



If calling, please ask for Democratic Services

Environment Committee

Thursday 23 November 2023, 09.30am

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

Quorum: Seven Members

Members

Councillors

Penny Gaylor (Chair)

David Bassett

Chris Kirk-Burnnand

David Lee

Daran Ponter

Yadana Saw

Simon Woolf

Quentin Duthie (Deputy Chair)

Ros Connelly

Ken Laban

Thomas Nash

Hikitia Ropata

Adrienne Staples

Appointee

Barbie Barton

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

Environment Committee (A Committee of the Whole)

1 Purpose

Oversee the development, implementation and review of Council's:

- a Environmental strategies, policies, plans, programmes, initiatives and indicators to improve environmental outcomes for the Wellington Region's land, water, air, biodiversity, natural resources, parks and reserves, and coastal marine area
- b Regional resilience priorities in the delivery of plans, programmes, initiatives and activities for flood protection, erosion control, and regional parks and forests
- c Regulatory systems, processes and tools to meet Council's related legislative responsibilities
- d Plans, programmes, and efforts to increase volunteer uptake, community involvement and mahi tahi with others seeking to improve environmental outcomes in the Wellington Region.

2 Specific responsibilities

The Committee's environmental responsibilities 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.

- 2.1 Apply Council's Te Tiriti o Waitangi principles when conducting the Committee's business and making decisions.
- 2.2 Oversee the development and review of Council's:
 - a Environmental strategies, policies, plans, programmes, initiatives and indicators
 - b Regional resilience prioritiesand recommend these matters (and variations) to Council for adoption.
- 2.3 Review periodically the effectiveness of implementing and delivering Council's:
 - a Environmental strategies, policies, plans, programmes, initiatives and indicators
 - b Regional resilience priorities.
- 2.4 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, initiatives and indicators
 - b Regulatory systems, processes and tools.

- 2.5 Recommend to Council changes to improve the effectiveness of Council's:
 - a Environmental strategies, policies, plans, programmes, initiatives and indicators
 - b Regional resilience priorities
 - c Regulatory systems, processes and tools.
- 2.6 Review Greater Wellington's compliance with Council's related legislative responsibilities¹, and the monitoring and enforcement of compliance.
- 2.7 Ensure that the Committee's decision making:
 - a Considers climate change-related risks (mitigation and adaptation)
 - 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.
- 2.8 Review, after each Farming Reference Group meeting, a written report of the business conducted at that meeting.

3 Delegations

- 3.1 Subject to sections 3.3 to 3.7, 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 approve submissions to external organisations for matters pertaining directly to the Committee's purpose.
- 3.3 The Committee may make decisions on matters with a financial impact only where the related costs are:
 - a Budgeted for in the relevant business group's budget
 - 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 needed², 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.
- 3.6 Where a matter proposed for consideration by the Committee (including during the development of proposed Greater Wellington plans and policies) is of strategic

¹ These responsibilities include those under the Resource Management Act 1991 and for the granting of resource consents, the Soil Conservation and Rivers Control Act 1967, the Biosecurity Act 1993, the Reserves Act 1977, and the Maritime Transport Act 1994.

² 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.

importance to the Wairarapa Constituency, that matter shall first be referred to the Wairarapa Committee or its members for their consideration.

- 3.7 The Committee shall ensure that it acts under the guidance of the Memorandum of Partnership in working with Greater Wellington's mana whenua partners of the Wellington Region to ensure effective Māori participation in the Committee's deliberations and decision-making processes.

4 Members

4.1 All thirteen 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

Seven Committee members.

7 Meeting frequency

The Committee shall meet six times each year, with additional meetings as required.

Environment Committee

Thursday 23 November 2023, 9:30am

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

Public Business

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Please note these minutes remain unconfirmed until the Environment Committee meeting on 23 November 2023

Report 23.535

Public minutes of the Environment Committee meeting on Thursday 12 October 2023

Taumata Kōrero – Council Chamber, Greater Wellington Regional Council
100 Cuba Street, Te Aro, Wellington, at 9.30am.

Members Present

Councillor Gaylor (Chair)
Councillor Duthie (Deputy Chair)
Councillor Bassett
Councillor Connelly
Councillor Kirk-Burnnand
Councillor Laban
Councillor Lee
Councillor Nash
Councillor Ponter
Councillor Saw
Councillor Staples
Councillor Woolf

Barbie Barton

Councillor Connelly participated at this meeting remotely, via MS Teams, and counted for the purpose of quorum in accordance with clause 25B of Schedule 7 to the Local Government Act 2002.

Karakia timatanga

The Committee Chair invited Councillor Duthie to open the meeting with a karakia timatanga.

Public Business

1 Apologies

There were no apologies.

2 Declarations of conflicts of interest

There were no declarations of conflicts of interest.

3 Public participation

Terry Joy spoke on pest management in regional parks.

4 Confirmation of the Public minutes of the Environment Committee meeting on 10 August 2023 – Report 23.382

Moved: Cr Staples / Cr Nash

That the Committee confirms the Public minutes of the Environment Committee meeting on 10 August 2023 – Report 23.382.

The motion was **carried**.

5 National Policy Statement for Indigenous Biodiversity – Report 23.484 [For Information]

Tessa O’Brien, Senior Advisor, Environmental Policy, Christina Underhill, Senior Advisor, Environmental Policy, Ainslee Brown, Advisor, Environmental Policy, and Mike Watts, Team Leader, Environmental Policy, spoke to the report.

6 Resource Management Reform – Day 1 Implications – Report 23.498 [For Information]

Fathima Iftikar, Director, Strategy, Policy and Regulation, and Shaun Andrewartha, Manager, Environmental Regulation, spoke to the report.

7 Toitū Te Whenua Parks Network Plan 2020-30 – Report 23.456 [For Information]

David Boone, Manager, Ecosystems and Community, and Tania Parata, Director Mana Whenua Partnerships, spoke to the report.

Noted: The Committee requested a report to a future Committee meeting, detailing the history of the development of Toitū Te Whenua Parks Network Plan 2020-30, what has been done in implementing Toitū Te Whenua, and the challenges and opportunities for parks (and wetlands) restoration work.

8 Pest Management Report – Report 23.467 [For Information]

Myfanway Hill, Manager Environment Operations, spoke to the report.

Noted: The Committee requested that it receive an annual pest management report. The Committee requested that this report cover:

- a Overall pest management work in the Wellington Region
- b Community pest management work
- c Greater Wellington pest control work on Greater Wellington controlled land, including regional parks.

9 Farming Reference Group Chair Update Report – Report 23.522 [For Information]

Barbie Barton, Chair of the Farming Reference Group, spoke to the report.

10 Whaitua Development Update – Report 23.505 [For Information]

Nicola Patrick, Director, Catchment, spoke to the report.

11 Environment Update – Report 23.7 [For Information]

Lian Butcher, Group Manager, Environment, spoke to the report.

Karakia whakamutunga

The Committee Chair closed the meeting with a karakia whakamutunga.

The public part meeting closed at 11.03am.

Councillor P Gaylor

Chair

Date:

Environment Committee
23 November 2023
Report 23.546



For Decision

ANNUAL ASSET MANAGEMENT CONDITION REPORT

Te take mō te pūrongo

Purpose

1. To advise the Environment Committee (the Committee) of progress made with the Environment Group's asset management system, and the overall performance and physical condition of flood protection and erosion control infrastructure assets (assets) across the region.

He tūtohu

Recommendations

That the Committee:

1. **Agrees** that the flood protection and erosion control infrastructure assets on the 15 schemes across the Wellington Region have been managed satisfactorily to the agreed Level of Service (LoS) in the 2022/23 financial year.
2. **Notes** that there has been a decline in the condition of the less critical flood management assets, and this will likely continue without further investment.
3. **Notes** that identified issues are being addressed through maintenance and improvement work programmes.
4. **Notes** that current budgets are insufficient to ensure that assets are maintained to agreed levels of service in the long term.

Consideration by Committee

2. The Te Awa Kairangi / Hutt Valley Subcommittee (the Subcommittee) met on the 9 November 2023 to consider the *Asset Management Report for Te Awa Kairangi/Hutt Floodplain 2022/23 – Report 23.384*. The Subcommittee recommends to the Committee that it is satisfied that flood protection and erosion control infrastructure assets for these floodplains have been satisfactorily managed and that identified issues are being addressed through maintenance and improvement work programmes for 2022/23, noting that current budgets are insufficient to ensure that assets are maintained to agreed levels of service in the long term. The Subcommittee after debate amended the recommendation to the Environment Committee to note that the decline in less critical assets will continue without further investment.
3. As flood resilience is considered of strategic importance to the Wairarapa Constituency, the Wairarapa Committee met on 31 October 2023 to consider the *Asset Management*

Report for Wairarapa 2022/23 – Report 23.544. The Wairarapa Committee confirmed that they were satisfied that flood protection and erosion control infrastructure assets for these floodplains have been satisfactorily managed and that identified issues are being addressed through maintenance and improvement work programmes, noting that current budgets are insufficient to ensure that assets are maintained to agreed levels of service in the long term.

4. The Friends of the Waikanae River meeting was held on 6 September 2023, officers reported to the Friends on asset condition and performance and note that identified issues will be addressed through work programmes.
5. The Friends of the Ōtaki River meeting was held on 25 October 2023, officers reported to the Friends on asset condition and performance and note that identified issues will be addressed through work programmes.

Te tāhū kōrero

Background

6. Greater Wellington is responsible for flood protection and erosion control infrastructure assets, including land and property, located on 15 river schemes across the Wellington Region. These assets have a total combined value of \$428 million¹ and provide flood and erosion protection to the communities, businesses and infrastructure located on these floodplains.
7. Greater Wellington has a comprehensive asset management system, which demonstrates that the service levels of our infrastructure assets are being maintained in an efficient and cost-effective manner, will perform as designed and, where required, are being improved.
8. The Environment Committee has overall responsibility to monitor the maintenance and improvement of these assets on behalf of Council. The Environment Committee relies on feedback from the various subcommittees, scheme advisory committees and friends' groups to confirm infrastructure assets are being satisfactorily maintained to the agreed service level.

Current challenges

9. The context and overall environment in which Operations and Maintenance (O&M) is undertaken has changed significantly, and increased budgets and resources are required to ensure we can maintain agreed scheme service levels and continue to undertake routine O&M activities. Analysis undertaken for the Long Term Plan process has highlighted significant challenges faced by the Environment Group to provide the agreed Level of Service (LoS) within the current budget and resource levels.
10. Central and local government reforms coupled with increasing compliance costs (health, safety and wellbeing, environmental), increasing expectations on how we should work to improve environmental outcomes, partnering with mana whenua and the increasing community desire for consultation and engagement to achieve broader social objectives continue to increase operational resource requirements. To achieve

¹ As of 30 June 2020

the above and Greater Wellington's Strategic Objectives we require a broader skill set in our workforce.

11. Climate change is also requiring more complex planning, and more frequent and extreme weather events will result in reactive maintenance taking precedence over the annual works programme.
12. Over the past decade we have also constructed a broader range of assets, aside from those that provide flood protection and erosion control, and these assets have different uses and more intensive maintenance requirements, e.g. tracks, gates, signs, and benches.
13. The implementation of the new operational resource consents for Te Awa Kairangi / Hutt River and Wainuiomata River have been difficult. We have been compliant with the consent conditions though we have not been able to commit the necessary resources to make the further improvements we would have hoped.
14. Greater Wellington has four classifiable dams which are currently managed, maintained and operated by Flood Operations teams within the Environment Group. Three of these are flood detention dams at Seton Nossiter, Stebbings, Donalds Creek, and the fourth is the Geoffrey Blundell Barrage Gates.
15. New regulations for dam owners (Building (Dam Safety) Regulations 2022) were recently passed into law and come into effect on 13 May 2024.
16. The announcement of these regulations has confirmed the importance of our dam safety system improvement program alongside our business-as-usual dam maintenance and monitoring. We are progressing through our improvement work program to ensure that our Dam Safety Assurance Program is compliant with the new Dam Safety Regulations by May 2024, and have engaged a consultant to support us with this. A key milestone was the Failure Modes and Effects Analysis Workshop which was done for Seton Nossiter and Stebbings Dams in April 2023. This workshop indicated where we could build resilience in our dam safety system, inform our forward work program and prioritise work streams.

Te tātaritanga Analysis

Asset performance, criticality, and risk

17. A comprehensive risk-based framework developed at a national level is used to produce a risk profile for each river.
18. The framework assesses both the probability and consequence of failure of a group of assets within a discrete section of the river. Assessing the probability of failure includes analysing the structural strength of stopbanks (intrinsic strength), the capacity of the channel to attenuate flood flows, and the physical condition of infrastructure assets. The consequence of failure relates to risk posed to both the community and environment from failure of a design flood event. Once a probability and a consequence score have been determined for each reach, a risk level is assigned at this level from 'Very Low' to 'Very High'.

19. Application of the framework also highlights where the confidence in the underlying technical information is low and informs the investigative work programme to gather new or additional information to improve this confidence.
20. Assets do not work in isolation; they typically belong to a system of assets that interact or are interconnected. Flood protection and erosion control schemes are no different. A system of assets can be identified as critical in the same way individual assets can.
21. The risk profile produced for each river identifies critical assets systems or reaches, and critical assets within those systems are defined as those which have a high consequence of failure.
22. Generally, most of the infrastructure assets in the region are assessed as ‘Very Low’ to ‘Medium’ risk, and this continues the trend from the previous years.
23. There are, however, a small number of sections that have been assessed as ‘High’ or ‘Very High’ risk. This risk can be attributed to one or more of the following failure modes: intrinsic strength, capacity, condition, or consequence. **Attachment 1** - River risk assessment maps 2023 identifies these areas. **Attachment 2** - Breakdown of ‘High’ and ‘Very High’ risk areas, treatment, and timeframes provides detail on the management response.

Asset condition and maintenance

24. Asset condition is a measure of the physical state of the asset and is assessed visually on an annual basis. Asset condition does not identify the criticality of the asset or whether the asset meets the required service level. This criticality is addressed in paragraphs 36-39 of this report. Table 1 below outlines the condition rating score definitions.

Table 1: Condition rating score definitions taken from the GWRC Condition Rating Guide.

Rating	Asset Condition Rating Score	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 required.
3	Moderate	Acceptable physical condition but showing some wear or deterioration. Generally, well maintained 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 or failure imminent. Major work or replacement required.

25. Monitoring asset condition enables us to predict and plan maintenance, forecast replacement requirements, and develop effective and proactive work programmes. This is essential to managing flood risk because it influences the likelihood of asset failure, and, therefore, the performance of the assets to ensure they achieve required service levels.
26. Infrastructure assets across the region show a trend of subtle decline in asset condition which is more prominent in the Western part of the region than in the Wairarapa.

Te Awa Kairangi/Hutt, Wainuiomata, Otaki and Waikanae floodplains

27. Infrastructure assets on Te Awa Kairangi/Hutt, Wainuiomata, Otaki and Waikanae Rivers show a slight decline since 2022, the number of very poor and poor assets has increased. The decline is subtle because the assets have been well maintained in previous years and we are seeing the start of asset deterioration. Lack of budget and resourcing has meant that maintenance has been focused on higher criticality assets resulting in a decline in condition of the remaining assets.
28. Without increased budget and resourcing the trend of decline will continue in our lower criticality assets; these consist of our “first line of defence” assets such as bioengineering (i.e. willows), rock groynes and rockwalls. Flood Risk is managed through a systems approach, if the first line of defence assets does not provide the level of service expected, this increases the risk to the higher criticality assets, such as stopbanks. This could increase maintenance costs in the future to ensure the higher criticality assets provide the level of service, i.e. flood protection, required.
29. The climate resilience work being undertaken has improved the condition of some of the assets across the region. Although this has allowed programmes to catch up with deferred maintenance, there are still reaches which have degrading lower criticality assets.
30. Tree removal from stopbanks has continued to be a priority for the Flood Operations Delivery teams, with a focus also on willow and native planting. However, resource constraints have not allowed this work to be fully completed, with reactive maintenance prioritised post flood events.
31. Rock top up work to maintain the integrity of rock structures (groynes and rockwalls) has also been deferred due to resource constraint. This will be addressed through planned works programs this year.

