figure 6. Compliance rating (25/26) of consented activities organised by waterbody the discharge first enters.¹¹³

Wastewater network overflows

The state of the public wastewater network within Te Awarua o Porirua means there are regular discharges of untreated wastewater into streams and coastal waters, particularly during heavy rainfall. Tiaki Wai is currently seeking resource consent for these discharges from 'wet weather overflow locations' in Te Awarua o Porirua. The application for resource consent identifies 28 controlled wastewater overflow locations in the catchment (see Figure 5).¹¹⁴

¹¹³ Data reflects only those activities with confirmed compliance rating at 26 June 2026 i.e. some consented activities are yet to have 25/26 compliance rating confirmed.

¹¹⁴ WWL 2023. Wet weather overflows from the Porirua and Wellington (Northern Suburb) Wastewater networks: Applications for Resource Consent and Assessment of Environmental Effects PART 1 REPORT

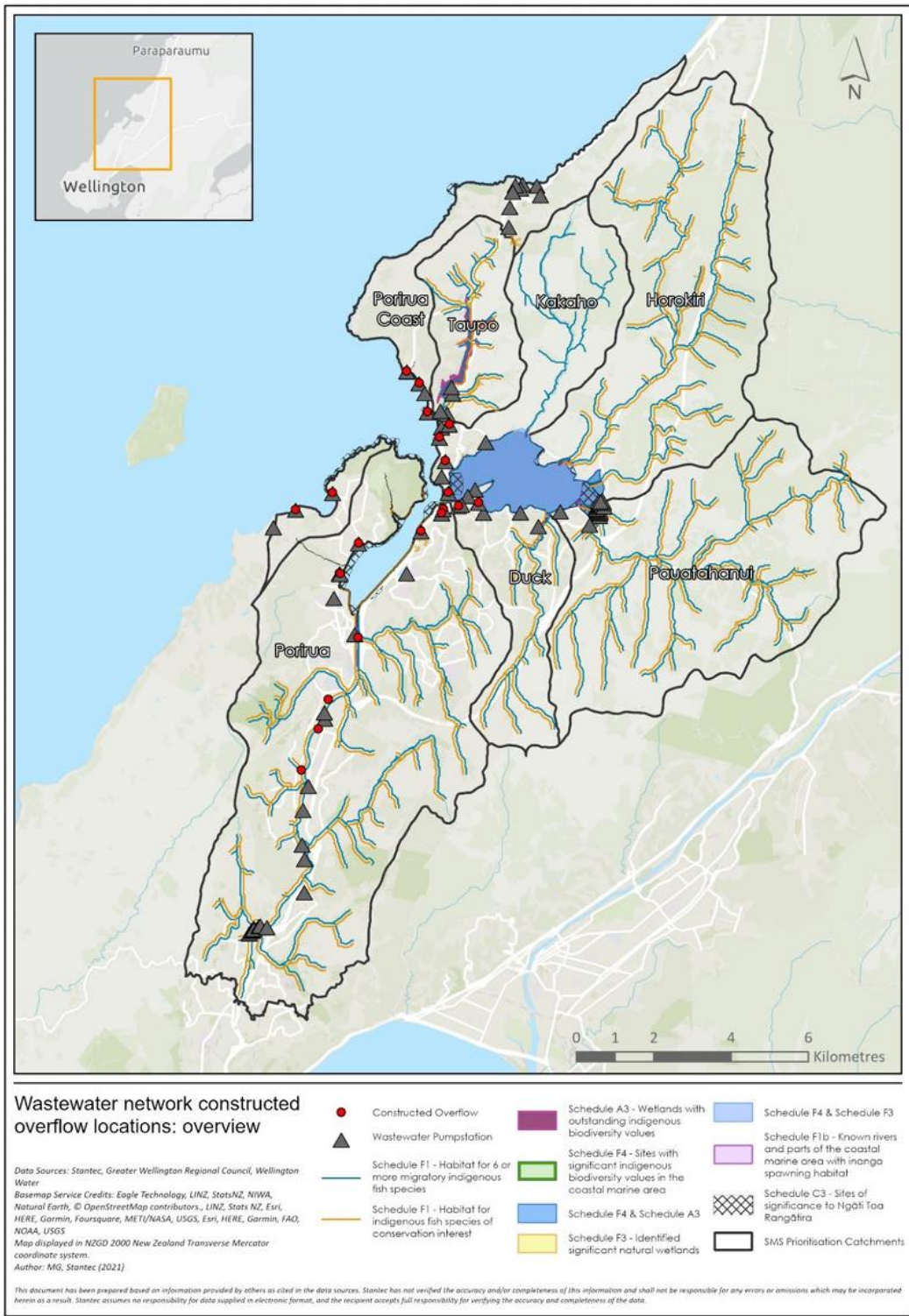


Figure 7. Map of wet weather overflow locations from the public wastewater network in Te Awarua o Porirua

The application also describes the nature of the volume and frequency the overflows – this data is summarised in the table below. This shows there are approximately 42 wet weather wastewater overflows per year across Te Awarua o Porirua, with the majority of those happening in either the Parumoana or Pāuatahanui parts of the harbour.

Approximate location of constructed wet weather overflow	Waterbody discharge goes to	Discharge volume		Discharge frequency	
		Annual mean (m³)	Range	Annual mean #	Range
Te Awarua o Porirua (Parumoana)					
Nearby Station Rd, Porirua	Kenepuru Stream (Porirua Stream)	2983	High	11	High
Left side of Station Rd, Porirua	Kenepuru Stream (Porirua Stream)	-	Medium	4	Medium
Paremata Cr, Paremata	Direct to harbour	-	Medium	1	Low
Outside 8 Kahutea Tce, Titahi Bay	Direct to harbour	11	Low	<1	Low
PCC_SW003885	Direct to harbour	1	Low	<1	Low
Papakowhai Rd and Brora Cres	Direct to harbour	-	Low	1	Low
Tangare Dr pump station, Takapūwāhia	Direct to harbour	-	Low	<1	Low
Station Rd, Porirua	Kenepuru Stream (Porirua Stream)	-	Low	-	Low
Titahi Bay Rd, Takapūwāhia	Direct to harbour	-	Low	-	Low
70 Oxford St, Tawa	Kenepuru Stream (Porirua Stream)	-	Low	-	Low
66 Beauchamp St, Tawa	Kenepuru Stream (Porirua Stream)	-	Low	-	Low
Wall Place, Kenepuru	Kenepuru Stream (Porirua Stream)	-	Low	-	Low
Te Awarua o Porirua (Pāuatahanui)					
Dolly Varden Beach	Te Awarua o Porirua (Pāuatahanui)	372	Low	3	Medium
Corner of SH58 and Postgate Dr	Browns Bay Stream	14	Low	3	Low
82 Paremata Rd, Paremata	Whitianga a Kupe (Ivey Bay)	3	Low	2	Low
158 Paremata Rd, Paremata	Rapa o te Whai (Browns Bay)	-	Low	1	Low
31 Paremata Rd, Paremata	Whitianga a Kupe (Ivey Bay)	-	Low	1	Low
Behind 13 Trevor Tce, Paremata	Whitianga a Kupe (Ivey Bay)	-	Low	<1	Low
Paremata Rd, Paremata	Rapa o te Whai (Browns Bay)	-	Low	-	Low
Te Awarua o Porirua harbour mouth					
Steyne Ave Railway Crossing, Plimmerton	Taupō Stream	-	Low	1	Low

Approximate location of constructed wet weather overflow	Waterbody discharge goes to	Discharge volume		Discharge frequency	
		Annual mean (m ³)	Range	Annual mean #	Range
5 Sunset Pde, Plimmerton	Plimmerton Beach	-	Low	1	Low
Moana Rd foreshore, Plimmerton	Karehana Bay	-	Low	1	Low
7 Moana Rd, Plimmerton	Karehana Bay	-	Low	1	Low
Opp 56 Moana Rd, Plimmerton	Karehana Bay	-	Low	1	Low
Front of 150 St Andrews Road, Plimmerton	Plimmerton Beach	-	Low	<1	Low
Open coast					
End of Moki St, Rukutane Point	Tītahi Bay	3835	Medium	8	Medium
Vella Street, Tītahi Bay	Tītahi Bay	41	Low	2	Low
Opposite 17 Ocean Parade, Pukerua Bay	Pukerua Bay	-	Low	<1	Low

The newly completed and now operational Porirua central wastewater storage facility, located adjacent to Porirua Stream, will greatly reduce wet weather event overflows, from approximately 13 annually to two.

Pollution incidents impacting waterways

Everyday there are a range of activities and incidents that lead to contaminants ending up in streams and coastal waters. Data from Greater Wellington shows around 144 reports of such incidents over three years to March 2026, with around a quarter of those being discharges of sediment.

Contaminant type	Number of pollution reports	Percentage of pollution reports
Sediment	34	24
Other liquid waste	25	17
Wastewater	18	13
Paint waste	16	11
To be confirmed	14	10
Hydrocarbons	14	10
Solid waste	8	6
Activity/works	7	5
Hazardous material	3	2
Wash water	2	1
Dye testing	2	1
Abandoned vehicle	1	1



Figure 8. Pollution incidents in Te Awarua o Porirua (2023-2026) where contaminants have impacted fresh and coastal waterbodies. The outer ring shows the stream impacted, while the inner ring shows the coastal catchment impacted. Data from the Greater Wellington pollution response database.

Te Awarua o Porirua (Parumoana) was by nearly half of all reported incidents during that period (Figure 8). Kenepuru Stream (Porirua Stream) and its tributaries (including Te Mara o Te Hiko o Te Rangi and Te Rātā Stream) was directly impacted by nearly a third of all incidents.



Figure 9. Pollution incidents in Te Awarua o Porirua (2023-2026) organised by coastal catchment (inner ring) and by contaminant/source type (outer ring). Data from the Greater Wellington pollution response database. The category 'Liquid waste – Other' includes all instances where it was not possible to determine the contaminant.

Figure 9 shows the types of contaminants reported to be impacting the different coastal catchments of Te Awarua o Porirua for incidents reported to Greater Wellington over the three years to March 2026. Parumoana shows a higher incidence of paint waste pollution than the other catchments. Sewage is the most frequently reported contaminant in Titahi Bay.¹¹⁵

¹¹⁵ This data set may include discharges of wastewater from locations in the wastewater network identified in the table on p59-60 if the discharge was also reported to the Greater Wellington incidents response.

Impact of litter in Te Awarua o Porirua

The health and vitality of the streams and coastal waterbodies of Te Awarua o Porirua are significantly impacted by litter or rubbish that reaches them through direct dumping, being blown there by wind and being picked up in stormwater systems. Since 2019 there have been 39 litter cleanups in and around the harbour recorded on the Litter Intelligence website.¹¹⁶ This provides an insight into the extent of litter pollution, what the litter comprises and the kind of effort taken to clean it up.

The table below shows that the eight sites in Te Awarua o Porirua with recorded data have had, on average, 1,659 pieces of litter per 1,000m². Of these, the portion of the litter that was plastic ranges between 56% and 95%. Litter density in those sites within Te Awarua o Porirua (3,523m²) is higher than at those sites in the open coast (225m²). At the Kenepuru Stream (Porirua Stream) estuary, the total litter collected in the 13 recorded surveys is nearly 180kg.

Location	Number of clean ups/surveys	Volunteer hours	Average number of litter items per 1,000m²
Te Awarua o Porirua at Paremata Bridge	22	525	4,185
Te Awarua o Porirua at Kenepuru Stream (Porirua Stream) estuary	13	387	2,003
Te Awarua o Porirua harbour – West End (Takakpūwāhia)	2	21	1,655
Pukerua Bay – Pukerua Bay pā site	28	252	340
Tītahi Bay – South End	4	55	202
Te Awarua o Porirua at Motukaraka Point (East Side)	2	50	166
Whitireia Park – Onehunga Bay	14	81	75
Hongoeka Bay – Hongoeka Beach	6	73	63
All locations	92	1,532	1,659 (Range: 18 to 10,818)

Although making up only 1.43% of the items collected across these eight sites, wood (e.g., crates) accounts for nearly 40% of the litter collected by weight. Excluding wood, plastic accounts for around 32% of the total litter by weight and about 73% by number of items.

Around 40% of the plastic litter identified in these surveys was 'unidentifiable'. Of the plastic litter able to be identified, food wrappers were by far the most frequent type of plastic (comprising 18% of all plastic litter) and the heaviest type of plastic, weighing in at 13kg across the 93 surveys. Analysis also shows that 1,049 lollipop sticks, 1,238 straws and 2,715 bottle caps or lids were removed from Te Awarua o Porirua coastal waters over the 93 clean-up events.