Wairarapa

32. In 2023, there were significant challenges in collecting condition data for assets in the Wairarapa, including:
 - a Several flood events that prevented the inspection of assets due to high water levels.
 - b Implementing a new asset management system, which involved a new way to capture data in the field.
 - c Inconsistencies in the assessment of asset condition.

33. The above factors combined have resulted in a low confidence in condition data, and that the reported condition is better than the actual condition. To rectify this, staff have critically reviewed the condition data, and based on scheme knowledge and engineering judgement, identified areas that required maintenance, which have been combined with the risk profile to produce annual work programs.
34. An improvement plan is in place to ensure that condition data collected in 2023/24 can be relied on, and includes a review of the condition rating guide for ease of use, focused training session for assessors, and improvements to the mobile field app.
35. A focus for a large part of the year has been responding and repairing damage following numerous flood events. At the beginning of the financial year, the eastern rivers, such as the Kopuaranga River, suffered serious bank erosion and debris blockages. Cyclone Gabrielle also caused erosion damage throughout various rivers. Impacts were mainly felt in the east with large blockages.

Management response

36. All 'Very High' or 'High' risks shown in **Attachment 2** are known to staff and have been identified for treatment either through an existing Floodplain Management Plan (FMP), a technical investigation or operational work programme. Existing and proposed FMP improvement works are being considered as part of the Activity Management Planning and Long Term Planning Processes. The outcomes of this work will prioritise and budget for the proposed work based on the assessed risks.
37. In the Te Awa Kairangi / Hutt and Wainuiomata Rivers, the following sections have been identified as 'Very High' and 'High' risk:
 - a At the Te Awa Kairangi / Hutt River Mouth downstream of the Estuary Bridge capacity is an issue; the area is inundated in a 1,900 cumec event (1% Annual Exceedance Probability – AEP) and is shown as 'High' risk. There are no stopbanks in this reach and no new stopbanks are currently signalled in the Hutt River Floodplain Management Plan (HRFMP). Initial investigations have been completed through the RiverLink project and these will be progressed further when the HRFMP is reviewed. Riverlink is due for completion by 2027.
 - b Sections of Te Awa Kairangi/Hutt River from Moera to Strand Park, and adjacent to Alicetown are 'High' risk. This is an inherent risk as the consequence of any stopbank failure is high.
 - c The Pharazyn Street and Lower Hutt city stopbanks have capacity issues and average intrinsic strength; they are predicted to overtop in the 2,800 cumec design event and are shown as 'Very High' risk. As both the probability and consequence of failure are very high the risk rating reflects this. RiverLink will retreat, raise, and improve the stopbanks and enhance channel capacity through this section of the Te Awa Kairangi/Hutt River. Advance works are in progress for the Mills Street stopbank. These works on the stopbanks for these reaches should reduce the risk from Very High to High. This is the minimum risk assessment possible due to the inherent risk of catastrophic consequences should the stopbanks fail.

- d The River Road stopbank above Moonshine Bridge has a capacity issue and average intrinsic strength; it is predicted to overtop in the 2,800 cumec event and is shown as 'Very High' risk. Modelling for Te Awa Kairangi/Hutt River is currently progressing and is due to be completed by December 2023.
 - e Sections of stopbank in the urban reach near Rotary Park on the Wainuiomata River are 'High' risk and are either predicted to over top in the 1% AEP or have edge protection assets that are in poor condition. Technical investigations into the capacity, are programmed for the 2023/24 financial year and improvements to the edge protection assets incorporated into operational work programmes.
 - f The asset performance tool (our risk assessment tool) is not applied to Pinehaven. This is due to Greater Wellington owning limited assets in the catchments and this tool specifically looks at flood risk management in relation to flood infrastructure. The assets we do have are condition rated through our inspection program and all the assets are in good condition and managed to the agreed levels of service.
38. In Kāpiti, the following sections have been identified as 'Very High' and 'High' risk:
- a On the Ōtaki River there is a small section of stopbank downstream of the bridges that is overtopped in the 5% AEP (1 in 20 year event) and is 'High' risk. This stopbank is proposed to be upgraded as part of the implementation of the Otaki Floodplain Management Plan (FMP) and the risk will be addressed at that time. Flood modelling is currently underway will be used for further options analysis.
 - b On the Waikanae River sections of the stopbank and floodwall are predicted to overtop on 10% and 1% AEP events respectively and are shown as 'High' risk. Preliminary investigations have been completed to confirm stopbank and floodwall capacity and structural strength. A forward plan is currently being developed.
 - c In Pukekawa Park on the Waikanae River, an area of stopbank is in Poor or Very Poor condition due to the proximity of invasive roots. This has been added to works programs and is due to be addressed in 2023/24.
39. In the Wairarapa, the following sections have been identified as 'Very High' and 'High' risk:
- a The urban section of stopbanks parallel to the urban section of the Waipoua River are either 'Very High' and 'High'. All stopbanks have poor intrinsic strength and capacity issues and are predicted to overtop in the 1% Annual Exceedance Probability (AEP) or the 1 in 100 year flood event. Upgrade works can only proceed once agreement has been reached with the Waipoua Working Group. Greater Wellington is working with this group to progress options that focus on addressing the immediate risk to Masterton.
 - b 'High' risk sections feature on the Waiohine River at Fuller Bend and west of Greytown due to flood water escaping the channel and flowing towards Greytown. Implementation of the Waiohine River Plan will address these.
 - c Implementation of the Te Kāuru Floodplain Management Plan will address two 'High' risks on the Ruamāhanga River, one in the Mount Bruce near Rathkeale Collage and the other in the Te Ore Ore section parallel to River Road in

Masterton. The plan will also address one ‘High’ risk on the Waingawa River to protect Masterton’s water supply pipeline.

Ngā hua ahumoni
Financial implications

- 40. The proposed recommendation has no financial implications.
- 41. We are currently seeking increased budget through the Long-Term Plan process. The table below shows the forecast budget for two scenarios: the Strategic scenario shows the budget required to maintain our asset base to the level of service agreed with our Council, stakeholders and partners; the Baseline Risk scenario shows a forecast budget which would require a drop in the level of service of our assets.

Table 2: Forecast budgets for Baseline Risk and Strategic scenarios

	Forecast scenario	3-year forecast (\$m)	10-year forecast (\$m)
Western Opex	Baseline Risk	22.0	111.9
	Strategic	22.8	115.0
Eastern Opex	Baseline Risk	15.1	61.3
	Strategic	17.8	74.2
Logistic and Resourcing Opex (including Dams)	Baseline Risk	17.0	66.8
	Strategic	18.9	77.2
Total Opex	Baseline Risk	54.1	240.0
	Strategic	59.5	266.4
Hutt / Wlg Capex (including RiverLink)	Baseline Risk	247.0	284.8
	Strategic	261.4	369.8
Kapiti Capex	Baseline Risk	11.6	21.8
	Strategic	7.1	35.9
Wairarapa Capex	Baseline Risk	18.2	33.6
	Strategic	22.6	70.2
Total Capex	Baseline Risk	276.8	340.2
	Strategic	291.1	475.9

Ngā Take e hāngai ana te iwi Māori Implications for Māori

42. The Environment Group and Te Hunga Whiriwhiri continue to explore opportunities for Māori through the consenting space as well as through the Riverlink and future improvement works.
43. River management consents for Te Awa Kairangi/Hutt River represent a step change in how Greater Wellington will undertake river management activities in the future. These consents enable co-design and development of key plans and strategies that set the parameters by which river management activities are undertaken in these rivers.

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

44. The matters discussed in this report have been considered by staff in accordance with the process set out in the Greater Wellington Climate Change Consideration Guide.
45. The assets discussed in this report were developed over an extensive period of time, during which climate change projections (e.g. rainfall intensity, sea level rise etc.) have evolved with the scientific community's understanding of how climate change will affect the Wellington Region. Climate change projections were incorporated into the modelling that underpins relevant management plans and asset designs at the time they were developed. Current climate projections estimate a 25-30% increase in rainfall intensity and a sea level rise of 1.35 metres and are used for recent modelling projects. The policy for modelling projects is to use latest national guidance for incorporating climate change into flood risk assessments and responses.
46. The greenhouse gas (GHG) emissions from rock supply for maintenance varies depending on the quarry source of the rock and transport to the work sites. Quarry sources for projects vary. The emissions from rock supply production and transport are not presently part of the organisation's GHG inventory.
47. Our maintenance will also use heavy machinery to carry out the work proposed in these projects. The emissions from these have not been estimated. However, in the 2018-2019 year, use of heavy machinery mainly for flood protection works at Greater Wellington represented 2% of the total organisational carbon footprint (835 tCO₂e).
48. Greater Wellington land which utilises grazing as a maintenance practice for managing vegetation has been assessed for alternatives to reduce the impact of carbon emissions as a result of this practice. However, it was found that the current practice while paying into the carbon credit scheme is more effective than other options such as mowing. Grazing licenses will continue to be reviewed regularly in future to ensure that the most effective practice of maintaining Greater Wellington land is employed.
49. Quarry selection is the single largest determinant of emissions. While it seemed possible that quarry operations could be improved and cartage distances reduced to help lower emissions, there are few options to obtain rock of the required quality.

Ngā tikanga whakatau
Decision-making process

50. 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

51. 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 due to the administrative nature of the decision.

Te whakatūtakitaki
Engagement

52. Due to the low significance of this matter, no engagement was considered necessary.

Ngā tūāoma e whai ake nei
Next steps

53. **Attachment 3** – Annual Asset Management Condition presentation will be presented at the Environment Committee meeting.

Ngā āpitihanga
Attachments

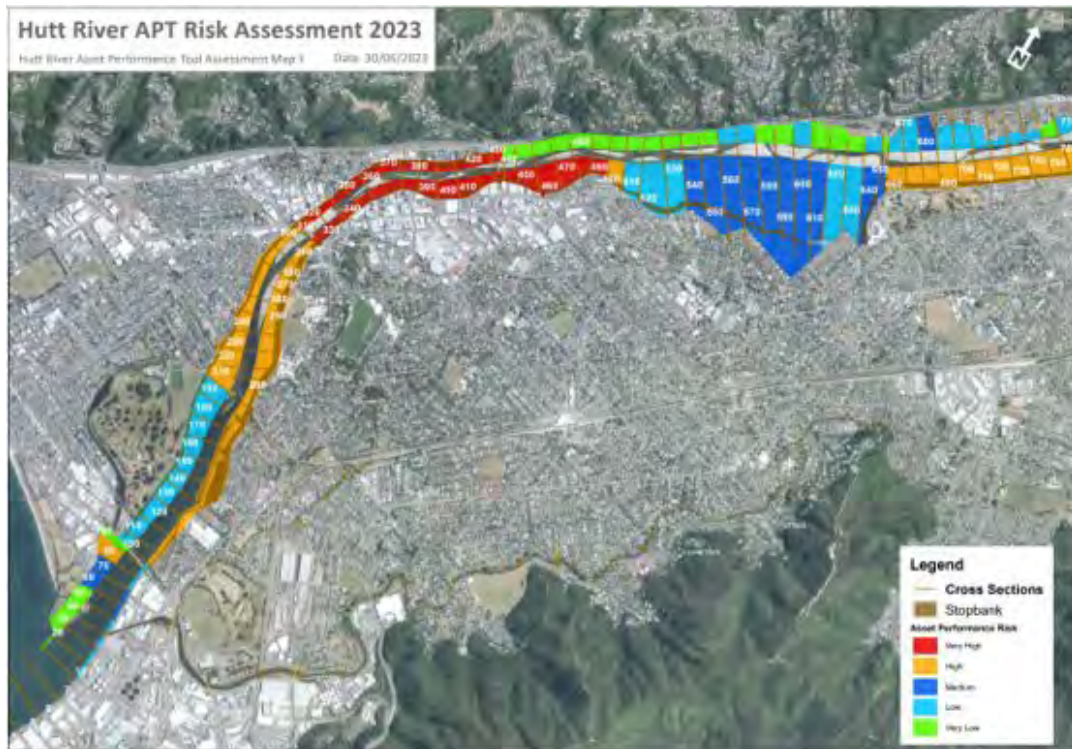
Number	Title
1	Risk Assessment maps 2023
2	Breakdown of 'High' and 'Very High' risk areas, treatment and timeframes
3	Annual Asset Management Condition Presentation to Report 23.546

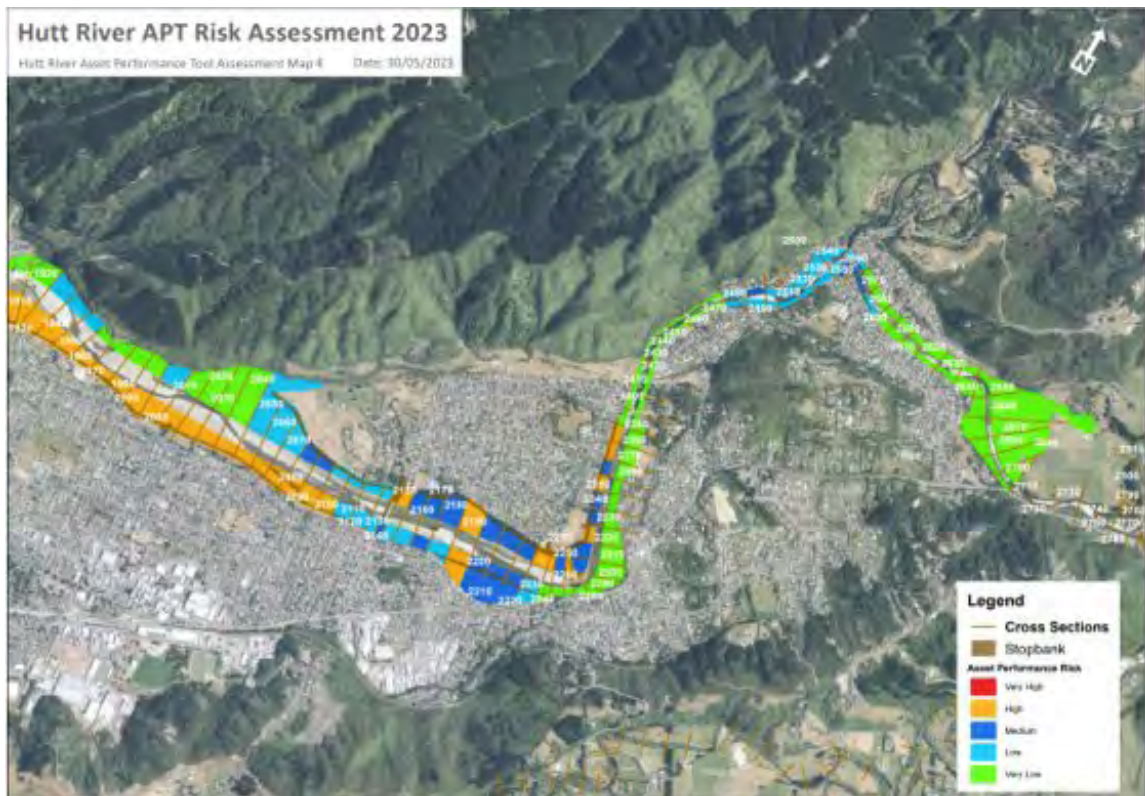
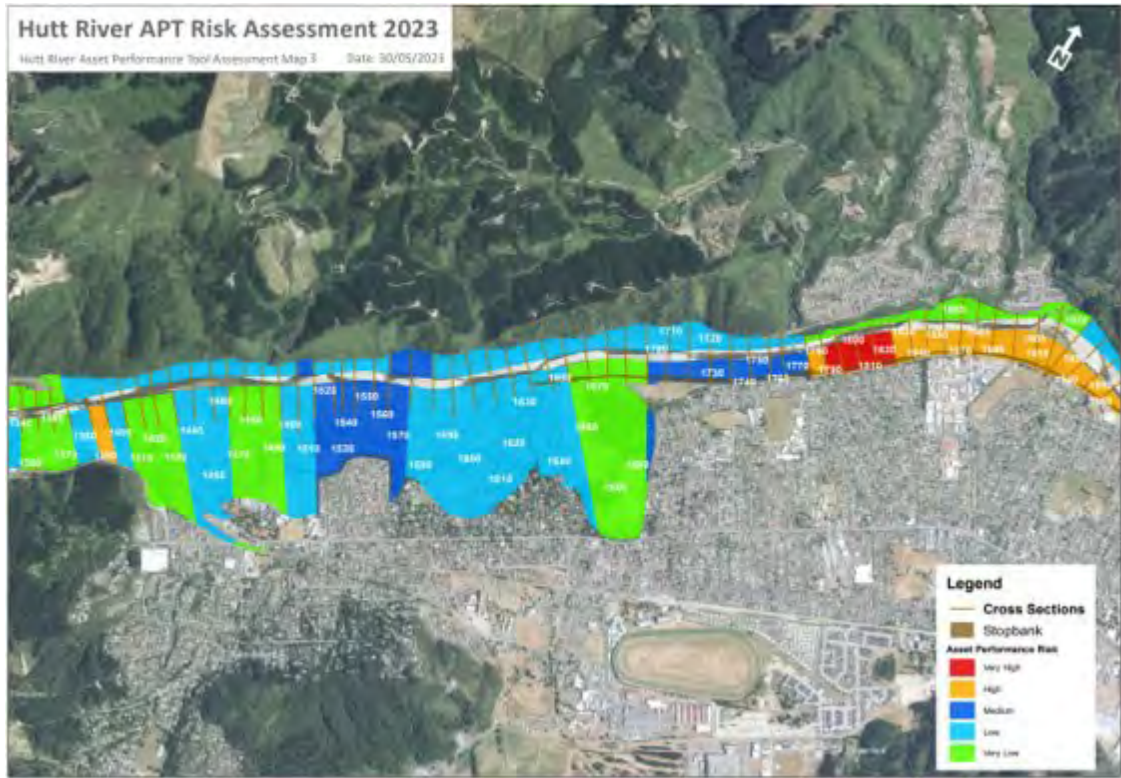
Ngā kaiwaitohu
Signatories