¹¹⁶ [Litter Intelligence - Data](#)

While the Litter Intelligence website provides a useful source of litter data, there is evidence that the actual volume of litter entering and accumulating around the harbour is higher than monitoring alone suggests.

In recent years, community-led harbour clean-up events have highlighted the scale of the issue. One community group recently removed 1.3 tonnes of litter during a single 90-minute clean-up at the Kenepuru Stream (Porirua Stream) estuary. The Porirua Harbour Accord clean-up event in April 2026, collected over 517kg of litter from the estuary, and along Titahi Bay Road coastline and Onepoto Inlet.

In addition to common litter such as plastic packaging, bottles and cans, large items including whiteware, shopping trolleys, traffic cones, tyres, clothing and other dumped waste are regularly collected. These clean-ups demonstrate that litter remains a significant issue for the harbour and that ongoing prevention, education and ongoing community action are essential.

Addressing pollution pressures

These pollution pressures will be addressed through multiple actions in Section 8: Ka mua, ka muri. Te whakarauoratanga - The past in front of us: restoration and renewal.

This will involve both regulatory monitoring and compliance activities from Greater Wellington as well as non-regulatory actions identified in this plan. Greater Wellington already prioritises earthwork consent monitoring in the Porirua Harbour catchment along with forestry.

Key actions to address these pollution sources include but are not limited to:

- Coordinated rural land engagement programme
- Forestry engagement programme
- Identify and repair private and public wastewater leaks
- Water-sensitive design
- Wastewater strategic programme
- Stormwater and transport asset management
- Transport network habitat restoration
- Living streams
- Pollution prevention programme.

Pollution prevention is a priority for the partner agencies and a new resource/role is to be funded 50/50 by Greater Wellington and Porirua City Council as part of Action 18.

7. Ka mua, ka muri. Te whakarauoratanga - The past in front of us: restoration and renewal

Our action framework

Signing a piece of paper does nothing to change the environment. For this reason, the signing of *Te Wai Ora o Porirua - Porirua Harbour Accord* was followed by an intentional and dedicated process of developing tangible actions to restore Te Awarua o Porirua.

The actions outlined in this section were developed during a series of workshops that focused on the most effective and feasible options. An intervention logic was applied to the priority actions. This logic model helps to illustrate a causal relationship between the proposed actions and the Harbour Accord outcomes and associated measures. The actions are also designed to directly address the range of pollution pressures summarised in Section 7, namely sedimentation, water pollution and habitat loss.

The actions are formatted in a similar layout to make it easy to read and compare. Each action includes an overall intro page, an action page and a table for each action.

The summary table includes:

Activities – key activities we will do to achieve the overall action.

Outputs – the direct, tangible products of each activity.

Timeframe – when an activity will be completed.

Led by – responsible for owning, coordinating, and delivering the project.

Key partner(s) – a supporting role in implementing and contributing to the delivery of the action.

Funding and resourcing – indication of which agency or agencies will fund and/or provide resources towards the activity. The vast majority of the actions in this plan are resourced in the agencies Annual Plan 26/27 for completion or start. In many cases, the actions involve greater collaboration, not just more funding. For the larger unfunded actions, the next most feasible step has been identified and resourced to complete over the next year.

As noted in the introduction of this document, the actions listed below are not the ‘final word’ for our collaborative approach to the restoration of the harbour. They will be refined and developed in the future, especially by maximising the opportunities of resource management reform (ie. development of a new spatial plan), new research, monitoring trends, etc.

PRIORITY FOCUS - Sediment solutions

Reducing sediment sources entering the harbour

Catchment context

Sedimentation from both rural and urban land-use change is a major challenge for Te Awarua o Porirua. Issues in the rural areas of Porirua are significant, particularly the contribution of sediment into streams and the harbour as a result of land erosion. Much of this erosion is related to historical forest clearance, but also more recent farming and forestry practices.

With over 13% of the Porirua catchment in plantation pine forest, with over 200+ individual landowners, it is an area that requires some resource and attention. Sediment discharged into rivers, streams and the harbour can negatively impact a range of values, including ecosystem health and the way people use water for recreational, cultural and spiritual purposes.

These actions seek to reduce and eliminate sediment at source and are supported by Water Sensitive Design (WSD) and compliance and regulation in the urban development space.

Key actions

1. To deliver a coordinated and scaled-up **rural land engagement programme** for the management of sediment sources within Porirua Harbour catchments.
2. Tailored engagement with **commercial forest owners**, forest managers and harvest operators to educate and upskill on forestry good management practices and regulations for sediment reduction.

Outcomes

- Rural landowners and forestry operators have improved knowledge, awareness, and capability to manage land in ways that reduce erosion and sediment loss.
- Priority sediment-reduction actions are implemented across an increased proportion of high-risk land by landowners and forestry operators, including council-owned exotic forestry.
- Vegetation on highly erodible public land is successfully established.
- Less sediment in streams, wetlands and harbour from rural land.

Action 1: Coordinated rural land engagement programme

A coordinated, scaled-up rural land engagement programme for managing sediment sources within Te Awarua o Porirua through council initiatives.

Key activities under this programme include:

1. Tailored advice and engagement to rural landowners, including support for Farm Environment Plans.
2. Incentive programmes for sediment mitigation and restoration on private rural land.
3. Restoration and erosion-control planting works on council-owned land including maintenance of plantings until establishment.
4. Best-practice land management on GW and PCC parkland.

What's different

- **New Lifestyle Property Advisor position** to enable engagement with smaller rural lifestyle property owners.
- **Stronger coordination** across agencies delivering sediment-reduction actions, and across different actions (e.g. fish passage, biodiversity, habitat), with clearer roles and reduced duplication.
- **Higher subsidies for actions on the most erosion-prone land** and critical source areas management. GW with PCC and WCC support working with landowners to address sediment issues, including land use change and restoration.
- **More explicit focus on behaviour change** and enabling conditions, not just delivery of physical works.
- **Belmont Regional Park grazing retirement** that prioritises the Porirua catchment and over 202 hectares removed from the grazing license in 2026.
- **Public land restoration** and the removal of grazing in areas like Glenside and reserve land adjacent to Pikarere Farm.

SEDIMENT SOLUTIONS					
Action 1: Coordinated rural land engagement programme					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Tailored advice and engagement to rural landowners including: - Proactive engagement with large landowners. - Support for Farm Environment Plans for large landowners. - Catchment wide education and targeted engagement with small-block rural landowners.	Engagement with all 15 large-scale rural landowners.	By 2028	GW	PCC	GW, PCC
	Farm Environment Plans completed for all 15 large-scale rural properties identifying priority sediment mitigation actions for each property.	By 2030			
	At least three education events delivered annually targeted towards small-block landowners.	Annually			
	Targeted engagement undertaken with at least five identified high-risk small-block properties annually.	Annually			
	Educational resources and guidance made available to all rural landowners.	Ongoing			
	Incentive funding made available to support priority sediment mitigation actions.	Ongoing			
Implementation of actions through incentive programmes for private land sediment mitigation on rural land.	150ha of erosion-prone, riparian and wetland areas treated through retirement, natural reversion and/or planting.	Over 10 years by 2036	GW	PCC	GW, PCC, WCC
	At least 10 priority sediment reduction actions implemented annually, including erosion mitigations and critical source area treatment	Annually			

Best-practice land management on GW parks land.	Retirement and planting of priority areas within Belmont Regional Park. Ongoing restoration and best practice land management on Battle Hill Farm Forest Park.	2026-2030	GW		GW
Best-practice land management on PCC parks land.	Ongoing restoration and best practice land management at Rangituhi and other reserve land retired from grazing.	Annually	PCC	Rūnanga	PCC

Action 2: Forestry engagement programme

Deliver a coordinated forestry sediment-reduction programme that supports forest owners and operators in adopting and exceeding good management practices through tailored advice, incentives, case studies, and aligned regulatory guidance.

Key activities under this programme include:

1. Tailored advice to commercial forest owners, forest managers and harvest operators to educate and upskill on forestry good management practices and regulations for sediment reduction.
2. Incentive mechanisms to support forestry practices that exceed regulatory minimums for erosion control e.g. hydroseeding or hay mulching to forestry earthworks sites.
3. Case studies to demonstrate good forestry practice and compliance approaches.
4. Advisory, incentive, and regulatory functions are actively coordinated to provide coherent expectations for forestry operators.

What's different

- **Shift from reactive, compliance-led engagement to proactive, non-regulatory advisory engagement** focused on improving forestry practice and reducing sediment risk before damage occurs.
- **New incentives** to encourage forestry practices that go beyond National Environmental Standards for Commercial Forestry (NES-CF) minimums (shift to formalise funding for Forestry Engagement Project).
- **Active separation of advisory and regulatory roles** - using independent consultants to improve uptake on solutions and reduce enforcement-driven conversations.

SEDIMENT SOLUTIONS					
Action 2: Forestry engagement programme					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Tailored advice to commercial forest owners, forest managers and harvest operators to educate and upskill on forestry good management practices and regulations for sediment reduction.	Forestry advice and guidance provided to forestry owners, managers, and harvest operators through an engagement programme. Forestry operators are supported to identify and apply erosion-control mitigations beyond regulatory minimums e.g. water cut outs, culverts, flumes, side-cast soil displacement.	Ongoing	GW	Forest managers / owners	GW
Advisory, incentive and regulatory functions are actively coordinated to provide coherent expectations for forestry operators and owners.		Ongoing	GW	Forest managers / owners	GW
Incentive mechanisms to support forestry practices that exceed regulatory minimums for erosion control.	Incentive programme for improved forestry sediment-risk mitigation established and available.	2027	GW	Forest managers / owners	GW, Forest managers / owners
Case studies to demonstrate good forestry practice and compliance approaches.	Forestry good-practice and compliance case studies produced and shared.	2027	GW	Forest managers / owners	GW

PRIORITY FOCUS - Water sensitive catchment

Improving water quality throughout the catchment and harbour

Catchment context

The Porirua Harbour has the highest density of adjacent roading of any harbour or estuary in Aotearoa New Zealand and has a comparatively small opening to the sea, making it vulnerable to many pressures.

The wastewater network is old and lacks adequate capacity for the current population, let alone the projected growth of the cities of Porirua and Wellington. It is also compromised by inflows from the stormwater network through incorrect connections or in many places the poor condition of both the stormwater and wastewater pipes. This all contributes to more frequent wastewater overflows.

Urban development affects water quality and ecosystem health in various ways. The modification of landforms and increased levels of impervious surfaces associated with traditional urban developments can impact landscape and natural character values and result in changes to the hydrology of catchments, creating more frequent high-intensity flushing flows and reducing base flows in streams.

Key actions

1. Increase resource and more strategic approach to identifying and **repairing private and public leaks.**
2. Consistent implementation of **Water Sensitive Design (WSD) principles** and practices.
3. **Compliance and regulation.**
4. **Wastewater strategic programme.**
5. **Stormwater and transport asset management.**
6. **Transport network habitat restoration.**

Outcomes

- Less water is lost due to public leaks.
- Private leaks and cross-connections are repaired sooner after identification.
- Consultants, developers and council staff understand how to apply WSD requirements.
- Water-related rules and consent requirements are applied more consistently.
- More priority wastewater issues are addressed through infrastructure investment.

- Stormwater maintenance is targeted towards the largest pollution sources within the catchment.
- More litter, sediment and contaminants are intercepted from the stormwater network before reaching waterways and harbour.
- More indigenous habitat is established within transport corridors.

Action 3: Identify and repair private and public leaks

Increased resourcing and take a more strategic and sub-catchment-based approach to identify and carry out additional inspections of wastewater pipes and repair leaks. This action includes a support programme that will help landowners repair leaks and any cross-connections on their property.

Key activities under this programme include:

1. Increase Tiaki Wai resourcing to carry out proactive investigations into the source of wastewater leaks.
2. Identify target locations based on modelling of E. coli loading in the harbour.
3. Repair public leaks and proactively engage with landowners of private leaks requiring repair.
4. Implement a programme to support landowners in repairing private leaks and cross-connections.

What's different

- Shift from reactive fixes and isolated investigations to a **planned, catchment-prioritised, multi-year programme** with shared metrics and transparent reporting.
- Explicitly includes a **pathway for private lateral identification, engagement and repair**, rather than relying on ad hoc homeowner action.
- More active **use of monitoring and modelling** to target investigations and confirm outcomes.
- **Better alignment** of local works, road corridor timing, and communication.
- **Shared tools/panels/approaches** to reduce duplication and speed up delivery.
- **Cultural priority-setting** and community trust-building embedded into delivery sequencing and messaging.