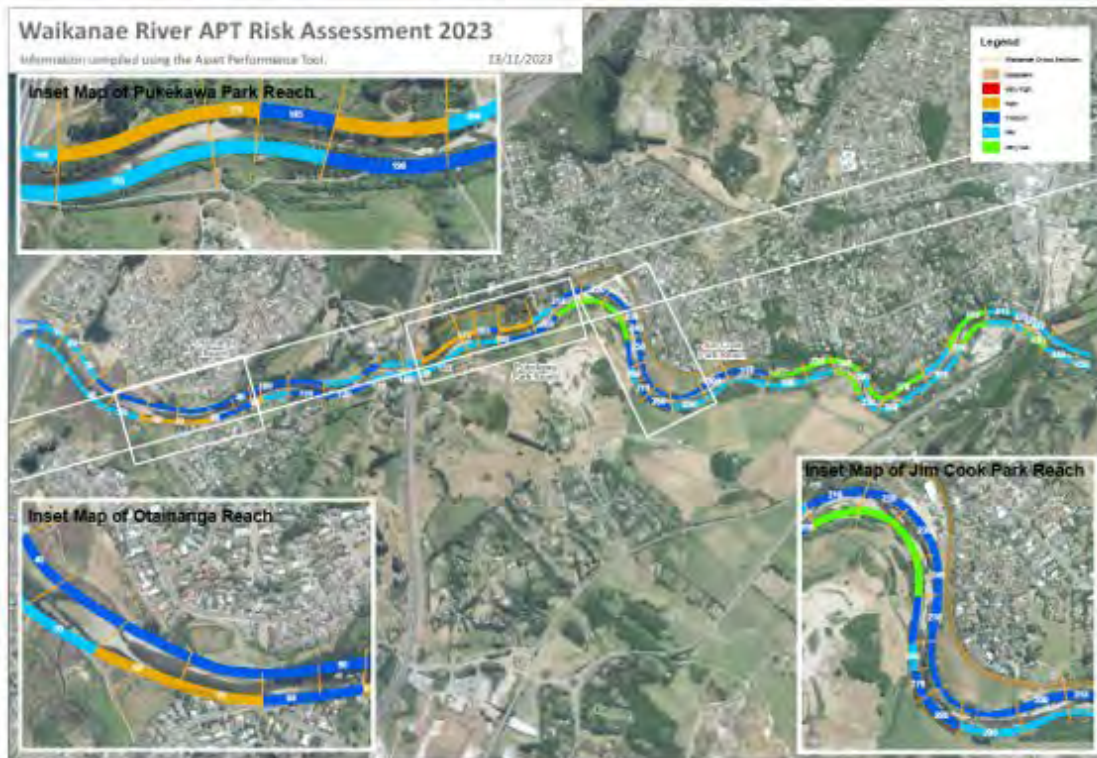
Writer	Lucy Ashford – Team Leader, Flood Operations Planning
Approvers	Jacky Cox – Manager, Logistics and Resourcing Jack Mace – Director, Delivery Lian Butcher – Group Manager, Environment

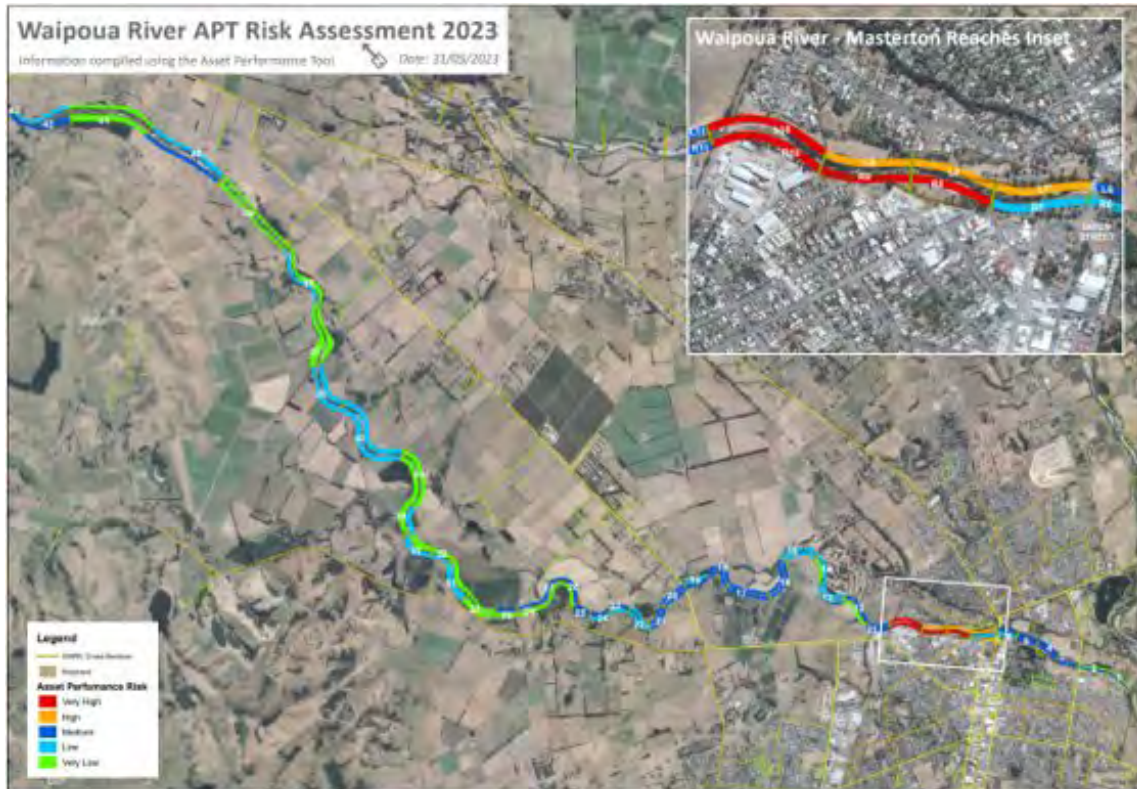
He whakarāpopoto i ngā huritaonga Summary of considerations
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>The Environment Committee provides oversight of the development, implementation, and review of regional resilience priorities in the delivery of plans, programmes, initiatives and activities for flood protection and erosion control; the infrastructure assets that form the flood protection and erosion control scheme are a critical element of this.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>The previous confirmation from the Wairarapa Committee and the Te Awa Kairangi / Hutt River Subcommittee that the infrastructure assets have been satisfactorily maintained to the agreed Level of Service (LoS) fulfils one of the Environment Group's non-financial performance measures in the Long-Term Plan. This report and confirmed minutes are supplied as evidence to Audit NZ that this has been achieved.</p>
<p><i>Internal consultation</i></p> <p>There was no internal consultation.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>The report notes that there are a small number of areas that pose either a 'Very High' or 'High' risk to the communities and businesses on that River's floodplain. These are identified for a technical investigation or in an operational or improvement programme.</p>

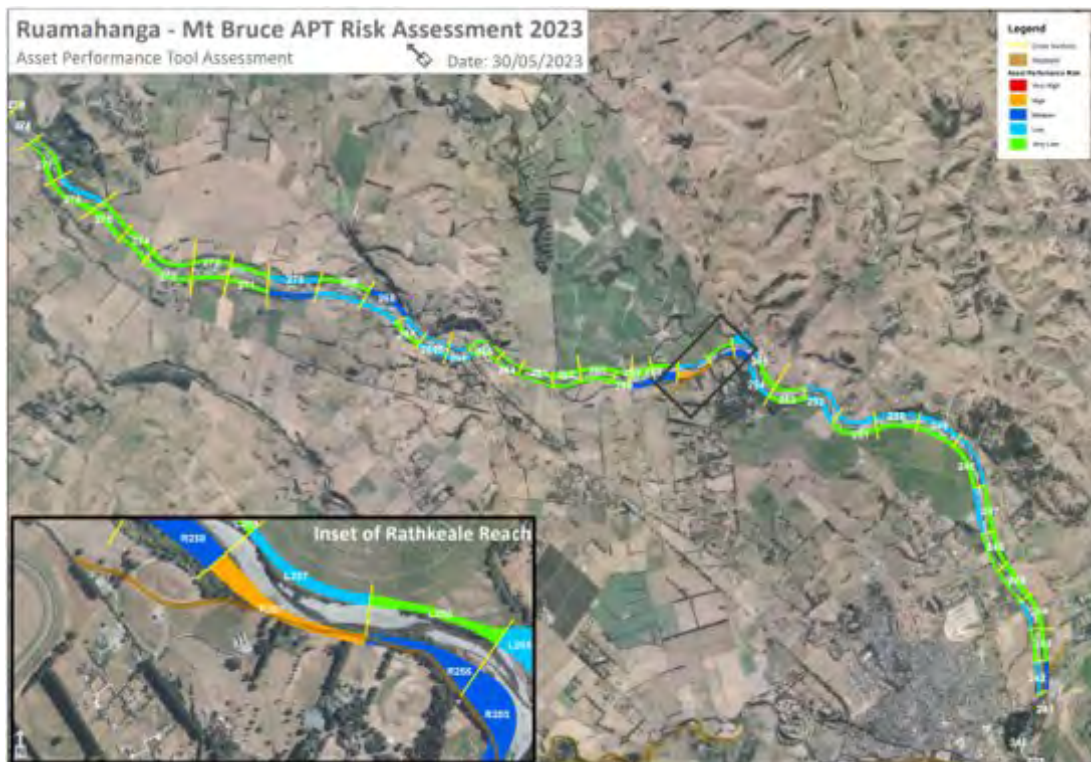
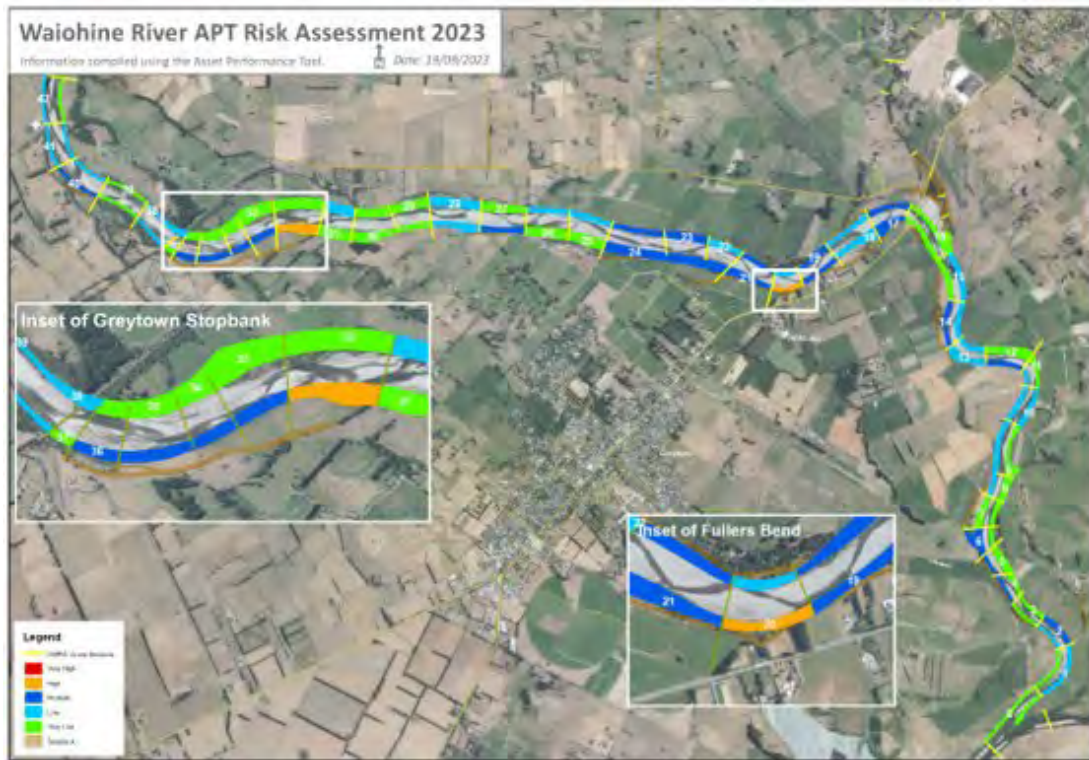
'High' and 'Very High' Risk Assessment Maps 2023 (Asset Condition Report).