WATER SENSITIVE CATCHMENT					
Action 3: Identify and repair private and public leaks					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Increase inspections of wastewater pipes and repairs to public assets.	Priority catchments mapped and ranked by leak/overflow risk. Verified leak/defect register established (public and private indicators).	2026-2027	Tiaki Wai		Tiaki Wai
Identify target locations based on modelling of E. coli loading in the harbour, investigate and repair the sources of public leaks.	Public network investigations completed in priority areas CCTV / monitoring / testing. Public leaks repaired.	2027	Tiaki Wai		Tiaki Wai
Proactively engage with landowners of private leaks requiring repair.	Process revised for notifying PCC/WCC of private leaks.	2026	Tiaki Wai	PCC, WCC, Homeowners	Homeowners
Develop a programme to support landowners in repairing private leaks and cross-connections.	Landowners are supported to repair private leaks and cross-connections.	2026-2027	Tiaki Wai	PCC, WCC, Homeowners	Homeowners

Action 4: Water Sensitive Design (WSD)

This action recognises that the regulation and guidance to achieve a water sensitive catchment are largely in place. It is now about implementing WSD in accordance with these for new developments and having a structured programme to deal with existing developments.

Includes a focus on the use of nature-based stormwater treatment solutions, such as rain gardens, swales, wetlands, and permeable surfaces, while improving coordination between infrastructure agencies to identify retrofit opportunities within existing urban areas.

This action would also strengthen guidance, training, and capability for practitioners delivering stormwater management solutions.

Key activities under this programme include:

1. Implement a coordinated WSD programme including:
 - a. Develop and implement an education and training programme for consultants, developers and council staff on new policy direction and ways to meet requirements.
 - b. Develop training and guidelines to support WSD implementation and maintenance.
 - c. Identify incentive mechanisms to incentivise stormwater mitigations within the existing urban footprint and maximise the opportunities provided by infill and brownfields redevelopments.
 - d. Build on local and international experience of co-funding stormwater mitigations.
 - e. Provide a long-term funding stream for retrofit projects in existing urban areas.
 - f. Invest in nature-based stormwater management solutions such as constructed wetlands, rainwater harvesting systems, rain gardens and more permeable surfaces.
 - g. Showcase what good WSD and water management practice looks like through projects such as town centre redevelopments, transport hubs and buildings.
 - h. Support planning and consenting processes to maximise sediment-reduction outcomes for future developments and subdivisions.
 - i. Support retreat of coastal land by:
 - Incentivising landowners to retire and restore low lying coastal land.

- Considering opportunities for future strategic land purchase.

What's different

- Greater **scale and more consistent integration of WSD** principles into urban planning, development, and infrastructure delivery.
- Greater use of **nature-based stormwater treatment solutions** such as rain gardens, swales, wetlands and permeable surfaces.
- Greater **coordination** between infrastructure agencies to identify opportunities for WSD retrofit in existing urban areas.
- Improved **guidance and capability** for practitioners delivering stormwater management solutions.
- Harbour Accord agencies **work constructively to resolve challenges** in building and maintaining nature-based stormwater solutions.

WATER SENSITIVE CATCHMENT					
Action 4: Water sensitive design (WSD)					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Implement a coordinated WSD programme including specific measures to resolve barriers to implementation.	Development of coordinated WSD programme, incl. mechanisms to address barriers to implementation. Delivery of an education and training programme for consultants, developers and council staff on new policy direction and ways to meet requirements. Training and guidelines to support WSD implementation and maintenance. Incentive mechanisms in place to increase use of water sensitive stormwater mitigations.	2027	PCC, WCC	Tiaki Wai, GW	TBD
Showcase what good WSD and water management practice looks like through projects such as town centre redevelopments, transport hubs and buildings.	Implement at least two examples annually of WSD best management practice.	2028	PCC, WCC	Tiaki Wai	PCC, WCC
Enable the delivery of significant stormwater nature-based infrastructure to reduce pressures in the harbour from existing development and mitigate effects in new ones. Including annual debrief and reviews across partners on	New Cannons Creek constructed wetland completed in partnership with Kāinga Ora. Explore opportunities for future sites on Porirua Stream at Kenepuru Park, near Linden Park and Onepoto Park in Titahi Bay.	2028	Tiaki Wai	PCC, WCC Rūnanga, Kāinga Ora	Tiaki Wai, Kainga Ora, Developers

learnings to make it easy.					
Build staff capability in stormwater green infrastructure maintenance, such as rain gardens, wetlands, and bioretention ponds.	Maintenance of existing and/or new stormwater nature-based solutions can be contracted at affordable rates.	2029	PCC	Tiaki Wai, GW	PCC, Tiaki Wai

Action 5: Planning, Compliance and regulation

Review and align planning, compliance, enforcement, and consenting practices to ensure water-related policies, rules, bylaws, regulations, and consent conditions support common outcomes and are applied fairly and consistently across the catchment/region by the Harbour Accord agencies.

Key activities under this programme include:

1. Consent conditions and practices are consistent across PCC and WCC for the same activities.
2. Shared or consistent relationship management with landowners/contractors.
3. Resource consent conditions support trialling of alternative management approaches and innovative practice (in low-risk scenarios).
4. Erosion and sediment control guidance across councils is consistent and up to date.

What's different

The activities would ensure **consent conditions are consistent across agencies**, maintain **up-to-date guidance** for earthworks, sediment, and erosion controls, and enable resource consent conditions that support **trialing innovative management approaches**.

It would also encourage **collaboration with landowners and sector groups**, alongside **investment in research and development**, to identify, support, and adopt more effective and innovative practices.

WATER SENSITIVE CATCHMENT					
Action 5: Planning, Compliance and regulation					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
PCC and WCC work together to produce shared standard conditions for consented activities that impact the harbour.	Shared or consistent condition sets for specified activities created.	2027	PCC, WCC	GW, Tiaki Wai, Rūnanga	PCC, WCC
PCC / WCC liaise with GWRC where separate consents are applied for the same activity & site to enable regulatory consistency across jurisdictions.	Shared or consistent relationship management with landowners/contractors as a joined-up approach to compliance and monitoring.	2027	PCC, WCC	GW, Tiaki Wai, Rūnanga	PCC, WCC
Resource consent conditions can support the trialing of alternative management approaches and innovative practices (in low-risk scenarios / in the implementation of water-sensitive design).	Resource consents support alternative management approaches where appropriate.	2027	PCC	GW, WCC	PCC, GW, WCC
Collaborate with harbour partners through legislative change to maintain strong and effective provisions in the District Plans and in future natural environment and land use plans.	Strong provisions in the new Land Use Plan and Natural Environment Plan to control sediment.	2028	GW	PCC, WCC	GW, PCC, WCC
Review of CME policies to priorities high-risk areas and activities that impact the health of the harbour	CME policies prioritise high-risk areas and activities.	2027	GW	PCC, WCC	GW, PCC, WCC
Councils regularly collaborate on CME to share knowledge and information, improve	Shared training opportunities and knowledge exchange through REPO hui.	2027	GW	PCC, WCC	GW, PCC, WCC

systems and processes, and upskill staff.					
Erosion and sediment control guidance across councils is consistent and kept up to date.	Shared or consistent ESC guidance document(s).	2027	GW	PCC, WCC	GW, PCC, WCC

Action 6: Wastewater strategic programme

Develop and implement an integrated strategic wastewater programme that addresses priority problem areas across the wastewater network.

Key activities under this programme include:

1. Develop and implement a strategic wastewater programme that includes:
 - a. Assessment of wastewater network performance and identification of priority problem areas (including dry weather discharges and overflow locations).
 - b. Development of a coordinated set of actions, strategies and investment priorities to reduce wastewater discharges to freshwater and coastal receiving environments.
 - c. Consideration of non-network wastewater challenges and opportunities including septic systems, cross-connections and emerging on-site treatment options.
 - d. Informing the regional water services delivery strategy.
2. Implement the wastewater strategic programme.

What's different

- **Integrated catchment approach** that recognises the interconnected nature of the wastewater network, receiving environments (including restoration and environmental outcomes) and urban development pressure.
- **Greater use of environmental monitoring** data to inform infrastructure planning.
- **Paremata Wastewater Main Renewal** – Stage 2.

WATER SENSITIVE CATCHMENT					
Action 6: Wastewater strategic programme					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Assessment of wastewater network performance and identification of priority problem areas (including dry weather discharges and overflow locations).	Priority wastewater network improvement areas identified.	2026	Tiaki Wai		Tiaki Wai
Development of a coordinated set of actions, strategies and investment priorities to reduce wastewater discharges to freshwater and coastal receiving environments.	Wastewater strategic programme confirmed.	2026	Tiaki Wai		Tiaki Wai
Consideration of non-network wastewater challenges and opportunities, including: • septic systems, • preventing cross-connections, and • emerging on-site treatment options.	Wastewater strategic programme confirmed.	2026	Tiaki Wai	PCC, WCC, GW	Tiaki Wai
Develop and implement a strategic wastewater programme, taking an integrated approach for Te Awarua o Porirua.	Integrated assessment of wastewater discharge impacts completed. Infrastructure investment priorities aligned with harbour outcomes.	2027	Tiaki Wai	PCC, WCC, GW	Tiaki Wai

Action 7: Stormwater and transport asset management

Review the existing stormwater asset management plan and develop a new programme focused on priority problem areas and assets. The programme would deliver enhanced maintenance and targeted infrastructure upgrades to improve stormwater outcomes, including the use of measures such as filtered sumps and litter capture devices in high-priority areas.

Maintenance activities, including street sweeping and sump cleaning, would be increased and optimised within priority catchments, supported by greater use of monitoring and data to inform decision-making and prioritisation.

Key activities under this programme include:

1. Review frequency of street sweeping and sump cleaning in plans and contracts.
2. Implement the Harbour Sumps Upgrade trial of Stormshield (filters) devices including monitoring of the effectiveness and maintenance implications.
3. Create an “Adopt a Sump” community programme.
4. Review Asset Management Plans to look at current level of service and identify opportunities and cost implications of increasing street cleaning frequency, sump cleaning etc.
5. Ensure asset management planning processes include prompts for stormwater improvements and identify follow-on improvements in water retention.

What's different

- Shift from reactive, routine maintenance to **proactive, targeted, data-driven and risk-based maintenance** focused on high-pollution areas, with infrastructure improvements (e.g. filtered sumps, litter capture devices) introduced as standard practice in priority areas.
- Increased **frequency and optimisation of street sweeping and sump cleaning** in priority catchments.
- Greater use of **data and monitoring to inform decision-making** and prioritisation of works.
- Integration of **stormwater outcomes into transport asset management** practices (not just road functionality).
- Greater **integration of cultural values and outcomes** into asset management decisions.

WATER SENSITIVE CATCHMENT					
Action 7: Stormwater built into asset management					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Review frequency of street sweeping and sump cleaning.	Included in asset management plans and contracts identified and costed and assessed for trade-offs.	2028	PCC	Tiaki Wai, WCC	PCC, NZTA, WCC
Harbour sumps filter upgrade trial.	Completed trial with sumps filters around Porirua Stream entrance to inform potential sump upgrade programme.	2027	PCC	Tiaki Wai, GW, WCC	PCC
Create an 'Adopt a Sump' community programme.	'Adopt a Sump' community programme initiated.	2027	PCC		PCC
Incorporate stormwater improvements into all infrastructure asset management.	Stormwater improvements included in asset management plan.	2029	PCC, WCC	Tiaki Wai	PCC, WCC, NZTA,

Action 8: Transport network habitat restoration

Protect indigenous vegetation cover on road resources and main road and railway corridors to enhance habitat connectivity, biodiversity and ecosystem function, and to buffer the harbour environment. Includes supporting community efforts to restore road and rail corridors.

Key activities under this programme include:

1. Deliver Road Reserve Planting Programme. Prioritise roading corridor for restoration.
2. Mana whenua guide cultural and ecological restoration approaches.
3. Update PCC Berm Policy.
4. Ensure maintenance of constructed wetlands, rain gardens, and other storm water nature-based infrastructure supports biodiversity outcomes.
5. Develop level of service guidelines for the roading corridor restoration.
Includes:
 - Protect existing vegetation within the road corridors.
 - Explore opportunities for berm planting by residents.
 - Pest tree and weed species removal list and programme.
6. Ensure new roads enable street-tree and garden planting opportunities.