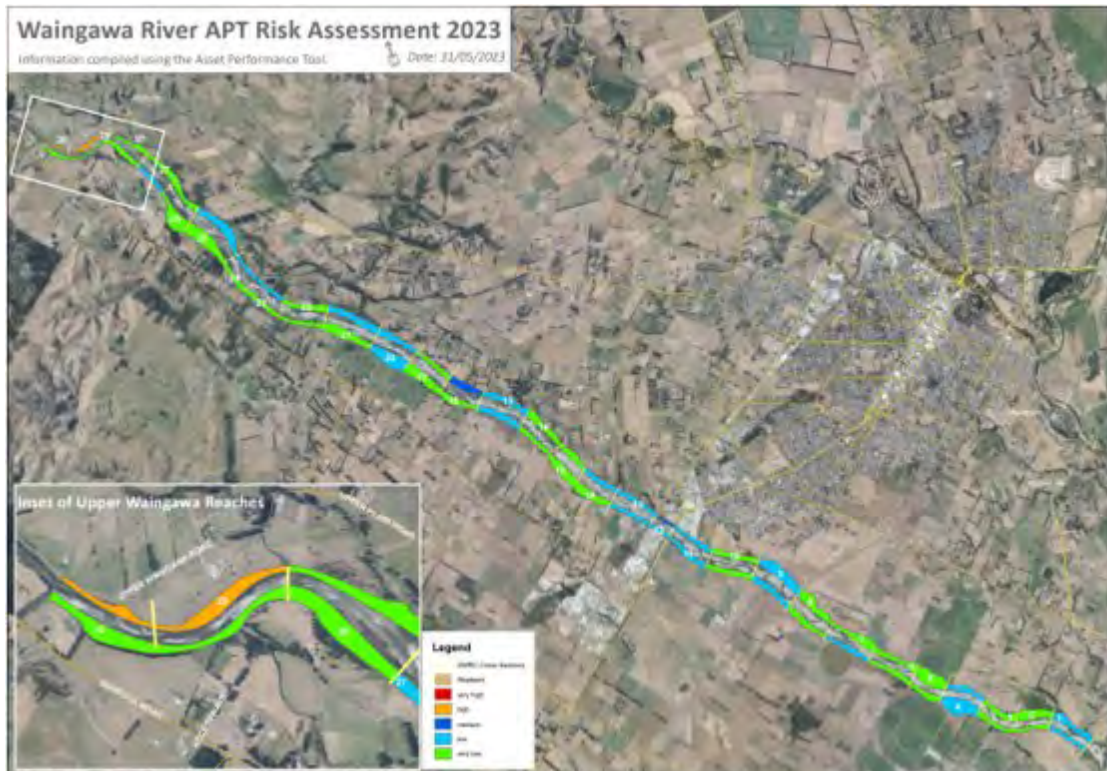
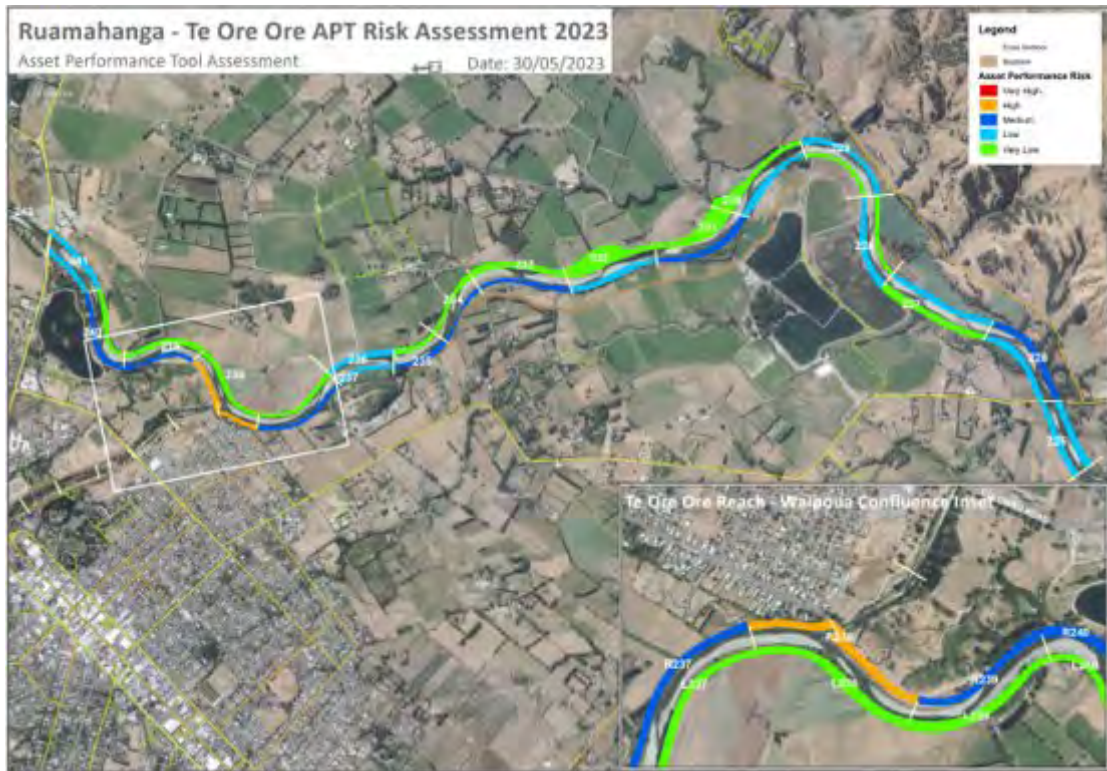












Breakdown of ‘High’ and ‘Very High’ risk areas, treatment, and timeframes

Location	Description	Risk	Treatment	Timeframes
Hutt River mouth	No stopbank. Area is inundated in the 1,900 cumec event (1% Annual Exceedance Probability – AEP).	High	Initial investigations completed through RiverLink. Further investigations through HRFMP review.	A prioritisation exercise is planned for in the latter part of 2023/24.
Hutt River Moera to Strand Park	Inherent risk as the consequence of any stopbank failure is high.	High	Operational work programs to prioritise maintenance.	Ongoing.
Hutt River Pharazyn Street	Stopbank will overtop from 2,800 cumec design event. Stopbank intrinsic strength is ‘average’.	Very High	RiverLink will retreat, raise and improve stopbanks.	RiverLink is due for completion by 2027.
Hutt River Lower Hutt City		Very High		
Hutt River River Road above Moonshine Bridge	Stopbank will overtop from 2,800 cumec design event. Stability of stopbank is ‘average’.	Very High	Modelling for Te Awa Kairangi / Hutt River is currently progressing	Modelling due to be completed by December 2023.
Wainuiomata River Rotary Park	Stopbank segment predicted to possibly overtop in 1% Annual Exceedance Probability (AEP) design event (XS 1185), and edge protection assets in poor condition (XS 1210).	High	Technical investigations required. Operational work programs to prioritise maintenance.	Technical investigations are planned to commence in 2023/24.
Waikanae River, Otaihanga Domain, Left Bank	Stopbanks XS 60 & 70 estimated to overtop in 10% AEP design event. Floodwall XS95 estimated to overtop in 1% AEP design event. Floodwall also in Poor condition.	High	Technical investigations have been completed to confirm stopbank and floodwall capacity and structural strength.	Preliminary investigations have been undertaken and a forward plan is currently being developed. This is due for completion in 23/24.
Waikanae River - Pukekawa Park	Stopbank in poor or very poor condition due to proximity of invasive roots.	High	Operational work programs will prioritise maintenance.	Due for completion in 23/24.
Ōtaki River, D/S old SH1, Left Bank	Stopbanks at XS210-250 will likely fail during 5% AEP design event due to	High	Assessment to be updated with latest stopbank crest levels and flood levels post-PP20 construction.	Technical investigations planned for 2023-2025.

Attachment 2 to Report No. 23.546

Location	Description	Risk	Treatment	Timeframes
	overtopping and/or intrinsic strength.		Recent Geotech investigation to be reviewed and included into risk assessment.	
Waipoua River Urban Reach	Stopbank predicted to overtop in the 1% AEP design event.	Very High & High	Issue being considered by Waipoua Working Group.	2021-2023
Waiohine River Fullers Bend	Stopbank predicted to overtop in the 1% AEP design event.	High	Will be addressed through the Waiohine River Plan. Implementation planning ongoing.	2021-2023
Waiohine River downstream of Rail bridge (XS 32 and 36)	Stopbank intrinsic strength is average (XS32) and channel alignment is poor (XS36).	High		
Ruamāhanga River Rathkeale (Mt Bruce)	Inadequate information on stopbank design. Poor intrinsic strength.	High	These projects have been identified and will be addressed in the Te Kauru FMP.	Ongoing
Ruamāhanga River Waipoua confluence (Te Ore Ore)	No stopbank. Area is inundated in the 1% AEP design event.	High		
Waingawa River MDC water supply pipeline	No stopbank. Erosion risk.	High		

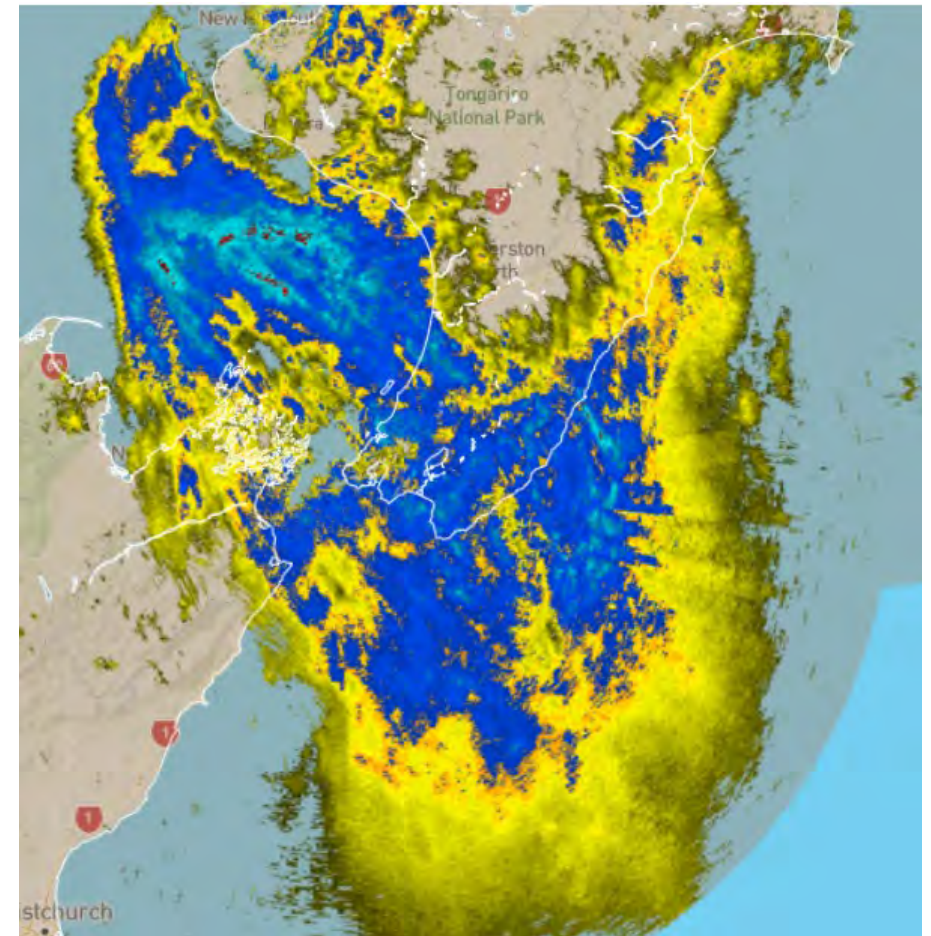
2022/2023 Annual Asset Management Condition Report

Part 1

Greater Wellington Regional Council's Flood Asset Management Process

Flood Risk Management - Why do we manage flood infrastructure?

- Three primary types of flooding – fluvial (rivers & streams), pluvial (stormwater), and coastal.
- Flooding is New Zealand’s number one hazard. This is no different in the Wellington Region, where the majority of our towns are located on the floodplains of major rivers.
- Flood risk is being exacerbated by climate change which is causing an increase in flooding due to more extreme rainfall in terms of frequency, intensity and unpredictability, and development, which is often occurring in marginal land in flood prone areas.



Flood Risk in our Region – Why do we manage flood infrastructure?

Buildings



Residential
73,000
31%



Commercial
4,000
69%

Emergency Service Sites



Total
11
24%

People



Total
197,000
31%

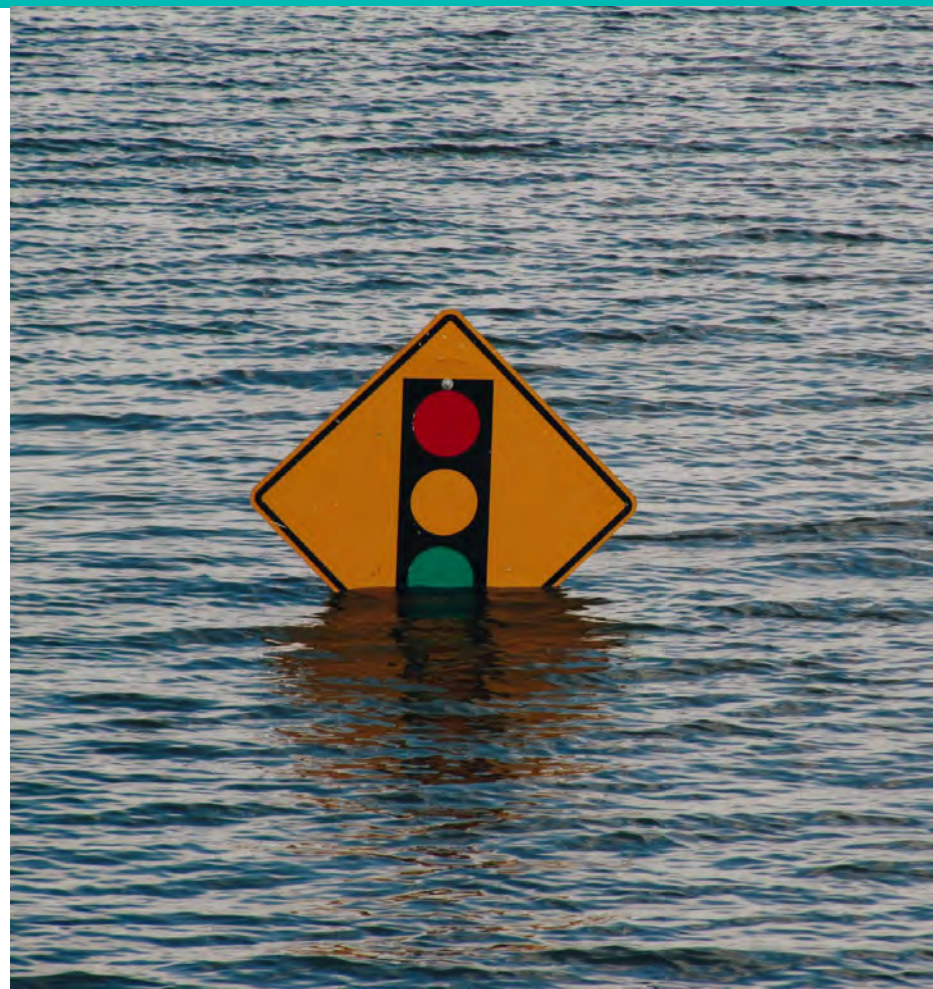
Transport



Road
1,000 km
20%



Rail
40 km
17%



Percentages relevant to present day regional total

Flood Risk Management – System Approach

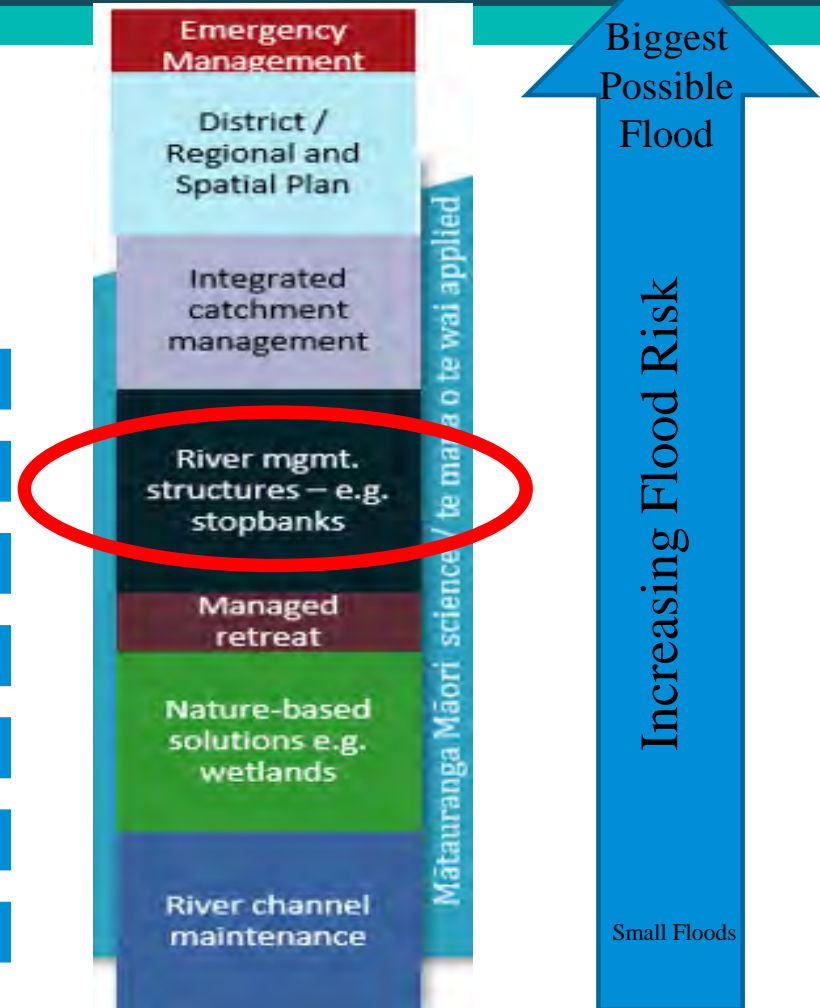
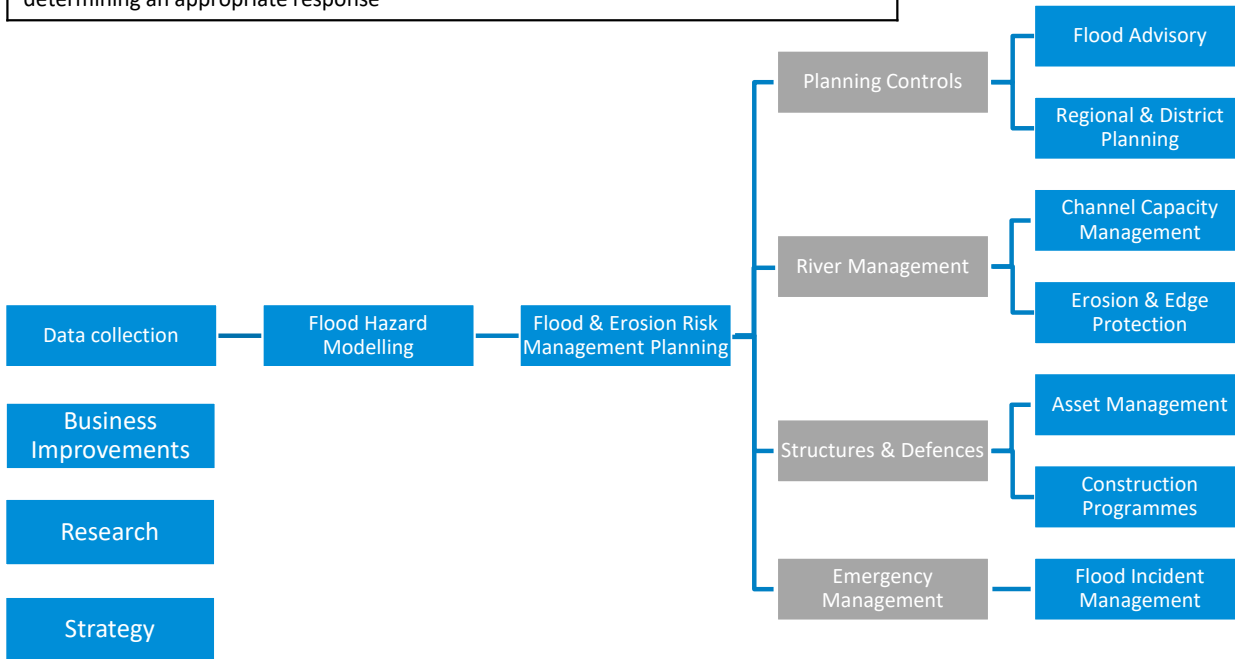
GWRCs Principles of Flood Risk Management