What's different

- Shift from aesthetic/maintenance-driven and amenity-focused planting (e.g. grass, exotics) to **ecological restoration using indigenous species**.
- Increased **maintenance** for native vegetation establishment.
- Integration of **biodiversity outcomes into transport and parks** maintenance programmes.
- Increased **collaboration with community groups** and restoration partners, and across agencies.
- **Increased mana whenua role** in guiding cultural and ecological restoration approaches.

WATER SENSITIVE CATCHMENT					
Action 8: Transport network habitat restoration					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Deliver Road Reserve Planting Programme.	Increase indigenous canopy cover within roading corridors.	Annual	PCC	WCC, Rūnanga	PCC
Prioritise roading corridor for restoration. Support integration of stormwater and ecological outcomes where relevant.	Mapped priority transport corridors and ecological connections.	2027	PCC	GW, WCC, Tiaki Wai, Rūnanga	WCC, PCC, NZTA
Deliver equivalent restoration within Wellington City roading corridor portions of the catchment.	Align corridor restoration planning with PCC. Integrate ecological outcomes into transport, asset and open space management.	2027	WCC	Rūnanga	WCC
Mana whenua role in guiding cultural and ecological restoration approaches	Species selection guidance. Place-based priorities identified to align with whakapapa, mahinga kai, and cultural values.	Ongoing	Rūnanga	PCC, WCC, GW, NZTA	PCC, WCC
Update Berm Policy	Berm Policy enables Transport network habitat restoration actions to be implemented within the road corridor.	2027	PCC	WCC	PCC
Develop level of service guidelines for the roading corridor restoration.	LOS guideline developed. Established ongoing maintenance programmes to ensure plant survival, establishment, and ongoing management.	2027	PCC	GW, Rūnanga	PCC
Ensure maintenance of constructed wetlands, rain gardens, and other storm water nature-based	Co-designed maintenance programme with PCC	Ongoing	Tiaki Wai	PCC	Tiaki Wai

infrastructure supports biodiversity outcomes.	parks operations to find a cost-effective model.				
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PRIORITY FOCUS - Thriving habitats

Restoring and protecting natural habitats

Catchment context

Sedimentation, pollution, harbour edge modification, deforestation, intensive land use, stream channel modification, and invasive pest species have all contributed to the decline of ecological health across Te Awarua o Porirua and its catchment. These pressures have reduced the extent, quality, and connectedness of habitats across freshwater, wetland, coastal, and terrestrial environments, including the harbour's distinctive estuarine ecosystems such as saltmarsh and seagrass. The result has been biodiversity loss, reduced ecological resilience, and ongoing impacts on the health and mauri of the harbour and wider catchment.

Biosecurity remains a critical pressure, with pest plants, animals, marine pests, and emerging diseases all posing risks to restoration success and ecosystem resilience.

This Action Plan focuses on restoring native habitats to a thriving state through practical, staged actions that support natural regeneration, enhance biodiversity, and strengthen ecological resilience in urban and peri-urban environments. It is not about returning the catchment to a pre-human state, but about combining active restoration with natural processes to create healthier spaces for both people and nature.

The Harbour Accord agencies have important roles in this work. Recent collaboration, including through the Streamside Restoration Project, has helped build a stronger shared understanding of how efforts, funding, and delivery can better align across the catchment.

Community conservation and community science are also an increasingly important part of this picture, with groups across the Wellington region already achieving strong results.

Key actions

1. **Titahi Bay Road** coastal restoration.
2. **Shoreline** habitat restoration.
3. **Ki Uta Ki Tai waterway** restoration.
4. Integrated **pest management** programme.
5. **Wetland** habitat restoration.
6. Retain and regenerate **high-value sites**.

Outcomes

- The area of natural shoreline habitat around the harbour increases.
- Connected native riparian habitat extends along more waterways.
- More native fish can access upstream habitat through improved fish passage, improving recruitment and breeding success.

- Impact of ungulates in regenerating forest and high erosion sites is reduced accelerating cost-effective outcomes across actions.
- Harbour Accord agencies and community are better prepared for biosecurity response.
- Shared understanding of wetland values and condition across the catchment.
- Connected high-value habitat areas increase.

Action 9: Titahi Bay Road coastal restoration

The Wi Neera to Onepoto Shared Pathway and Coastal Resilience Project (details can be found [here](#)) remains a critical project for the Harbour Accord to help improve ecological outcomes, strengthen environmental and transport resilience, improve community access to the harbour edge, and contribute to the long-term health and connectivity of Te Awarua o Porirua Harbour.

Current PCC funding only enables a portion of this project to be started through the Wi Neera Reserve Redevelopment project. Harbour Accord agencies will continue to work collaboratively to identify and pursue funding and delivery options to progress the project, including with central government.

Key activities under this programme include:

1. Deliver a component of the improvements through Wi Neera Reserve Redevelopment project.
2. Retain funding commitment from PCC and consenting permits to progress this over the next ten years.
3. Investigate funding options and alternatives.

What's different

This project has the potential to be **transformational for the harbour**. Starting with the development of Wi Neera Reserve and continuing to progress this aspect of it is critical to keeping the restoration of Titahi Bay Road front and centre for the harbour.

THRIVING HABITATS					
Action 9: Titahi Bay Road coastal restoration					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Deliver a component of the improvements through Wi Neera Reserve Redevelopment project	Improved coastal profile, access and ecological function at Wi Neera foreshore section.	2027	PCC	Rūnanga	PCC
Maintain the project as a council priority.	Project funding secured in PCC Long-term Plan.	2027	PCC		PCC
Investigate funding options.	Funding Options Paper.	2027	PCC	GW, Rūnanga	PCC

Action 10: Shoreline habitat restoration

Develop a programme to restore and naturalise the harbour shoreline through coordinated ecological restoration, habitat enhancement, and integrated infrastructure planning.

Key activities under this programme include:

1. Creation of a Shoreline and Harbour Kaitiaki Role (combined with the *Pollution Prevention Kaitiaki role* under Action 18).
2. Development of Shoreline Condition Assessment tool with baseline assessments so change over time can be accurately assessed.
3. Capture and maintain information on green infrastructure assets along the harbour shoreline to support their inclusion in PCC's asset management processes and enable more integrated planning, maintenance, and investment decisions.
4. Develop a three-year work programme of shoreline projects and restoration actions.
5. Scope Motukaraka Point Restoration project.
6. Restoration of dunes and coastline at Ngāti Toa Domain.
7. Work with KiwiRail and Waka Kotahi (NZTA) on improved solutions for sea walls along the rail network and State Highway 58 and other roads adjacent to the harbour.

What's different

- Increased **resourcing for leadership and coordination** from the Rūnanga through the new Shoreline (and Pollution) Kaitiaki role.
- Better **alignment and coordination, integration of CAPEX and OPEX work programmes** and cross agency project resulting in increased continuity, maturity, integration of outcomes and opportunity for iwi influence, rather than isolated projects.
- **Parallel delivery.** The community will see results through restoration projects such as Ngāti Toa Domain Restoration while the work programme is developed and further opportunities identified and prioritised.
- **Shoreline focused work programme** will result in working with natural coastal processes better; prioritising nature-based solutions; proportionate, proactive risk-based responses; adaptive management under sea-level rise; and integration of cultural, ecological and community values.

- Established **baseline and dedicated reporting** on shoreline improvement projects and impact, progress will be understood and impact and cumulative improvements tracked.

THRIVING HABITATS					
Action 10: Shoreline habitat restoration					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Creation of a Shoreline Kaitiaki Role.	Full-time equivalent employed by Te Rūnanga. Job description includes Pollution Prevention.	2027	Rūnanga	GW, PCC	GW, PCC
Development of Shoreline Condition Assessment tool.	Tool created. Baseline assessments completed for all inner harbour shoreline.	2027	PCC	GW, Rūnanga	GW, PCC
Include green infrastructure assets along the harbour shoreline into council infrastructure strategy.	Complete Shoreline Green Asset Capture.	2029	PCC	GW, Rūnanga,	PCC
Develop five-year work programme of priority shoreline projects and restoration actions.	Five-year work programme for shoreline restoration.	2028	PCC	GW, Rūnanga	PCC
Removal of rubble and concrete from the shoreline.	Multi-year programme developed for prioritized removal of shoreline concrete and debris.	2028	PCC	Rūnanga, GW	PCC
Scope Motukaraka Point Restoration project.	Scoping document completed.	2027	PCC	GW, Rūnanga	PCC
Ngāti Toa Domain Dune Restoration and Resilience Project.	Restoration works commenced with maintenance plan in place.	2027	PCC	Rūnanga, GW	PCC
Work with KiwiRail and Waka Kotahi (NZTA) on improved solutions for sea walls along the rail network and SH58 and other roads adjacent to the harbour.	Regular meetings with NZTA and KiwiRail established.	2028	Rūnanga	PCC, GW, KiwiRail, NZTA	KiwiRail, NZTA

Action 11: Ki uta ki tai waterway restoration (including fish passage)

This action focuses on restoring healthy riparian corridors along streams and waterways through a ki uta ki tai approach that strengthens ecological connections from the headwaters to the harbour.

It prioritises streams based on priorities of Ngāti Toa Rangatira, reserve land purpose and responsibilities, opportunity for impact, landowner readiness, and community partnership, through native planting and maintenance, improved habitat and fish passage, stronger links between riparian and wetland systems, and alignment with infrastructure, flood resilience, and climate adaptation.

Key activities under this programme include:

1. Restoration of riparian corridors with continuous improvement including both clarity of feasibility in areas with flood risk, and improved maintenance and habitat management on agency-owned land. This means enabling restoration efforts to reach self-sustaining stage and continued management of pressures for better function.
2. Investigate and establish the Kākaho Catchment Restoration Project through a draft restoration plan that includes a restoration plan for all esplanade reserve land to be vested.
3. Kenepuru (Porirua) Stream naturalisation, long-term waterway planning through a strategic business case and feasibility assessment.
4. Support active kaitiaki by Ngāti Toa Rangatira. Whānau, marae, and kaimahi lead stream restoration (including but not limited to Mahinawa, Hukarito and Waitangirua Streams).
5. Support cultural monitoring practice through the mobilisation of Kaitiaki Ranger.
6. Development of a Fish Passage Improvement Programme.
7. Support existing and new stream and catchment restoration projects e.g. freshwater action plans, restoration and sediment control at Pāuatahanui with the support of Waka Kotahi (NZTA), Taupō Swamp, Horokiri Valley, etc.
8. Community science integrated into waterway restoration including the surveying of inanga spawning sites.

What's different

- **A more connected ecological approach**, restoring stream margins as part of wider living systems that support waterway health, habitat connectivity, and fish passage from the headwaters to the harbour.

- **Focused awa approach** enables greater outcomes for community and mana whenua aspirations.
- **Greater recognition of iwi leadership** for restoration of streams at Kākaho, Hukarito, Mahinawa and other catchments. And stronger integration of cultural monitoring and mātauranga-informed restoration approaches.
- **Stronger relationships** with catchment community groups and iwi restoration programmes.
- More **integrated planning across agencies** and work programmes, linking stream restoration with infrastructure planning, asset management, and wider catchment restoration to achieve more coordinated and lasting impact.
- **A shift from outputs to outcomes**, focusing less on hectares planted and more on long-term ecosystem function creating thriving native riparian corridors with healthy, connected stream banks, with agencies leading by example with reserve land as showcases.

THRIVING HABITATS					
Action 11: Ki uta ki tai waterways restoration (including fish passage)					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Support existing and new stream and catchment restoration projects.	Agreed plan(s).	2027	PCC, GW	Rūnanga, GW, NZTA	NZTA
Investigate and establish the Kākaho Catchment Restoration Project.	A co-designed draft plan for Kākaho Catchment Restoration was established, and project delivery was established.	2027	PCC	Rūnanga, GW	PCC
Restoration of riparian corridors.	Increase extent of riparian margin in native vegetation.	Annually	PCC	PCC, WCC, Tiaki Wai	PCC, WCC, GW
Planning for Kenepuru (Porirua) Stream naturalisation opportunities.	Strategic business case and feasibility assessment for Kenepuru (Porirua) Stream naturalisation.	2028	PCC	Rūnanga, GW, Tiaki Wai, WCC	PCC, WCC
Resource awa restoration in line with Living Streams focused catchment approach, starting with Takapū and Kahotea (see below).	Resources and focus enable living streams.	2027 and beyond	PCC, WCC, GW	Rūnanga, GW, Tiaki Wai	WCC. PCC, GW,
Best practice riparian management in agency owned land.	Riparian restoration across the reserve network with well-managed native riparian margins with higher ecological values and lower sedimentation.	Annually	PCC	WCC, GW, Rūnanga	PCC, WCC, GW
Active kaitiaki of restoration at key sites.	Restoration is guided and delivered by Ngāti Toa whanau, marae and kaimahi at Mahinawa, Hukarito and others.	Annually	Rūnanga	PCC, WCC, GW	PCC, GW

Resource cultural monitoring and streams reconnection for whanau.	Cultural monitoring is practiced.	Ongoing	Rūnanga	PCC, GW, WCC	PCC
Fish Passage Improvement Programme developed.	Five-year work programme drafted across agencies.	2027	GW	Rūnanga, PCC, WCC	GW
Community science integrated.	Catchment groups inform a catchment wide community science programme that covers inanga spawning.	Annually	PCC	Rūnanga, WCC, GW	GW, PCC, WCC

Action 12: Integrated biosecurity management

This action signals a commitment to a coordinated, catchment-wide approach to biosecurity. Recognising the diverse range of biosecurity pressures and the risk of spreading effort too thinly, partners will focus collaboration on five priority activities that provide the greatest opportunity to protect and restore the ecological health of the harbour and catchment.

Key activities under this programme include:

1. Establish an ungulate control programme to support forest regeneration in erosion-prone land. Including a targeted programme south of Transmission Gully.
2. Co-design wildlife outcome goals with community and agencies to guide sustainable investment in predator control management across the catchment over the next 10 years.
3. Understand the impact of geese/swans on harbour health and consider management options.
4. Build capability and preparedness for marine biosecurity threats.
5. Share biosecurity and wildlife data across agencies.

What's different

- **Stronger coordination** through Predator Free Porirua, creating a clearer link between agency planning and community ambition.
- Better use of **shared expertise and evidence**, building on Predator Free Wellington research and wildlife-focused projects such as Capital Kiwi to improve the effectiveness of pest control.
- Greater **alignment across iwi, agencies, and community**, with more joined-up planning and resource use to close gaps and increase ecological impact.
- **Equitable data access** across councils, mana whenua and community for effective decision making.
- Openly **share biosecurity and wildlife data** across agencies.

THRIVING HABITATS					
Action 12: Integrated pest management programme					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Establish an ungulate control programme, focused on feral goats, to support regeneration in erosion-prone land. Including a targeted programme south of Transmission Gully.	Workshop to scope targeted Transmission Gully ungulate programme. Feral goats culled across the catchment and reported on.	2026	GW	WCC, PCC, Rūnanga	GW, WCC, PCC
Undertake assessment of impact of geese and swans on harbour health. Recommend management options.	Impacts are understood and recommendations on management options considered by partners.	2028	PCC	GW, Rūnanga, DOC	PCC, GW
Co-design shared wildlife outcome goals for trapping infrastructure and predator control management across the catchment over the next 10 years.	Workshops held and plan drafted.	2028	PCC	WCC, GW, Rūnanga	GW, PCC, WCC
Build capability and preparedness for marine biosecurity marine biosecurity.	Marine biosecurity wānanga held and follow up actions drafted.	2027	GW	WCC, PCC, Rūnanga, DOC	GW, PCC, DOC
All trapping data accessible across the catchment.	Catchment Trapping Dashboard live.	2028, then ongoing	GW	PCC, WCC, Rūnanga	GW, PCC, WCC

Action 13: Wetland habitat restoration

To deliver a coordinated catchment-wide plan to protect, restore, and expand wetlands through shared prioritisation, monitoring, and management.

Key activities under this programme include:

1. Create a community of practice network across agencies, community and subject matter experts to develop a 'Values of Wetlands' framework for urban and rural landscapes. Prioritise active management of existing potential wetland extent that could be restored.
2. Develop a wetlands rapid condition assessment tool and complete baseline assessments.
3. Build local capability in wetland management - deliver training for Te Ara Taiao programme, council officers, iwi and community to improve capability around wetland assessment, management and monitoring.
4. Engage community in citizen science efforts to monitor for outcomes such as presence or breeding of key species.

What's different

- **Catchment wide prioritisation** focused on holistic outcomes for wetlands, instead of constrained within individual programmes. Ensuring delivery is underpinned by improved and shared monitoring and reporting.
- Creation of a **wetland community network**.
- **Improved capability** across agencies to manage wetlands cost effectively.
- **Reporting on wetland condition** and outcomes across the catchment, setting a baseline for tracking progress.

THRIVING HABITATS					
Action 13: Wetland habitat restoration					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Values of Wetlands framework.	Framework created. Catchment wetlands assigned value in line with framework.	2027	GW	PCC, Tiaki Wai, Rūnanga	GW, PCC, WCC
Wetlands rapid condition assessment.	Baseline assessment completed across accessible wetlands.	2028	PCC	PCC, Tiaki Wai, Rūnanga	
Build local capability.	First training workshops delivered.	2027	PCC	PCC, Tiaki Wai, Rūnanga	PCC, GW

Action 14: Retain and regenerate high-value sites

Investing in Key Native Ecosystems (KNE), Significant Natural Areas (SNAs), Ecological Management Units (EMUs) and other high-value ecological sites is essential to retain the best of what remains. While restoration of degraded areas is critical, some of the ecological values found in these sites - including mature habitat, complex species relationships, long-established ecosystem function, peat swamps that store significant amounts of carbon, and trees that may be hundreds of years old - cannot simply be recreated, even over decades of restoration.

Retaining these values means more than mapping or formal protection on paper; it requires active management of the pressures that threaten them, including weeds, pests, fragmentation, and inappropriate land use.

When this investment is combined with ecological buffers and corridors that reconnect these sites across the landscape, their value is magnified strengthening species movement, improving resilience to climate change, and helping these important places function as part of a healthier, more connected catchment.

Key activities under this programme include:

1. Identify and map wildlife and ecological corridors that strengthen connections between high-biodiversity sites, beyond those created through riparian restoration.
2. Delivery of actions agreed within existing joint plans under the KNE and EMU programmes; and ensure all KNE and EMU plans in the catchment when reviewed, are done so with all interested Harbour Accord agencies and contributing community groups.
3. Pilot programme to provide trapping infrastructure for animal pest control on high biodiversity-value private land.
4. Investigate innovative funding and incentive mechanisms to support biodiversity protection and restoration of high-value sites on public and private land.

What's different

- Moving from isolated site values to **opportunities of ecological corridors**.
- Increased **alignment and coordination between agencies** to improve efficiencies and outcome achievement, including through collective planning, prioritisation, deliver and expanded monitoring.
- Ensure sufficient and appropriate **animal and plant pest control** in high-value habitats, so taonga species can thrive and return safely.
- Increased emphasis on **data sharing and alignment** of operational delivery to make bigger impacts.

- **Iwi leadership** in the planning of site management starting with Rangituhi.

THRIVING HABITATS					
Action 14: High-value habitat restoration					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Identify and map wildlife corridors.	Report and Map of Wildlife and Ecological Corridors across the catchment to support restoration prioritization and planning.	2028	PCC	WCC, GW, DOC	PCC, WCC, GW
KNE and EMU programmes delivered.	Pressures are adequately managed at KNE and EMU sites.	2027	GW	PCC, WCC, DOC	PCC, WCC, GW
Pilot trapping in high-value private land programme.	Pilot project rolled out.	2028	PCC	GW, WCC	PCC
Investigate innovative funding mechanisms.	Priority mechanisms are identified and assessed for potential application.	2029	PCC	GW, WCC, Rūnanga	TBC

PRIORITY FOCUS - Harbour connection

Building a network of catchment kaitiakitanga through education, engagement and support.

Catchment context

Te Awarua o Porirua catchment is home to passionate individuals, iwi, community groups, schools, and organisations committed to protecting, restoring, and enhancing the environment. Support for these efforts has largely been delivered by individual agencies and within local authority boundaries, resulting in limited coordination and collaboration.

The Harbour Connection actions aim to bring these efforts together by breaking down organisational and geographic silos and fostering a connected, catchment-wide network of activity and kaitiakitanga. Through coordinated education, community support, environmental restoration, and capacity and capability-building initiatives, these activities will provide a more accessible and collaborative approach to sharing information, funding opportunities, resources, and expertise.

Key actions

1. **Bringing it all together – Our living streams** – a central focus will be the living streams projects at Kahotea and Takapū Streams. These two projects will involve a wide range of actions and increased resourcing from the Harbour Accord agencies.
2. **Community support and funding** – increase funding and resource support for community environmental projects, establish regular community group network opportunities, create a catchment-wide view of community projects and assess staff training resources.
3. **Kura connection** – reignite the educator's network, sustain funding and develop an environmental education programme.
4. **Pollution prevention** – develop and implement a holistic, coordinated and collaborative pollution prevention programme.
5. **Marine and Waka Education Centre** – establish a multi-functional facility where environmental education is delivered.
6. **Industry training** – develop and deliver wastewater, stormwater, and drinking water education grounded in mātauranga of Ngāti Toa Rangatira and kaitiakitanga to the water industry.

Outcomes

- Iwi and community feel a stronger connection to Te Awarua o Porirua and streams.
- Iwi and community-led stewardship activity in the catchment increases.

- Better transparency, planning and delivery of environmental mahi is achieved in the catchment.
- Community groups have stronger connections with others undertaking environmental mahi across the catchment.
- Rangatahi have increased knowledge of Te Awarua o Porirua and its catchments.
- More highly-polluting businesses adopt pollution prevention practices.
- Decision-makers have the information needed to determine the future of a Marine and Waka Education Centre.
- Water industry infrastructure works incorporate mana whenua values and perspectives.

Action 15: Bringing it all together – Our living streams

Living streams is a dedicated catchment-based programme of restoration. It delivers a mauri ora (stream-specific) plan for two priority stream catchments, Takapū and Kahotea, that support and empower communities to care for their waterways through coordinated engagement and a multi-partner approach to service delivery.

Working in an integrated, place-based way is essential to achieving meaningful and lasting outcomes. A mauri ora, stream-focused approach targets resources to priority streams and their catchments, leveraging existing programmes and community momentum to accelerate improvements in water quality and environmental outcomes.



Figure 10. This illustration highlights the range of services and audiences that should be considered and engaged when planning our activities around the priority streams and associated catchments.

Our living streams will test how our actions can work together in a coordinated and connected way. A range of actions from the plan will be delivered in these stream catchments and it is anticipated that this approach will achieve significant improvement in stream health more effectively than covering a broader geographical area. Priority catchments have been chosen based on a range of factors including:

- Alignment with the vision of the *Te Wai Ora o Porirua – Porirua Harbour Accord*.
- Delivery of multiple Harbour Accord objectives and outcomes.
- Significance to mana whenua.
- Ecological and biodiversity significance.
- Contribution to improved water quality and freshwater ecosystem health.
- Opportunities for collaborative action and collective impact across partners and with community.

- Strong alignment with, and enhancement of, existing projects and initiatives.
- Diverse engagement opportunities with kura, community groups, businesses, landowners, lifestyle block owners, and other stakeholders.
- Potential for iwi-led projects, cultural initiatives, and environmental education programmes.

Through this pilot, we aim to demonstrate how an integrated approach can strengthen partnerships, maximise resources, and deliver greater environmental and community outcomes at the catchment scale.

Takapū Stream

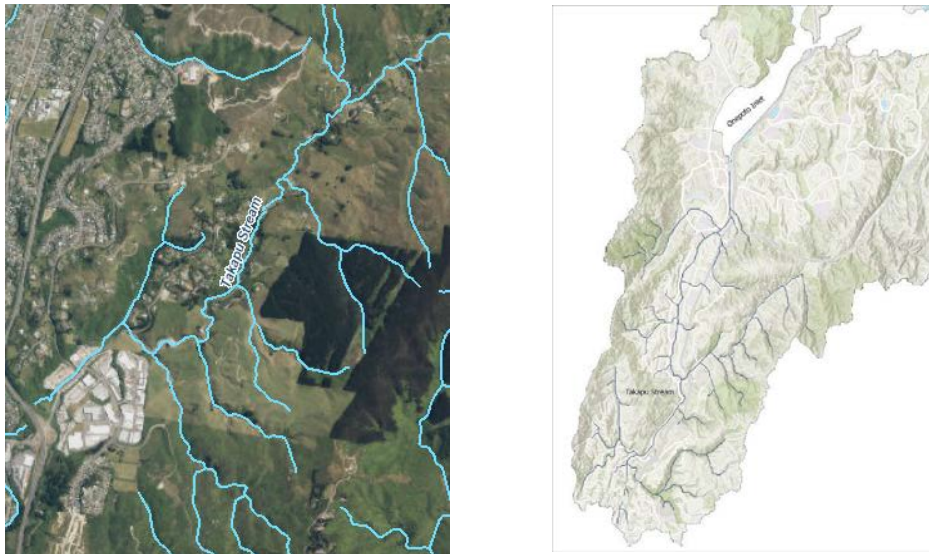


Figure 11 Takapū Stream and tributaries run through urban, industrial and rural areas making it ideal to activate all our actions in one place.