Principle 1: Avoid building in areas at high risk of flood hazard

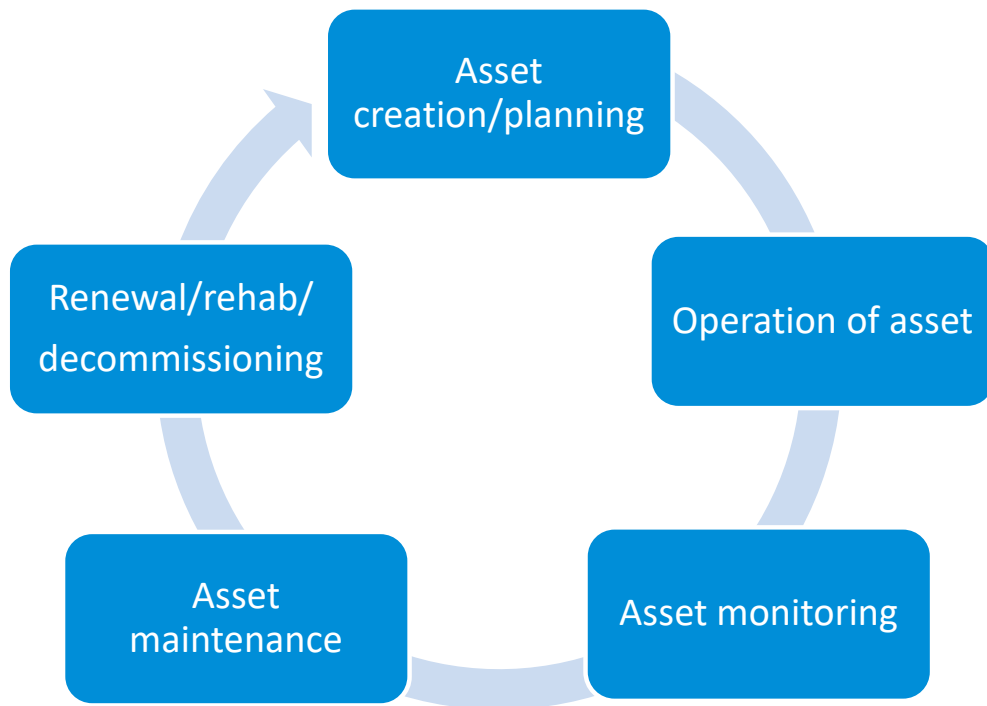
Principle 2: Only consider new flood protection infrastructure where existing development is at risk

Principle 3: Establish standards of flood protection relative to the degree of risk

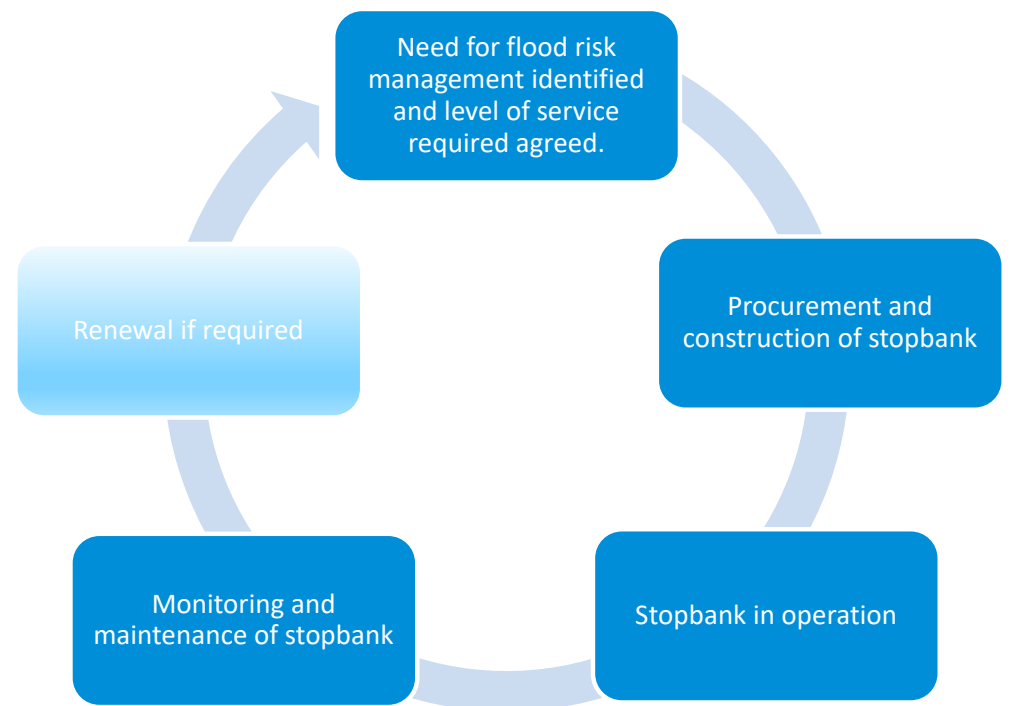
Principle 4: Plan for climate change in assessing the degree of flood hazard risk and in determining an appropriate response



GWRC's Asset Management Process - What is the Asset Lifecycle?



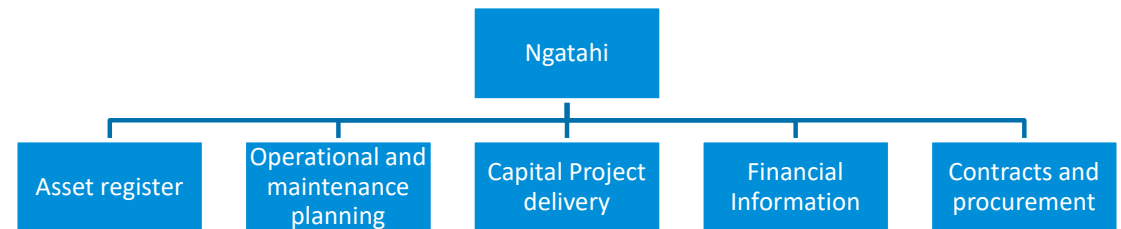
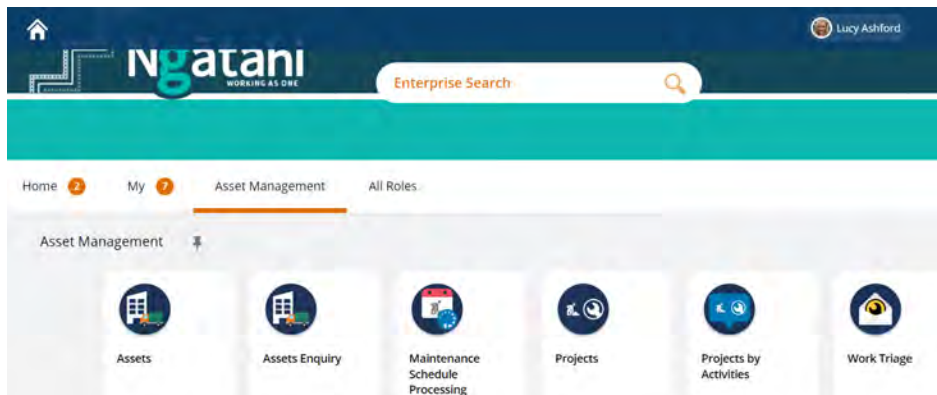
Asset lifecycle



Stopbank example

GWRC Asset Management System – What is GWRC’s system?

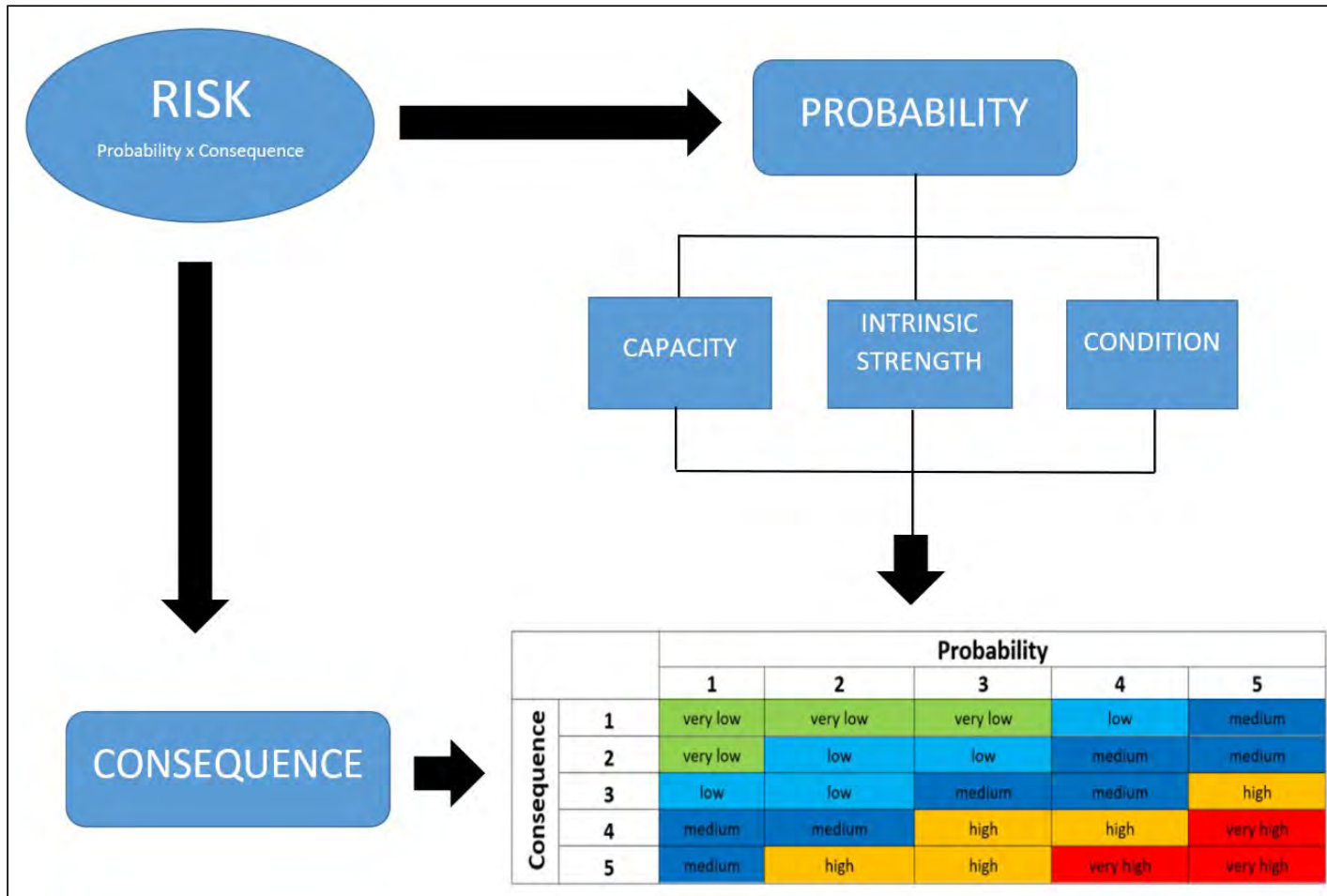
- Integrated information management system – Ngatahi
 - Asset register, financial information, operations and maintenance work planning, project delivery.
- Improvement program is in place as we develop our asset management maturity.



How do we assess asset condition? - Condition Rating Programme

Rating	Asset Condition Rating Score	Definition
1	Very Good Only routine/cyclic maintenance required	Sound physical condition, well maintained. No work required.
2	2 – Good	Generally sound physical condition, showing minor wear or deterioration, well maintained. Deterioration has significant impact on asset performance. Only minor work required (if any).
3	3 – Moderate	Acceptable physical condition but showing some wear or deterioration. Generally, well maintained but some work is required to improve the asset condition or make sure it is working well.
4	4 – Poor	Poor physical condition, significant wear or deterioration, impacting much of the asset. May not meet level of service.
5	5 – Very Poor	Failed or failure imminent. Major work or replacement required.

Asset Risk – how do we assess this?



Part 2

2022/23 Annual Asset Condition Report

2022/23 Asset condition summary – Te Awa Kairangi/Hutt River and Kapiti (Otaki and Waikanae)

Attachment 3 to Report 23.546

- Infrastructure assets have been well maintained in previous years.
- Data shows a subtle decline in asset condition since 2022 (the number of poor and very poor assets has increased).
- Lack of budget and resourcing has resulted in focused maintenance on higher criticality assets.
- Without increased budget and resourcing the trend of decline will continue in our lower criticality assets.



Photograph: Construction of debris fences along Te Awa Kairangi/Hutt River

2022/23 Asset condition summary – Wairarapa

- **Most assets in the Wairarapa are assessed as Very Low to Medium Risk.**
- In 2023 there were significant challenges to collecting condition data.
 - Several flood events
 - Implementing a new asset management system
 - Inconsistencies in the assessment of asset condition
- Low confidence in the condition data for 2022/23.
- Improvement program in place to ensure accurate data is collected for 2023/24.



Photograph: Geoffrey Blundell Barrage Gates

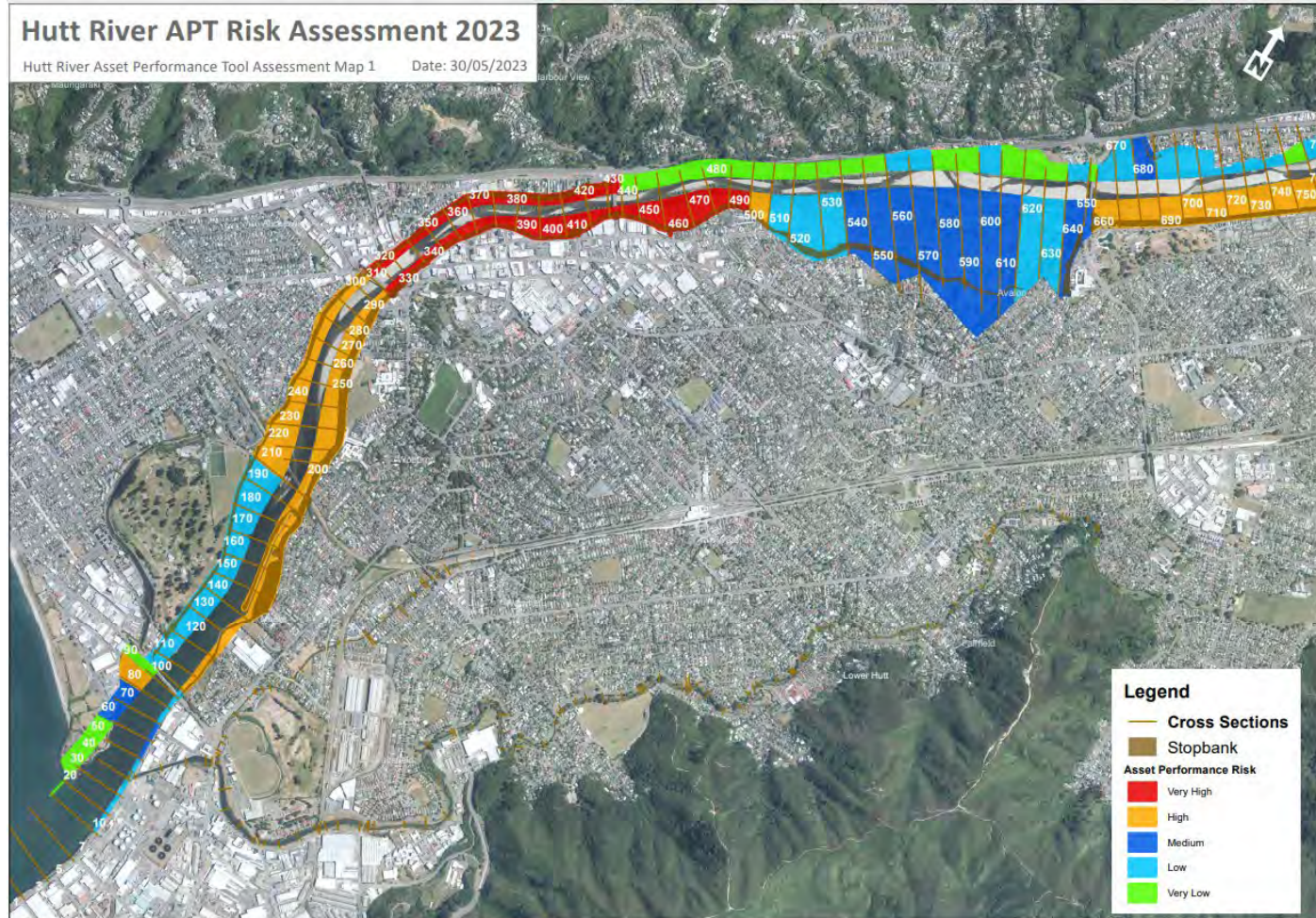
2022/23 Asset condition summary

The table shows a summary of asset condition across the Greater Wellington Region.

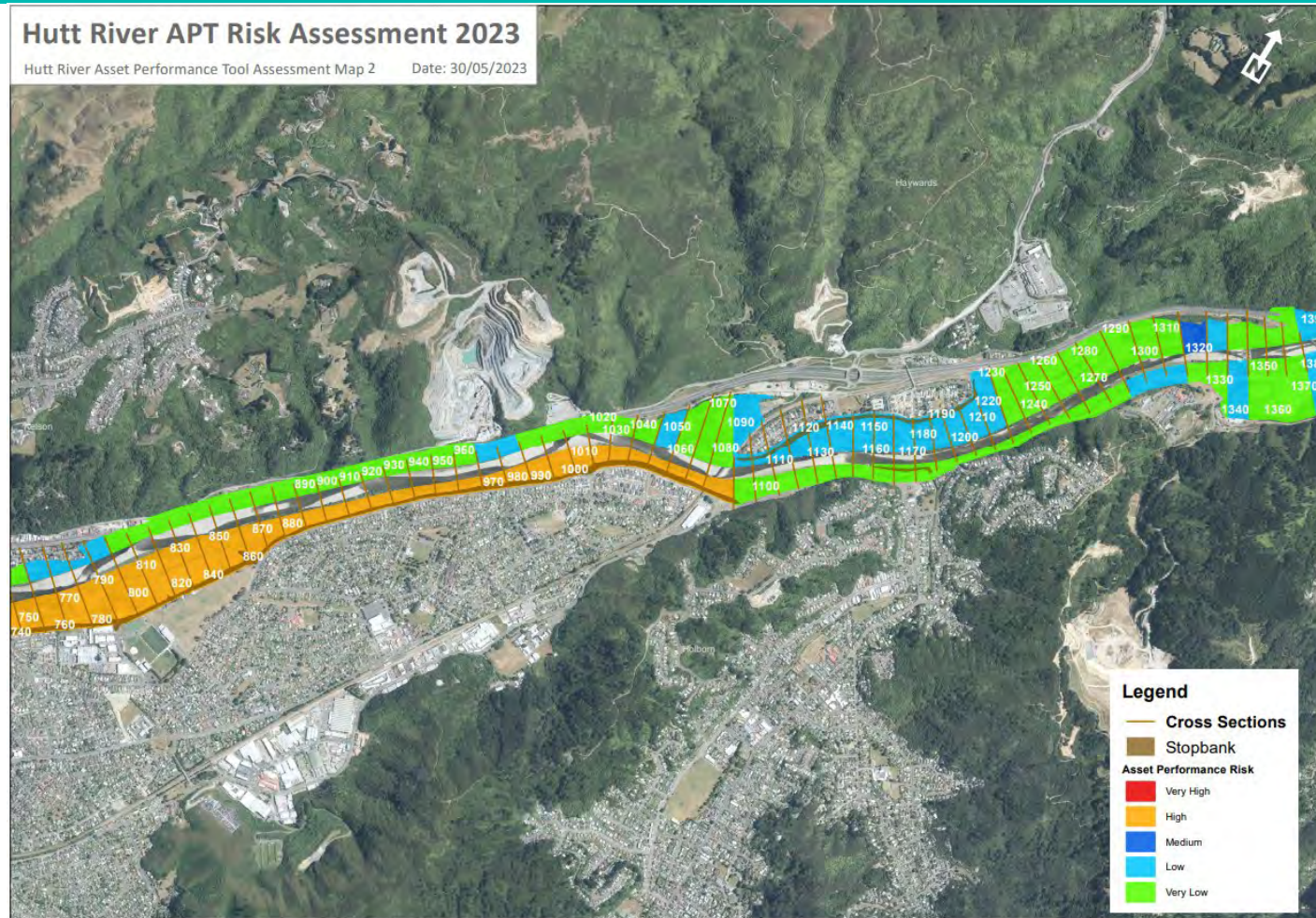
Totals* have changed due to decommissioned assets being removed from the register.

Year	2023		2022		2021	
Asset Condition Rating Scores	Ratio	Count	Ratio	Count	Ratio	Count
1 - Very Good	89%	1195	88%	539	91%	622
2 - Good		2211		2959		3230
3 - Moderate		1191		1680		1653
4 - Poor	11%	446	12%	657	9%	452
5 - Very Poor		128		56		60
Totals*	100%	5171	100%	5891	100%	6017

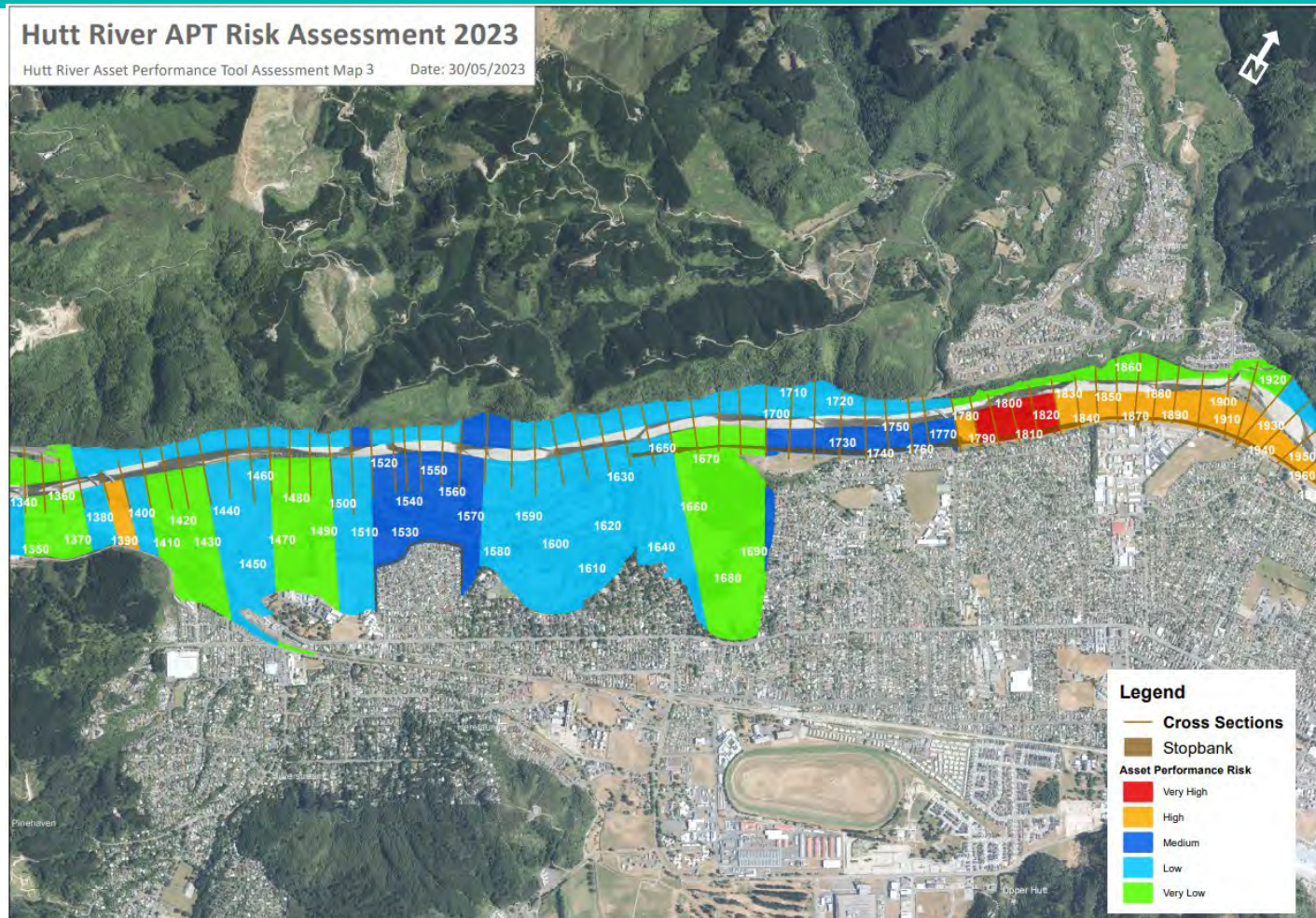
Results – Te Awa Kairangi /Hutt River risk maps



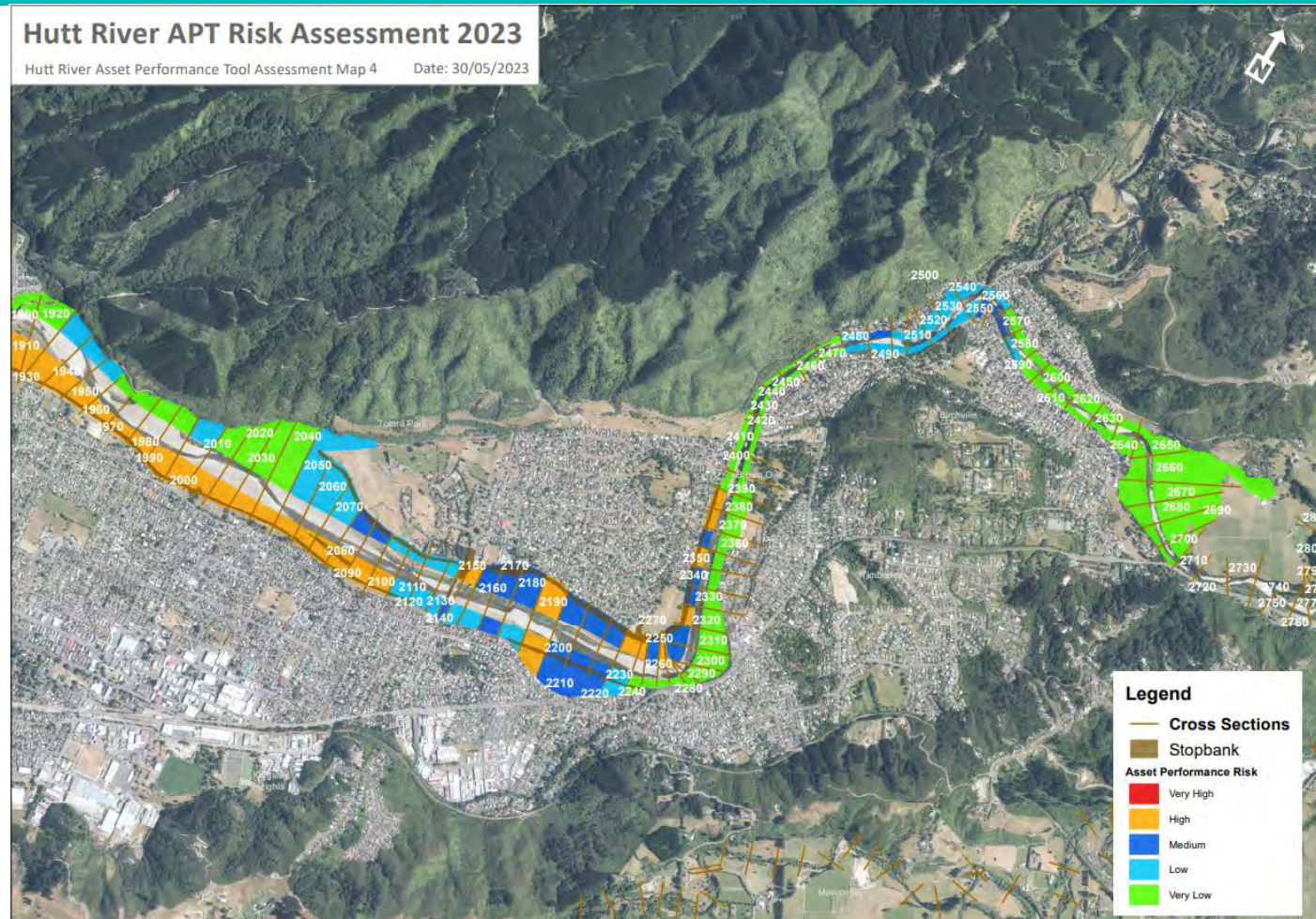
Results continued - Te Awa Kairangi /Hutt River risk maps