The Takapū Stream is an ecologically significant waterway located in the southern part of the Porirua Harbour Catchment. The large majority of the stream is located within the Wellington City Council administrative boundary.

The stream begins in the upper hills near the Belmont trig, running north and then southwest through Takapū Valley until it merges with the Porirua Stream at the Willowbank Reserve. The stream flows through the semi-rural Takapū Valley and Belmont Regional Park before flowing through residential and commercial/industrial areas.

Takapū is the puna (spring) of Te Awarua o Porirua. The waters flow from the hills and down to Te Kenepuru. It is a critical and significant place to Ngāti Toa Rangatira. Te Takapū is a mahinga kai site for the iwi. The stream provides habitat for indigenous flora and fauna included banded kokopu, common bully, smelt and longfin eel.

Opportunities in this catchment include rural land restoration (both council owned and private land), riparian planting, fish barrier remediation, school and community connections, pollution prevention and waste minimisation engagement particularly focusing on the commercial/industrial areas.

Current initiatives include:

- WCC-led Kids Enhancing Tawa Ecosystems (KETE) school programme which connects schools with the stream; and
- GW-led Belmont Regional Park grazing retirement and restoration project.

Kahotea Stream

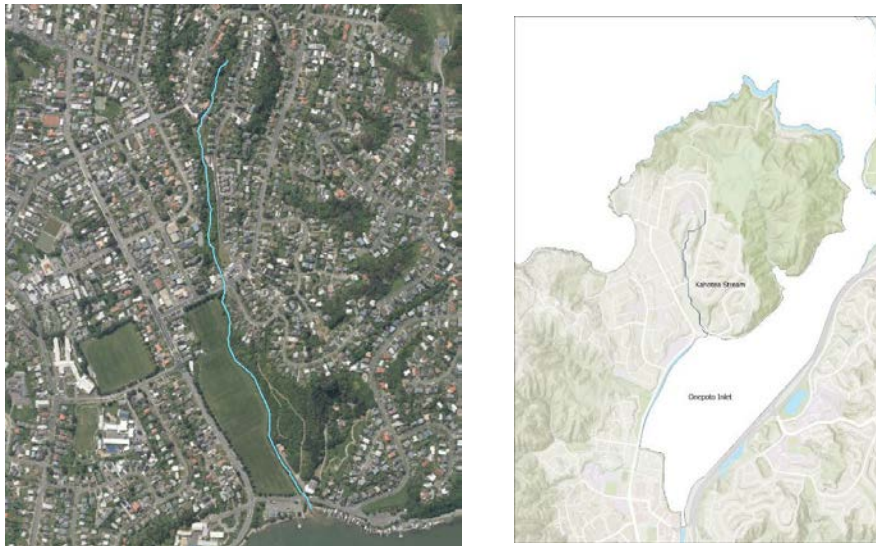


Figure 12. Kahotea Stream flows through a dense residential area and sports field within Titahi Bay before running directly into Te Awarua o Porirua.

The Kahotea Stream runs through Titahi Bay, alongside Onepoto Park and out into the Parumoana arm of Porirua Harbour. It is an urban catchment within Porirua City Council Boundary.

It is the focus of a major, community-led ecological restoration project dedicated to improving water quality and fish habitat.

Kahotea Stream holds cultural significance to mana whenua. It was part of the original reserve lands set aside for Ngāti Toa Rangatira in 1847 and one of the papakāinga of rangatira such as Te Whatarauhi Nohoroa, Te Hiko o Te Rangi and Hanikamu Te Hiko.

Opportunities in this catchment include riparian planting, wetland restoration, fish habitat improvements, school and community connections and fixing wastewater cross connections.

Work underway includes:

- An active community group engaged in PCC's streamside restoration project (removing weeds, testing water quality, and planting native trees) and
- Tiaki Wai investigations to identify sources of wastewater discharges.

Wider catchment mahi

Focusing on Kahotea and Takapū allows us to concentrate effort where it can achieve the greatest impact, accelerating improvements without increasing costs. The knowledge, relationships, and successful approaches developed through this work can then be applied to other priority catchments across the catchment over time.

While Takapū and Kahotea are the initial focus for 2026/27 year, they are not the only locations where action will be taken. Restoration projects, infrastructure improvements, and initiatives that support communities to connect with and care for their local environments will continue across the wider Porirua catchments.

As the health of these streams and their surrounding catchments improves, there will be opportunities to expand the integrated approach to additional streams. Future focus areas and timeframes will be determined as the programme evolves and lessons are learned from the pilot.

Key activities under this programme include:

1. Develop and implement a mauri ora (stream-specific) plan that includes service delivery, community events and engagement, interpretation and storytelling, and using te reo Māori names for streams, including piped sections.
2. Develop an online campaign and resources for all agencies to use/promote to educate communities about the streams, harbour, drains, water network, history and catchment. This should include interactive maps and education showing waterways flow paths and drains, water networks.

What's different

- Greater coordination and a **priority stream-focused plan** developed by all partners that activates all our services around the two streams, providing momentum of change (as opposed to sporadic activity).
- Developing a **living streams campaign** for the catchment and ensuring our maps, naming conventions, messaging etc are consistent.
- It includes a **suite of key messages** that can be shared across agencies through media channels on the Harbour Accord and health.

HARBOUR CONNECTION					
Action 15: Bringing it all together – Our living streams					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Develop and implement a mauri ora (catchment-specific) plan that includes service delivery, community events and engagement, interpretation and storytelling, te reo Māori names for streams, including piped sections.	Kahotea and Takapū are priority streams, outlining community engagement and service implementation is completed. New signage at selected waterways is installed. Community events are delivered (e.g. streams at night, monitoring, community group establishment opportunities, planting events etc.) Official documentation is updated with te reo names. A list of approved te reo Māori names for stream is confirmed (via NZ Geographic Board process). Maps of underground waterways are produced and made available.	2027	Rūnanga	GW, PCC, WCC, Tiaki Wai, Community groups	PCC, GW, Rūnanga, WCC, Tiaki Wai
Develop an online campaign and resources for all agencies to use/promote to educate communities about the stream, harbour, drains, water network, history and catchment. This should include interactive maps and education showing waterways flow paths	Living streams campaign materials (including video content exploring stream-to-harbour flow paths and stream education) are produced and available for use by partners.	2026 - ongoing	PCC, WCC	GW, Rūnanga, WCC, Tiaki Wai	PCC, GW, Rūnanga, WCC, Tiaki Wai

and drains, water networks.					
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Action 16: Community support

To support community groups to connect, upskill and carry out diverse community environmental projects within the catchment.

Key activities under this programme include:

1. Establish and promote a Harbour Accord Te Awarua o Porirua Community Environment Fund managed by a 'Harbour Accord Fund working group' with partner representatives who review, assess, scope and approve funding applications together.
2. Scope, develop and share resources to support staff to work equitably and efficiently with communities providing appropriate levels of service.
3. Establish and facilitate a catchment-wide Harbour Accord community network that meets regularly to plan, learn, connect, present and celebrate achievement. Includes building a database for the Harbour Accord eNewsletter.
4. Develop a catchment-wide dashboard view of community mahi for all partners to access to help plan mahi.

What's different

- Combining efforts for more **joined-up, consistent, effective and strategic community support** and relevant staff capability.
- **Greater visibility across partners and community** of catchment community group mahi (via database, newsletter, monitoring and reporting).
- A **'Harbour Accord funding group'** with partner representatives who review, assess, scope and approve funding applications together.

HARBOUR CONNECTION					
Action 16: Community support					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Establish and promote a Harbour Accord Te Awarua o Porirua Community Environment Fund managed by a 'Harbour Accord Fund working group' who review, assess, scope and approve funding applications together.	A community environment fund is established, with criteria reviewed and updated, funding rounds run and grants allocated to community environmental projects. A single community funding application portal on the Harbour Accord website is live. Harbour Accord Fund working group established and fund criteria agreed.	2026	GW	Rūnanga, PCC, WCC	GW, PCC, WCC, Rūnanga
Scope, develop and share resources to support staff to work equitably and efficiently with communities providing appropriate levels of service.	Joint resources, starting with catchment plant lists are produced and actively used across partner agencies.	2027 and ongoing	GW	PCC, WCC, Rūnanga	GW, PCC, WCC, Rūnanga
Establish and facilitate a catchment-wide Te Wai Ora o Parirua community network to improve information dissemination and mutual support among community groups.	Networking hui delivered. Mailing list created. Regular communications.	2026 – ongoing	PCC	GW, WCC, Rūnanga, Community groups	PCC, GW, WCC, Rūnanga
Co-develop a website and dashboard showing catchment-wide community mahi.	Community-led environmental projects funded through the Harbour Accord are recorded and visible through shared reporting and GIS spatial mapping.	2027	GW, PCC	Rūnanga, WCC, Community groups	GW, PCC, WCC, Rūnanga

Action 17: Kura Connection

Deliver coordinated environmental education programmes across the Porirua catchment that strengthens rangatahi and school connections to Te Awarua o Porirua.

Key activities under this programme include:

1. Develop a cohesive, scalable and outcomes-focused environmental education plan for the Porirua Harbour and catchment that aligns and strengthens existing delivery programmes and identifies funding required.
2. Reactivate and reinvigorate the Porirua Harbour Educators Network (PHEN), to build relationships, promote the Harbour Accord mahi, funding streams and support understanding of mana whenua aspirations for Te Awarua o Porirua.
3. Identify and develop new catchment-focused resources and learning opportunities for schools and house all education resources on the New Zealand Association for Environmental Education website.

What's different

- Greater **collaboration and funding between Harbour Accord agencies** to enable more efficient, supportive, integrated and effective programme delivery throughout the catchment.
- A **collective strategy** relating to environmental education across the catchment.
- **Transparency of resources and programme schedules.**

HARBOUR CONNECTION					
Action 17: Kura connection					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Develop a cohesive, scalable and outcomes-focused environmental education plan for the Porirua Harbour and catchment that aligns and strengthens existing delivery programmes and identifies funding required.	Comprehensive Environmental Education Plan developed and funding secured.	2027	PCC, GW, WCC	PCC, GW, WCC, Rūnanga, MTSW, Schools	PCC, GW, WCC, Rūnanga
Reactivate and reinvigorate the Porirua Harbour Educators Network (PHEN), to build relationships, promote the Harbour Accord mahi, funding streams and support understanding of mana whenua aspirations for Te Awarua o Porirua.	PHEN steering group established. Yearly schedule of PHEN meeting dates and agreed agenda/programme for each.	2026	PCC, GW, WCC	PCC, GW, WCC, Rūnanga	PCC, GW, WCC, Rūnanga
Identify and develop new catchment-focused resources and learning opportunities for schools and house all education resources on the New Zealand Association for Environmental Education website.	New set of resources developed and available online.	2028	PCC, GW, WCC	PCC, GW, WCC, Rūnanga, MTSW, Schools	PCC, GW, WCC, Rūnanga

Action 18: Pollution prevention

To deliver a coordinated pollution prevention programme that encapsulates waste minimisation, pollution prevention and litter clean-up initiatives and that brings together partners, businesses, schools and community groups to improve water quality.

Key activities under this programme include:

1. Creation of a Pollution Prevention Kaitiaki role (combined with the *Shoreline and Harbour Kaitiaki* role under Action 9).
2. Develop and implement a holistic and integrated pollution prevention programme that includes waste minimisation, reducing car washing on driveways and streets, pollution prevention and litter clean-ups and supports and aligns with existing agency waste management plans.
3. Engage with interest groups and partners to run harbour clean-up events and create and maintain a yearly harbour clean-up schedule and litter intelligence programme that includes activity by schools, environmental organisations, partners and businesses.
4. Develop a Harbour Accord membership/certification programme aimed at businesses and other interested parties to encourage ongoing best practice and kaitiakitanga.