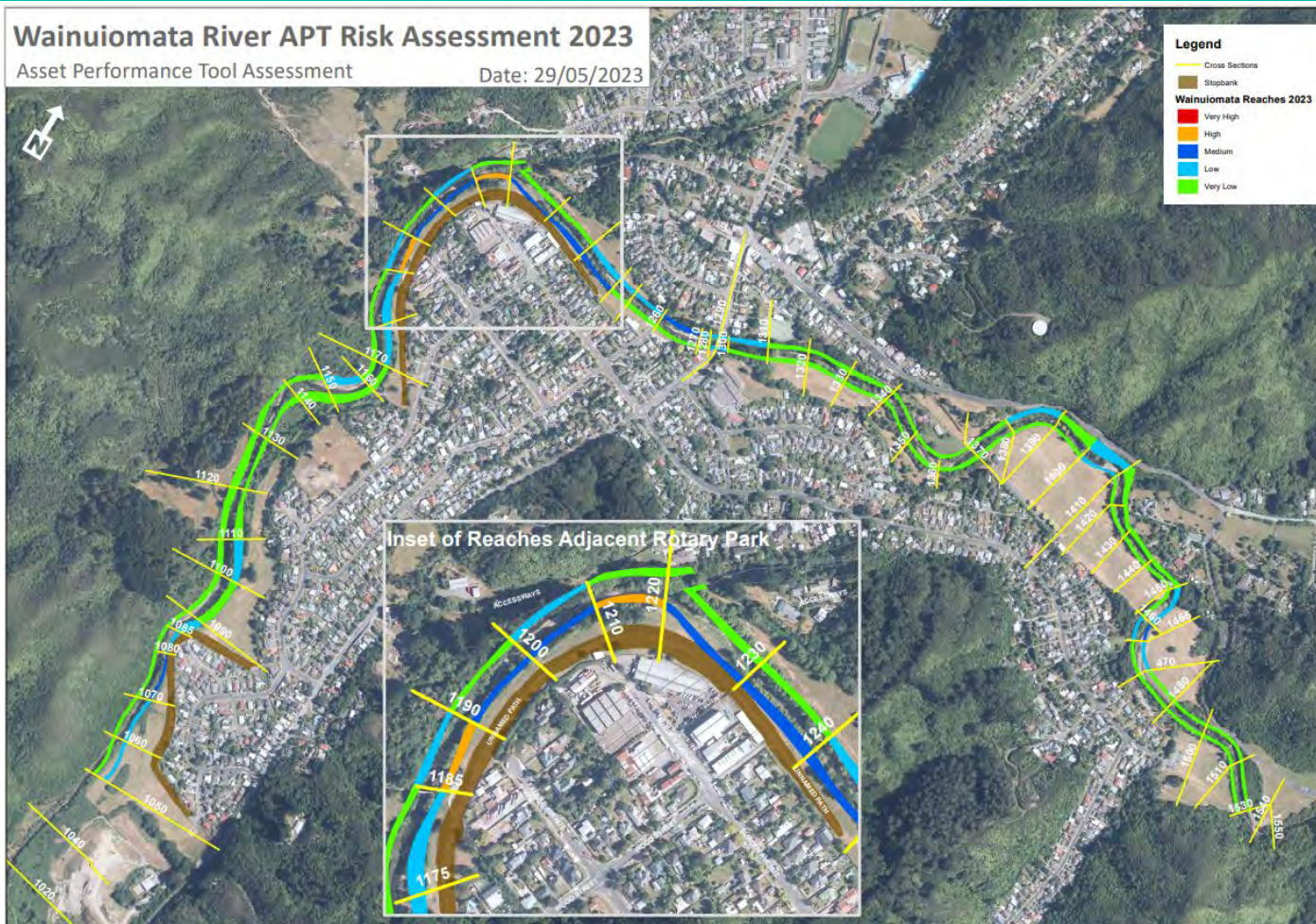
Results continued - Te Awa Kairangi /Hutt River risk maps



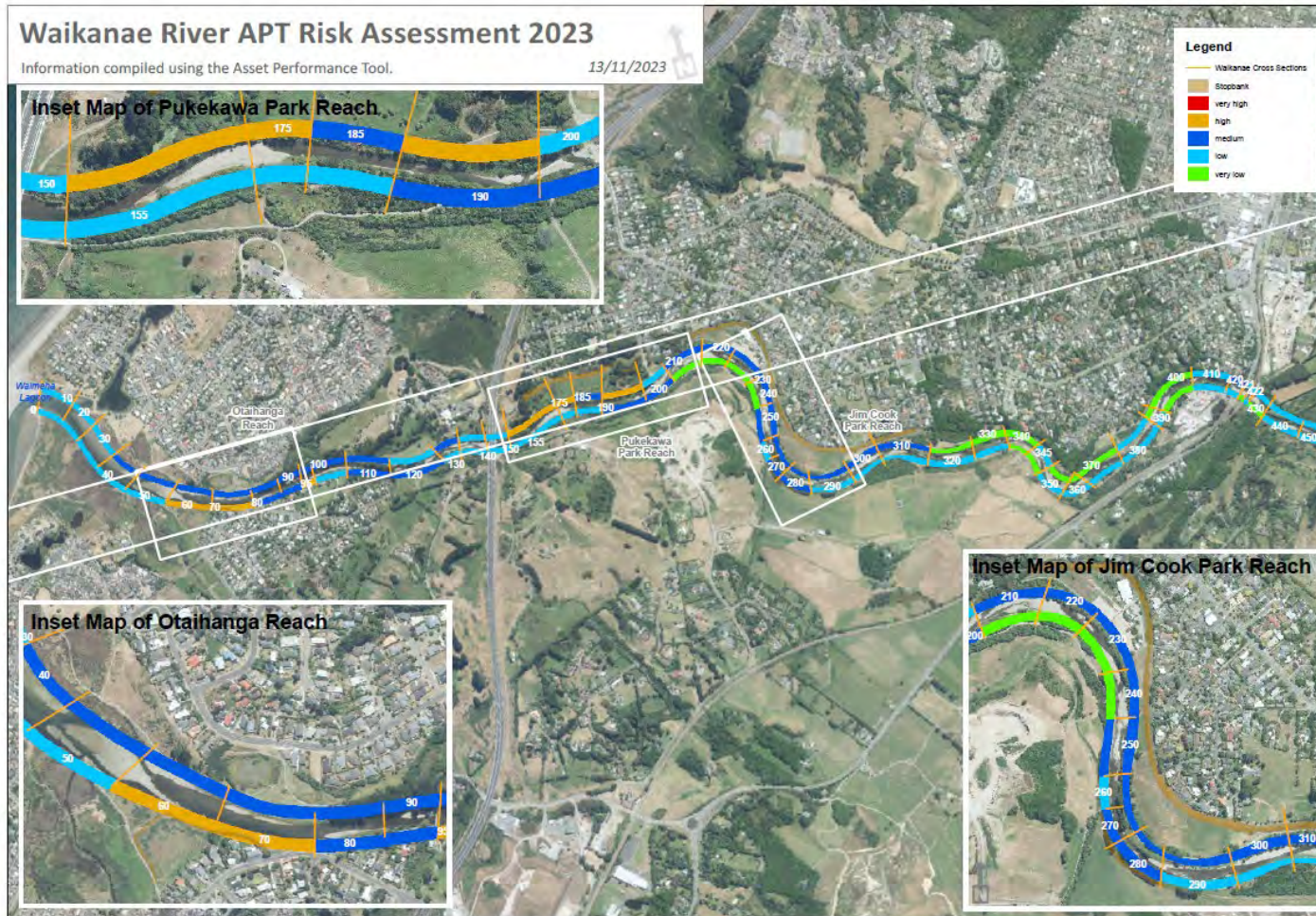
Results continued - Te Awa Kairangi /Hutt River risk maps