What's different

- New **Pollution Prevention and Shoreline Kaitiaki** role.
- Greater collaboration, funding and transparency between Harbour Accord agencies to enable more efficient, supportive, **integrated and effective programme delivery** throughout the catchment.

HARBOUR CONNECTION					
Action 18: Pollution prevention					
Activities	Outputs	Timeframes	Led by	Key partners	Funding and resourcing
Creation of a Pollution Prevention Kaitiaki role (combined with the <i>Shoreline and Harbour Kaitiaki</i> role under Action 9).	New FTE hired. Work programme developed.	2027	Rūnanga	GW, PCC, WCC, Tiaki Wai	GW and PCC (50/50)
Co-develop and implement a holistic and integrated pollution prevention programme that includes waste minimisation, pollution prevention and litter clean-ups and supports and aligns with existing agency waste management plans.	Pollution Prevention Programme is developed and ready for implementation.	2028	GW, PCC, WCC, Rūnanga	GW, PCC, WCC, Rūnanga	GW
Engage with interest groups and partners to run harbour clean-up events and create and maintain a yearly harbour clean-up schedule and litter intelligence programme that includes activity by schools, environmental organisations, partners and businesses.	Harbour clean-up events held by the Harbour Accord and in partnership with the community. Develop and maintain a yearly litter clean-up schedule.	2026 - ongoing	Rūnanga	PCC, GW, WCC, Community groups, Schools, Businesses	GW, PCC, WCC, Rūnanga
Co-develop a Harbour Accord membership/certification programme aimed at businesses and other interested parties to encourage ongoing best practice and kaitiakitanga.	Membership/certification plan, criteria, process, guidelines and designed certificates complete ready for active recruitment.	2029 Membership ongoing	GW, PCC, WCC, Rūnanga	GW, PCC, WCC, Rūnanga	GW, WCC, Rūnanga

Action 19: Marine and Waka Education Centre

To grow community awareness and understanding of the issues facing Te Awarua o Porirua and the catchment by establishing a multi-functional facility where environmental education is available and delivered. The facility would also act as a hub for waka activities.

Key activities under this programme include:

1. Partner agencies led by the Rūnanga are conducting a feasibility study to scope the project and decide on location.
2. Develop a project plan including funding strategy.
3. Implement the project plan.

What's different

- A dedicated **environmental education facility** within the catchment.

Action 20: Water industry training

Develop a Water Industry Training Centre of Excellence that delivers wastewater, stormwater, and drinking water education grounded in mātauranga Māori and kaitiakitanga for students, industry, developers, and council staff.

Key activities under this programme include:

1. Te Rūnanga to conduct a feasibility study including partnering with tertiary institutions to co-design and deliver the programme.
2. Develop an incentive programme for graduates and participating businesses, including recognition, procurement advantages, and streamlined consenting opportunities.

What's different

- New enterprise for Te Rūnanga that will **enhance Aotearoa New Zealand's water sector training** to include mātauranga Māori principles.

8. Supporting the actions

Monitoring and reporting on the action plan

Successful implementation of the Harbour Accord Action Plan relies not only on delivering actions, but also on regularly assessing progress, learning from experience, and sharing results with partners, mana whenua, stakeholders, and the wider community. For this purpose, the Harbour Accord provides a Performance Monitoring Framework which will also enable timely sharing of progress in meeting obligations through monitoring and reporting.

The Performance Monitoring Framework will use a combination of working group progress reports, environmental monitoring baseline data (as illustrated in the dashboard), and performance measurement information to provide consistent and transparent reporting on both action delivery and outcomes. Annual reports will identify:

- Progress against Harbour Accord Action Plan commitments and priorities.
- Key monitoring and performance measurement findings.
- Barriers, risks, and challenges affecting implementation, including funding, resourcing, policy, or regulatory constraints.
- Funding and resources secured to support delivery.
- Lessons learned and opportunities for improvement.
- Priority actions for the coming 12 months.

This approach will support accountability, adaptive management, and evidence-based decision-making, ensuring the Harbour Accord remains focused on achieving meaningful, measurable outcomes over time and can pivot actions or delivery as needed.

Understanding te taiao

The Performance Management Framework also provides for the sharing of information relating to the state of the harbour environment. This will involve an enhanced collaborative programme of environmental, social, cultural, health, and other data to understand te taiao in Te Awarua o Porirua. This will involve better alignment and coordination of existing and new monitoring programmes, as well as cultural monitoring, investigations, mapping, historical research, surveys, modelling and other methods.

The monitoring will enable an understanding of the state and trends, where conditions are better or worse, identify emerging issues, and establish baselines to support the actions.

Performance measurement and management

Performance measurement helps assess whether the actions outlined in this plan are achieving the intended outcomes. It examines the contribution of specific interventions

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to desired environmental, cultural, and community outcomes, providing evidence about what is working, what is not, and where change may be needed.

Performance measurement supports accountability, learning, and informed decision-making, and provides confidence to communities, partners, and funders by showing the extent to which actions are having an impact. Performance management is about responding to performance information where actions are not having desired results.

As part of the Performance Monitoring Framework, a measurement framework is being developed to ensure a meaningful, robust methodology is in place to assess the effectiveness of Harbour Accord actions in addressing existing pollution pressures and environmental degradation. This work requires careful design and engagement to ensure the framework provides credible evidence of progress and outcomes. The framework will be introduced over the coming months and will complement the delivery of this action plan.

What's different:

- Collaborative and **joined-up environmental monitoring**.
- Development of a **framework to measure performance** to systematically assess whether Harbour Accord actions are delivering the intended outcomes.
- **Regular reporting** to the Harbour Accord Steering Group on action effectiveness and outcomes to enable evidence-based decision-making, alongside standard programme reporting on milestones, budgets, risks and delivery progress.

Communication and engagement

Effective communication and engagement are essential to building awareness, understanding, and support for the actions outlined in this plan. A collective, coordinated and consistent approach helps build trust with communities and stakeholders, strengthens accountability, and demonstrates how individual projects contribute to shared outcomes.

The Harbour Accord provides a framework for partner agencies to work together on a cohesive approach to storytelling, education, active participation, and celebrating achievements, strengthening the connection between on-the-ground action and the Harbour Accord's vision and desired outcomes.

What's different:

- A Harbour Accord **Communications and Engagement Committee** has been established to coordinate communication and engagement initiatives across agencies.
- Information about the Harbour Accord is on each agency website, and a **dedicated Harbour Accord website page** will be created to improve access to Harbour Accord information and progress updates, until funding is available for the creation of a dedicated Harbour Accord website.

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- **Website and dashboard** to share information and to report on progress and activity.
- Harbour Accord key messages have been developed and adopted across partner organisations, creating a stronger and more unified voice.
- Communication focuses on how collective action contributes to the Harbour Accord's vision, outcomes, and benefits for the catchment and its communities.

Funding sources

The Harbour Accord Action Plan has been developed in a constrained fiscal environment that includes rates restrictions, cost-of-living pressures, and competing budget priorities.

Recognising these realities, the delivery of the Action Plan relies on reprioritising budgets to Harbour Accord priority actions, aligning work programmes, and collaborating between Harbour Accord agencies. It also relates to an integrated approach at the place, as proposed through the two priority streams. to maximise efficiencies, and the integration of priority actions into the Annual Plan and Long-Term Plan processes.

The majority of the actions in this plan are resourced in the agency's Annual Plans 26/27 for completion or start. In many cases, the actions involve greater collaboration and coordination rather than additional funding.

In addition, the Harbour Accord will actively pursue external funding opportunities, including philanthropic, third-party, and central government investment. This will accelerate delivery and support actions that may not otherwise be achievable through existing partner funding sources alone.

What's different:

- **Alignment of existing funding** sources.
- **Integration across Annual Plan and Long-Term Planning** processes.
- Proactive approach to securing **external funding opportunities**.

Engagement with central government

The Harbour Accord agencies have existing and ongoing relationships with key central government agencies and organisations, including PHF Science, Earth Sciences NZ, NZTA/Waka Kotahi, Ministry for Cities, Environment, Regions and Transport (MCERT), Transpower, KiwiRail, Fish and Game NZ and the Department of Conservation. Many of these agencies have critical ownership, regulatory and management responsibilities relating to the harbour such as roading, railway, infrastructure, conservation and research. Some of the agencies were engaged in the workshops during 2025 to scope the actions in this plan.

The Harbour Accord partners will look to develop and formalise relationships over the coming year and potentially provide opportunities for agencies to become formalised supporting organisations for the Harbour Accord.

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Resource management and local government reform

The Harbour Accord was developed during a period of unprecedented environmental and central government reform. The RMA will be replaced by new legislation (Natural Environment and Planning bills), which will alter the responsibilities and regulatory functions of regional councils and territorial authorities (RM reform). The reform has disrupted many RMA plan changes, such as Plan Change 1 of the Natural Resources Plan. Local government reform is also underway and will have a material impact on the Harbour Accord agencies. Meanwhile, water reform resulted in the creation of Tiaki Wai, which now has responsibility for water services in the Wellington Region.

We anticipate that the RM reform and associated local government reform will provide a new regulatory and administrative context for Porirua Harbour, and that the Action Plan will be revised accordingly, with the aim of maximising opportunities, such as the development of a new regional spatial plan.

Climate change

The Porirua Assembly on Climate came together in early 2025 under a Te Tiriti-based democratic approach to make climate-related recommendations for Porirua.

The recommendations from the Assembly were incorporated into the Harbour Accord action planning workshops in 2025 and have informed the selection and prioritisation of actions for this plan. In particular, there is strong alignment with the Assembly's te taiao recommendations and the Action Plan (see table below).

Assembly te taiao recommendation	Accord actions
Integrating traditional ecological knowledge and community-led restoration, Porirua will foster a greener, healthier, more fire-resistant future, while strengthening cultural and environmental connections	- Action 15: Bringing it all together - Our living streams - Action 16: Community support
Restore waterways & integrate nature-based solutions	- Action 10: Shoreline habitat restoration - Action 11: Ki uta ki tai waterway restoration (including fish passage) - Action 15: Bringing it all together - Our living streams
Increase resourcing, support and visibility of native afforestation initiatives that focus on restoring indigenous ecosystems, enhancing biodiversity, and improving environmental resilience (example: Ngahere Korowai)	- Action 1: Coordinated rural land engagement programme (incl. public/parks land) - Action 8: Transport network habitat restoration - Action 13: Wetland habitat restoration - Action 14: High-value habitat restoration
Investigate opportunities to incentivise private landowners to encourage native afforestation, e.g. carbon credits, regenerative planting for all new	- Action 1: Coordinated rural land engagement programme - Action 2: Forestry engagement programme

developments, converting deforested land into native bush.	
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Te Rūnanga o Toa Rangatira has recently prepared a climate change strategy which will serve as a roadmap to guide the iwi and enable a proactive, informed and resilient future across the rohe.¹¹⁷ The Porirua Harbour Accord and this Harbour Accord Action Plan makes an important contribution towards the climate change strategy in terms of facilitating nature-based solutions and Taiao regeneration, positive systems change and strategic alliances, sustainable development and mokopuna-focused prosperity.

Implementation and resourcing requirements

Delivery of the Action Plan will be achieved through a collaborative partnership approach, with responsibility shared across Harbour Accord agencies and partners. Strategic oversight will be provided by the Governance Group, while the Steering Group will meet regularly to coordinate implementation, monitor progress, and address emerging issues and opportunities.

Each action within the Harbour Action Plan will have an identified lead agency or organisation responsible for coordinating delivery, bringing together the appropriate partners, technical expertise, and community stakeholders required to achieve the desired outcomes.

At this stage, rather than relying on a dedicated programme team, implementation will be embedded within the existing work programmes, resources, and expertise of Harbour Accord agencies. This approach encourages collective ownership of the Action Plan while enabling partners to align actions with their existing priorities, budgets, and planning processes. We will review this approach as we implement the actions to ensure it is working as planned. If not, we will consider a portfolio management mechanism or role to track activities.

¹¹⁷ Te Rūnanga o Toa Rangatira, *Te Heke Whakamahere Āhuarangi o Ngāti Toa Rangatira, Ngāti Toa Rangatira Climate Change Strategy*, July 2026.

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Appendix 1. Primary coastal areas, catchments and stream names of Te Awarua o Porirua

Te Awarua o Porirua

Coastal areas and catchments	Name	Common names and notes
Harbour estuaries	Te Awarua o Porirua (Pāuatahanui)	Pāuatahanui Inlet
	Te Awarua o Porirua (Parumoana)	Te Onepoto Arm Onepoto Arm
Te Rewarewa ki Paremata	Te Rewarewa	Rocky headland
	Kenana Creek	Stream flowing near Hongoeka Marae
	Hongoeka	Papakāinga
	Karehana Creek	Karehana Bay and stream
	Motuhara Creek	Motuhara Bay and stream
	Tawhitikurī	Rocky headland, also known as Goat Point
	Paremata	Papakāinga associated with Ngāti Toa Domain, Mana Cruising Club and Mana Esplanade
Taupō	Taupō Stream	Plimmerton, pā, stream and wetland Taupo Stream
	Kokika Creek	Creek flowing into Taupō wetland from Airlie Road area
	Te Tōtara Creek	Upper section of Taupō Creek at Pukerua Bay, Greenmeadows Park area
Te Kākaho	Te Kākaho Stream	Kākaho Stream
Horokiri	Tunupō Stream	Horokiri Stream (west branch), Paekākāriki Hill Road
	Horokiri Stream	Horokiwi Stream, main branch, State Highway One
Te Noakau	Te Noakau Stream (Ration Creek)	Ration Creek
Pāuatahanui	Mātaitaua Creek	Creek flowing near Mātaitaua Pā (St Albans Church)
	Pāuatahanui Stream	Also known as Waitanginui Stream

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Coastal areas and catchments	Name	Common names and notes
	Horokiwi Stream (Belmont Road Creek)	Stream flowing near the Belmont Road. Also possibly known as Te Tukutuku
	Flightys Road Creek	
	Mulhern Road Creek	
	Pūrehurehu Stream	Moonshine Road Stream
Waiohata	Waiohata Stream (Duck Creek)	Duck Creek Wai o hata Wai-o-hata Wai-o-Hata
Waiohata ki Kenepuru	Pohorero (Bradeys Bay)	Bradeys Bay
	Rapaotewhai (Browns Bay)	Browns Bay
	Tutaemanu (Golden Gate)	Golden Gate
	Whitianga o Kupe	Paremata Railway Station area, including Ivey Bay
	Horopaki Creek	Papakōwhai stream
	Oahu Creek	Small creek just south of Aotea Lagoon
	Okowai Creek	Creek flowing into Aotea Lagoon
	Aotea Creek	Creek just south of Gear Homestead and Aotea College
Te Kenepuru	Te Mara o Te Hiko o Te Rangi	Cannon's Creek Kenepuru Stream Kenepuru iti Stream Bothamley Park Stream
	Tamanga o Kohu Stream	Headland pā
	Kenepuru Stream (Porirua Stream)	Porirua Stream
	Te Rātā Stream (Mitchell Stream)	Mitchell Stream
	Tawa Stream	Tawa west, flows under the Main Road at the town centre
	Takapū Stream	Takapu Stream
	Tōtara Stream (Stebbings Stream)	Stebbings Stream
	Paparāangi Stream	Sub-catchment of Kenepuru Stream (Porirua Stream) that runs through

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Coastal areas and catchments	Name	Common names and notes
		Paparangi, Newlands and Woodridge
Kenepuru ki Rukutane	Te Uru Kahika Stream	Flows from Rangituhi, above Camp Elsdon
	Mahinawa Stream	Flows from Rangituhi above Elsdon
	Takapūwāhia Stream	Flows from Rangituhi above Takapūwāhia
	Hukarito Stream	Hukarito Stream
	Kōkiri Creek	Flows into the Hukarito
	Te Kaureroa Creek	Te Pene Ave area
	Kahotea Stream	Onepoto Park and northern Tītahi Bay
	Onepoto Stream	Whitireia Park
	Onehunga Creek	Onehunga Bay
	Parahamiti Creek	South end, Tītahi Bay Beach
	Ohangao Creek	Mid Tītahi Bay Beach at Toms Road
	Koangaaumu Creek	South Beach Access Road, Tītahi Bay Beach
	Rukutane Creek	Southern end, Tītahi Bay Beach

Te Rewarewa ki Wainui

The coastal environment from Te Rewarewa to Wainui (north of Paekākāriki) is closely related to Te Awarua o Porirua but located outside the catchment.

Toka Potaka	Coastal rock
Te Horo	Creek and landmark
Haukopua	Ridge, tauranga waka and small papakāinga
Wairaka	Rocky headland, coastal rock, pā site and creek
Waimāpihi	Pā site and stream
Te Umukoura	Coastal rock
Pukerua	Pā site, stream, two hills above Pukerua Bay beach
Waikākaho Stream	Stream (flows into Brendan Beach)
Hokiwi	Coastal rock
Waiiwiwi	Coastal rock and creek

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Te Ana o Hau	Coastal rock (originally a cave damaged during the construction of the Centennial Highway)
Paripari	Papakāinga and creek
Kapukapuariki	Coastal rocks
Paekākāriki	Papakāinga and creek
Wainui	Papakāinga, tauranga waka, stream
Te Puka	Stream flowing down from Tunupō ridge (S.H. 1) joins to the Wainui Stream

Appendix 2. Acronyms/glossary

The following acronyms and abbreviations are used within this plan:

Rūnanga	Te Rūnanga o Toa Rangatira
PCC	Porirua City Council
GW	Greater Wellington
WCC	Wellington City Council
Tiaki Wai	Tiaki Wai (formerly Wellington Water)
DOC	Department of Conservation
NZTA	New Zealand Transport Agency Waka Kotahi
KR	KiwiRail
MTSW	Mountains to Sea Wellington
KETE	Kids Enhancing Tawa Ecosystems
KNE	Key Native Ecosystem
EMU	Ecological Management Unit
Harbour Accord	<i>Te Wai Ora o Porirua – Porirua Harbour Accord</i>
Harbour Accord agency(ies)	Refers to the partners of the Harbour Accord
WSD	Water sensitive design
WWTP	Wastewater Treatment Plant

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Ahi kā	Burning fires of occupation, continuous occupation.
Ahi kā roa	Burning fires of occupation, long undisturbed occupation, continuous and enduring occupation
Ara tupuna	Traditional routes and pathways
Atua	Māori Gods or deities of the natural world and its processes
Awa	A river, stream, creek, gully or gorge
Hapū	Kinship group, clan - smaller section of an iwi, and the primary political unit in traditional Māori society
Harakeke	New Zealand flax
Hui	Meeting, conference, workshop
Iwi	Extended kinship group, tribe, nation, people, nationality, race - often refers to a large group of people descended from a common ancestor and associated with a distinct territory.
Iwi whānui	The wider iwi
Kaimoana	Seafood, shellfish
Kāinga	Home place
Kāinga rua	Second chance; fresh opportunity
Kaitiaki	Guardian, caregiver
Kaitiakitanga	The exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; guardianship, stewardship
Kaumatua, Kaumātua	Elder, elders
Kaupapa	Topic, matter for discussion, plan, purpose, subject, theme, issue, initiative
Kawa	Protocol, etiquette
Kāwanatanga	Government
Kōiwi	Human bones, skeletal remains
Kōrero	Narrative, account, information
Kōrero tuku iho	Oral tradition, traditional history, intergenerational knowledge
Koruru	Carved face on the gable of a whare tupuna, often representing an ancestor
Kotahitanga	Unity, collective
Kōwhaiwhai	Traditional painted scrollwork and decoration
Mahi toi	Art, artistry
Mahinga kai	Garden, cultivation, food-gathering place e.g. fishing grounds, bird-snaring area, etc
Maihi	The facing boards on the gable of a house, the lower ends of which are often ornamented with carving, or a house so adorned.
Mana	Authority, influence, status or control

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Mana moana	Authority over the sea and lakes - although this is a modern term, the concept of authority over lakes and parts of the sea (<i>mana o te moana</i>) is traditional. According to Māori custom, land rights extended as well to adjacent sea or lakes with fixed boundaries for inshore and deep-sea fishing and the gathering of seafood.
Mana whenua	Territorial rights, power from the land, authority over land or territory, jurisdiction over land or territory
Manaaki manuhiri	Tradition of hospitality towards visitors
Manaakitanga	Hospitality, kindness, generosity, support - the process of showing respect, generosity and care for others.
Mātauranga	Traditional knowledge, systems and practices
Mātauranga ā-iwi	Iwi-specific traditional knowledge, systems and practices
Mātauranga ā-moana	Traditional knowledge of the sea, marine and coastal environments
Maunga	Mountain, mount or peak
Mauri	Vital life-force energy; essential source of all vitality
Moana	The ocean and its environs
Mokopuna	Grandchildren, descendants
Muka	The inner fibre of the harakeke
Ngahere	Bush, forest
Ngā Paihau	Overlay classifications within the Ngāti Toa Rangatira Claims Settlement Act 2014
Noa	To be free from the extensions of tapu, ordinary, unrestricted, void.
Pā	Māori village
Pakeke	Adult, adults
Papakāinga	Original home, home base, village, communal Māori land
Papatūānuku	Earth, Earth mother and wife of Rangi-nui - all living things originate from them.
Parawhenuamea	Personification of fresh water
Pou	Post, pole, pillar, or landmark indicating territory
Poutiaki	Guardianship of an area
Pōwhiri	Ritual ceremony of welcome; formal welcome
Rāhui	A temporary ritual prohibition, closed season, ban, reserve
Rangatahi	Youth, young adult
Rangatira	Esteemed tribal leader
Rangatiratanga	The right to exercise chiefly autonomy
Rohe	Traditional tribal area, region, territory
Rohe moana	The coastal landscapes and marine environment within the rohe of Ngāti Toa; traditionally encompassing Te

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	Moana o Raukawa, coastal waters, and beyond the boundary of the territorial sea
Rohe whānui	Regionwide
Rongoā	Traditional Māori medicine and healing practices
Rūnanga	Tribal council, mandated iwi authority
Tāhuhu kōrero	History
Taiao	The environment and natural world
Take Raupatu	Land right obtained by conquest
Tamariki	Children
Tangaroa	Deity, god of the oceans
Tangata Whenua	People born of the whenua
Tangi	Rites for the dead, funeral ceremony
Taniwha	Powerful spiritual denizen, often associated with particular bodies of water. They are regarded as guardians by the people who live in their territory
Taonga	A treasure, anything prized - applied to anything considered to be of value including socially or culturally valuable objects, resources.
Taonga species	The species of flora and fauna in respect of which an iwi, hapū or whānau hold kaitiaki responsibilities
Tapu	Sacrosanct, prohibited, reserved
Tauranga waka	Anchorage, mooring, fishing ground, landing
Te Awarua o Porirua	Porirua harbour and its catchment
Te Heke Mai Raro	The series of migrations by Ngāti Toa Rangatira ancestors and allied iwi between the 1810s and 1830s
Te Ika a Māui	North Island
Te Mana o Kupe	Mana Island
Te Rewarewa	An important navigation marker on the coast north of Porirua
Te Tauihu o Te Waka a Māui	The northern South Island
Te Toka a Papa	The reef at the entrance of Te Awarua o Porirua
Te Waka a Māui	South Island
Te Whanganui a Tara	Wellington Harbour
Tikanga	Māori traditional practice, customary law
Tkanga Māori	Māori customary law
Tiriti	Te Tiriti o Waitangi
Tītī	Muttonbird, describes a number of shearwater species
Taketake	Indigenous
Tohu	Sign, symbol, cue, landmark, distinguishing feature
Tomokanga	Gateway, entrance
Tuku	The granting of territory
Tukutuku	Ornamental lattice-work found inside a whare tupuna
Tupuna, tūpuna	Ancestor, ancestors

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Turakirae	Turakirae Head
Uri	Descendant/s
Urupā	Cemetery, burial ground
Wāhi tapu	Sacred place, sacred site - a place subject to long-term ritual restrictions on access or use
Wāhi tupuna	Place or site of ancestral significance
Wainui	Paekākāriki, Kapiti Coast
Waka	Traditional sailing vessel, canoe
Waka ama	Outrigger canoe, outrigger canoeing
Wānanga	Seminar, forum for the sharing of traditional cultural, religious, historical, genealogical and philosophical tribal knowledge
Whare	House, building
Whare Tupuna	Ancestral meeting house
Whakapapa	Genealogy; the recitation of history and lineage; a method to define relationship and associations between two or more people and entities in accordance with traditional Ngāti Toa cosmogony
Whakatau	The welcoming ceremony which is less formal than a pōwhiri
Whakatauākī	Proverbial saying, the origin of which is traceable to a known ancestor or event
Whakataukī	Proverb
Whakauta	To load a vessel
Whenua	The land, the earth, soil