Results continued – Wainuiomata risk map



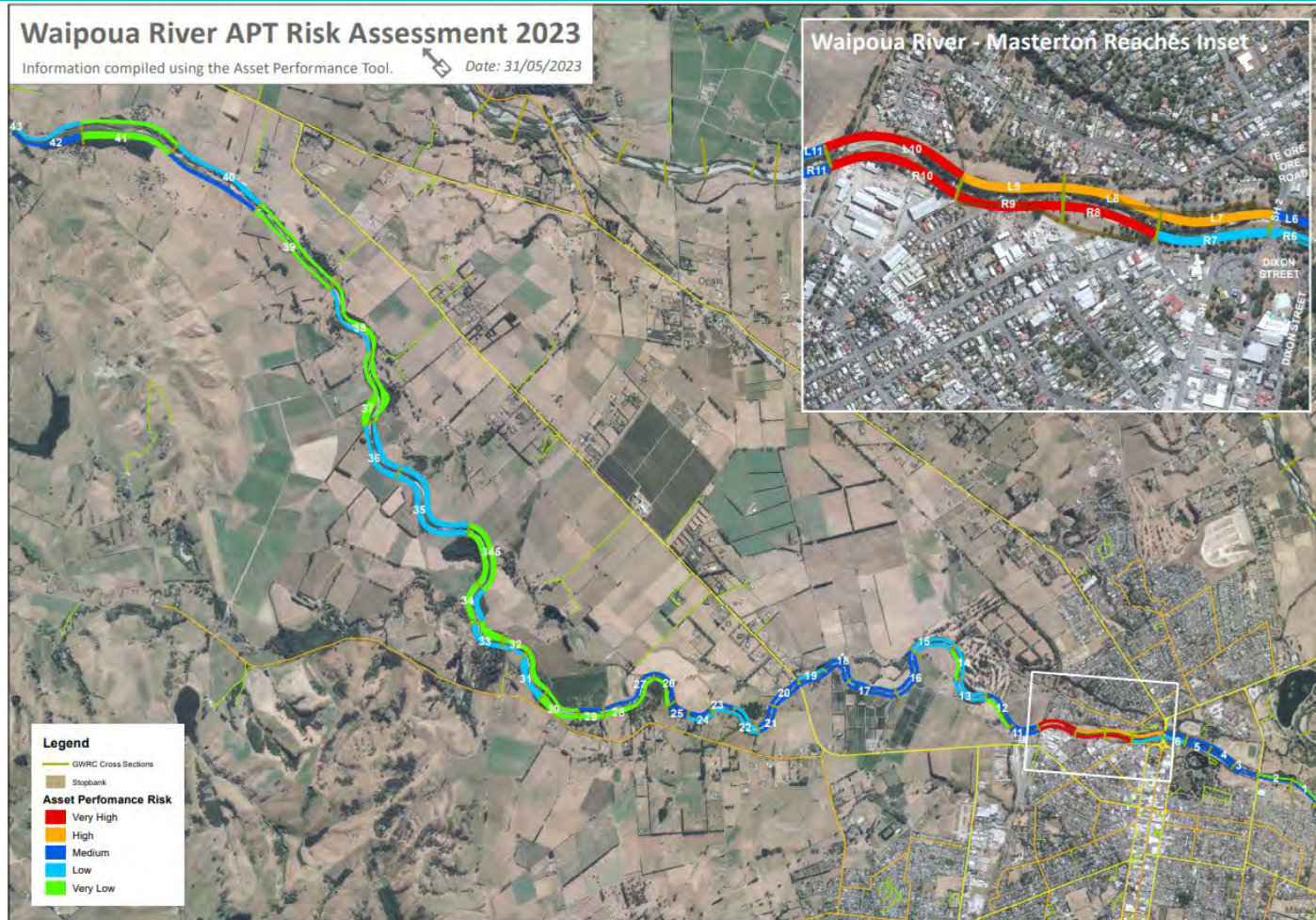
Results continued – Waikanae risk map



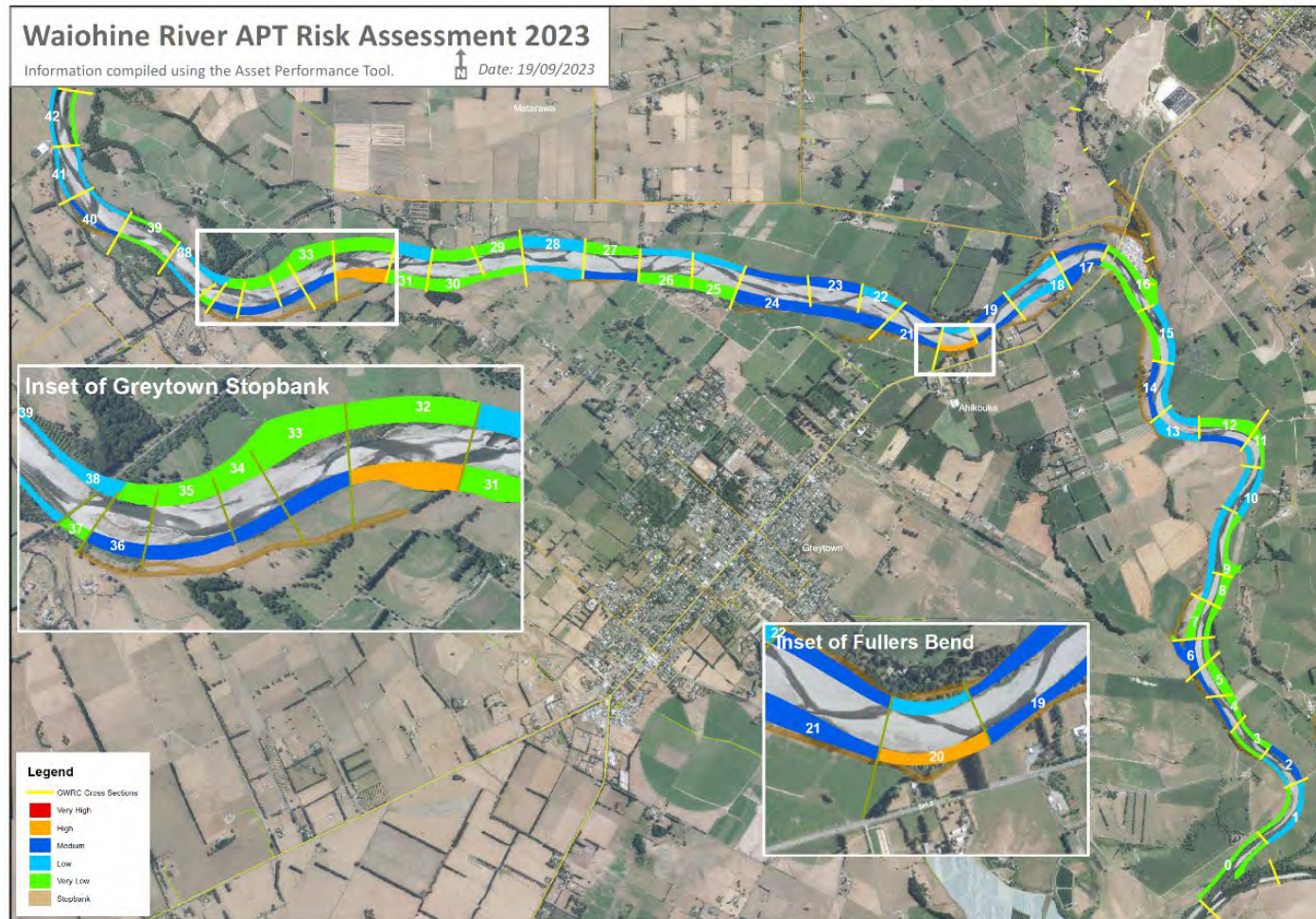
Results continued – Ōtaki risk map



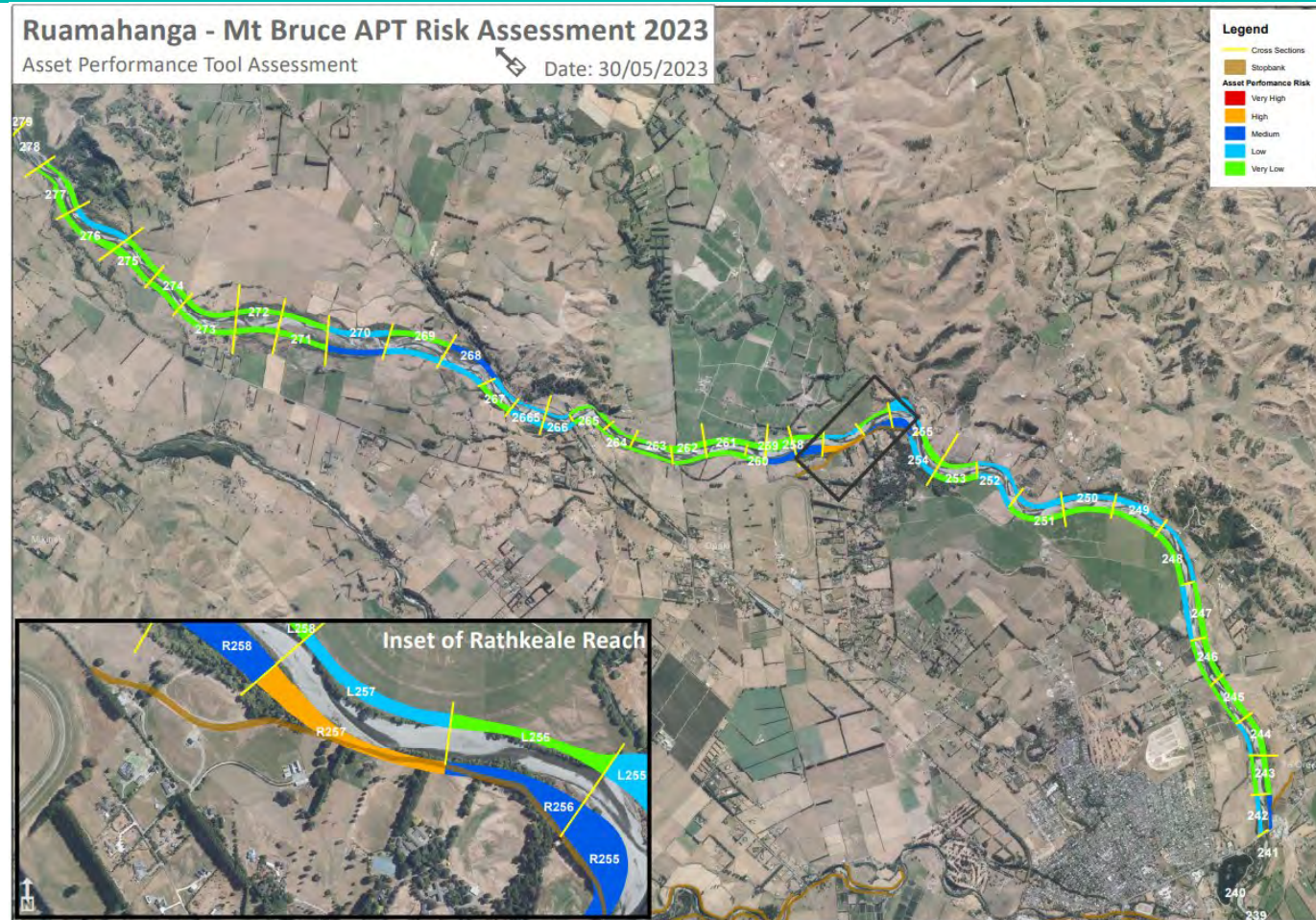
Results continued – Waipoua risk map



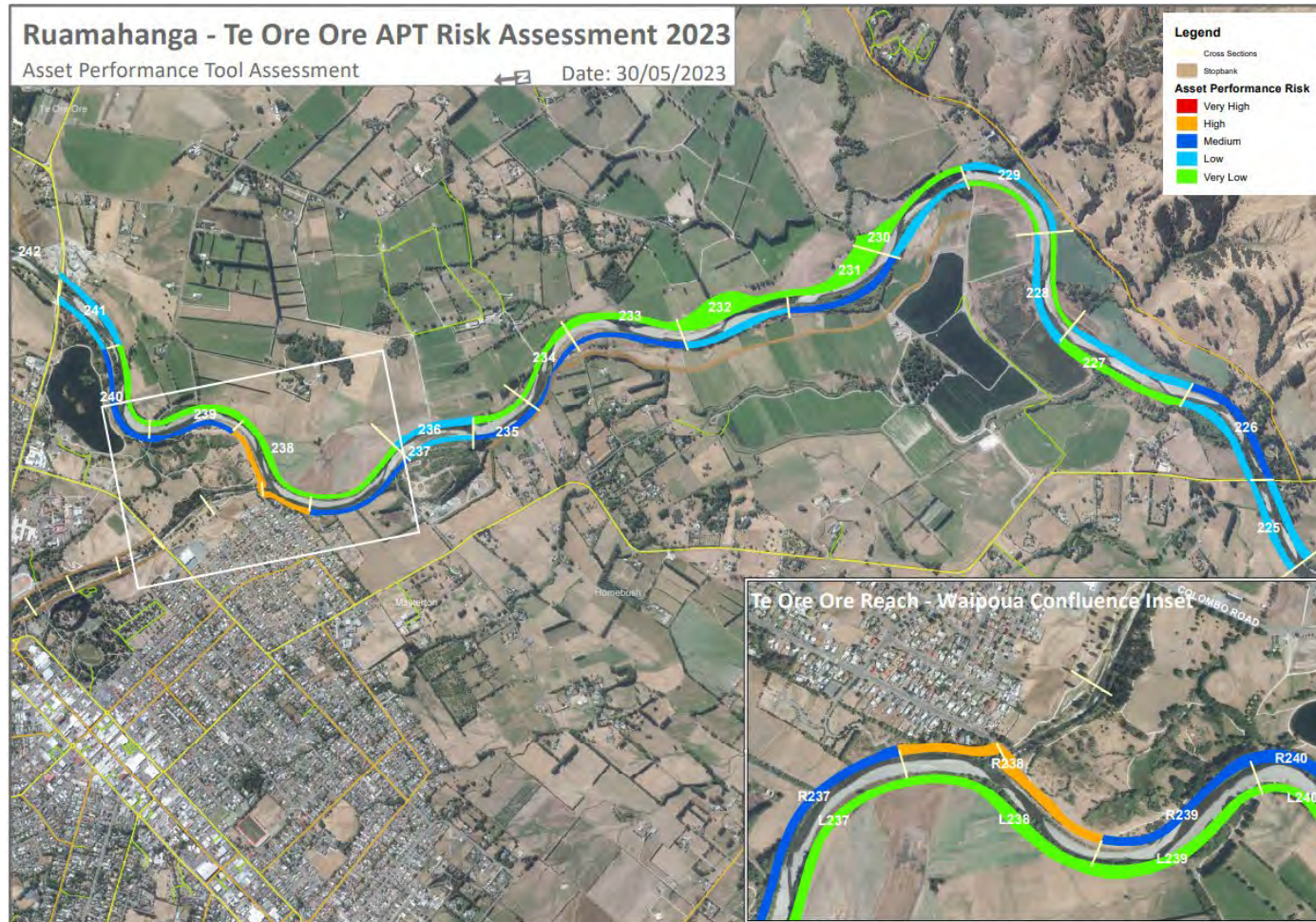
Results continued – Waiohine risk map



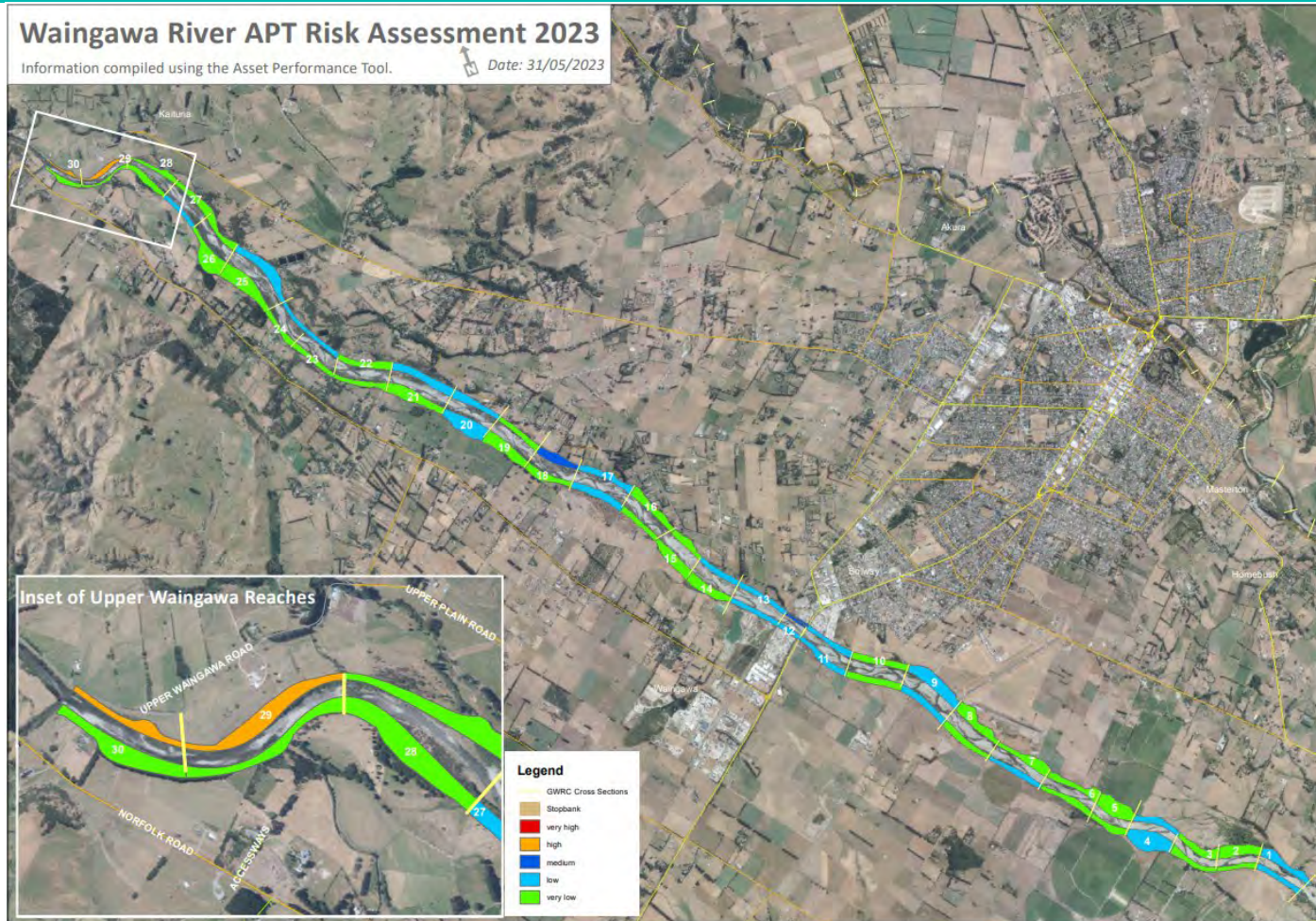
Results continued – Ruamāhanga – Mt Bruce risk map



Results continued – Ruamāhanga – Te Ore Ore risk map



Results continued – Waingawa risk map



Recommendations

That the Committee:

- 1. Agrees** that the flood protection and erosion control infrastructure assets on the 15 schemes across the Wellington Region have been managed satisfactorily to the agreed Level of Service (LoS) in the 2022/23 financial year.
- 2. Notes** that there has been a decline in the condition of the less critical flood management assets and this will likely continue without further investment.
- 3. Notes** that identified issues are being addressed through maintenance and improvement work programmes.
- 4. Notes** that current budgets are insufficient to ensure that assets are maintained to agreed levels of service in the long term.

Environment Committee
27 November 2023
Report 23.608



For Information

FARMING REFERENCE GROUP CHAIR UPDATE REPORT

Te take mō te pūrongo

Purpose

1. To update the Environment Committee on the items discussed at Farming Reference Group meeting held on 8 November 2023.

Te horopaki

Context

2. The Terms of Reference for the Environment Committee and the Farming Reference Group state that a written report will be provided to the Environment Committee after each Farming Reference Group meeting. The Chair of the Farming Reference Group is a member of the Environment Committee and will speak to the written report at each meeting.

Ngā āpitihanga

Attachment

Number	Title
1	Farming Reference Group Chairs Report

Ngā kaiwaitohu

Signatories

Writer	Barbie Barton – Chair, Farming Reference Group
Approvers	Jack Mace – Director Delivery, Environment Group Lian Butcher – Group Manager, Environment Group

He whakarāpopoto i ngā huritaonga Summary of considerations
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>The Environment Committee's terms of reference state that they will review, after each Farming Reference Group meeting, a written report of the business conducted at that meeting.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>The Farming sector is a key demographic within the Greater Wellington Region with a focus on environmental matters.</p>
<p><i>Internal consultation</i></p> <p>There was no internal consultation.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>There are no known risks and impacts related to this report.</p>

Attachment 1 to Report 23.608

Greater Wellington Farming Reference Group Report

November 2023 following a meeting on November 8th 2023

To the Greater Wellington Environment Committee

I am writing this report on behalf of the Greater Wellington Farmer Reference Group.

The recent Farming Reference Group (FRG) meeting was well attended by both our members and Greater Wellington management staff showing the strength of the group in providing a valuable information pipeline about the mood from the rural communities. The grass growing season across all sectors has been very stop start with the cold snaps for the East Coast while the Kapiti coast has had a great spring period.

On going delays to road repairs post cyclone is concerning for the Tinui district along with a lot of unresolved housing issues leading to concerns about the viability of the district and retention of the school. Forestry had already reduced the population in this area.

Greater Wellington have successfully applied and received funding for willow removal in some of the Wairarapa rivers as part of government flood mitigation - this will be good news for landowners. At our next FRG meeting we will have an update from staff about the funding and the decisions of who is going to benefit.

Land Management also expressed concern that 20-25 year old established poplar plantings have been ringbarked so forestry plantings can go in - this is of concern to the land stabilisation those poplars are providing.

Kapiti and Wairarapa Whaitua Update

Some early connections are being developed for Wairarapa Whaitua with groups such as Wairarapa Catchment Collective, but nothing has started in earnest with mana whenua or community as yet. Once again FRG members expressed concern about the shortening timeline for completion and the availability of landowners to participate in the process.

For the Kapiti Whaitua Cr Penny Gaylor and Kerry Walker reiterated how time intensive the process is but as trust is established throughout the process, it does become easier to engage.

Department of Conservation (DOC) officers presented a very good paper on the intricacies of ungulate control. DOC assign very little funding to the GWRC area with \$90,000 assigned primarily for the control of goats. Whilst Hunting groups are keen to make their skills available landowners are still reluctant to allow people they do not know onto their properties. Traditional hunters also have the approach of taking home enough meat for the family to use rather than culling numbers down. There is also a major drop in the number of people who go recreational hunting.

Attachment 1 to Report 23.608

Collaboration and education are the key drivers to maintenance and/or control. There is a National Co-ordination group setup to look at long term options and solutions and hope to work with Regional Councils in regional collaborative plans.

Once again, I voiced the need to track and study the biodiversity benefits of ungulate control so data can show what is being lost.

The bottom line is that there is not sufficient funding from any one organisation and collaboration looks like the best option of dealing with limited resources- skilled cullers are also in short supply.

Seed Collection

The next interesting topic was looking at **seed collection** in our region. I happily go to Akura and collect my small trees to plant without ever giving any thought to how they became a small tree!

Seed collection is a skilled job requiring multiple skills, knowing the location of seed sources, having vehicles to access, collecting, drying and sorting seed whilst maintaining the eco-sourced integrity of knowing where each seed has been collected. And there is a shortage of seed collectors at Greater Wellington.

FRG will do some work looking at the opportunity to open up some QEII covenant areas that are currently unable to be collected from. We are also going to look at a workshop around educating landowners in what to look for with ripe seed and perhaps create a phone/text option to alert collectors that the seed is ready to harvest.

It is definitely worth looking at efficiencies as the demand for trees increases with the need to plant out the GWRC Parks.

Parkvale Farm Plans were discussed with their deadline due 30 December 2023. Greater Wellington are taking a pragmatic approach to this date, requiring landowners to have 'booked in' with Greater Wellington by this date to avoid any need to have resource consent. Hopefully with good comms all landowners will be made aware of this process as the likelihood is that there will be very few plans completed by this date. We are aware that some other regional councils have applied for a time extension.

National Resource Plan Change 1 has not gone down quite so well with landowners and I have had a few phone calls mostly around why Greater Wellington rules are stricter than National rules. It was good to get an understanding of the role the WIP's are playing in defining NRP.

I noted to the meeting that as a lay person I find the document very hard to read and understand and link up the various constraints to landowners. I will continue to read and take advice and may approach Greater Wellington staff to help explain the interpretation. I am grateful for the links to Greater Wellington management staff to enable this.

This is our last FRG meeting for 2023 and sadly we farewell Leo Vollebregt who has decided to hang up his hat after at least 12 years of involvement. He has a great knowledge of water in

Attachment 1 to Report 23.608

our region along with a wealth of knowledge around land management. Leo has always had a great capacity at a meeting to cut to the chase of the discussions and hone in on the answers he is looking for.

Thank you also to the Greater Wellington staff that willingly give their time to make the FRG function and be part of supporting this valuable advisory role.

Thank you
Barbie Barton
Chair, GWRC Farmer Reference Group
RogBar@xtra.co.nz
0274 418 187

Environment Committee
23 November 2023
Report 23.616



For Information

WELLINGTON REGIONAL EMERGENCY MANAGEMENT OFFICE – LESSONS LEARNT FROM CYCLONE GABRIELLE AND REGIONAL EXERCISES

Te take mō te pūrongo

Purpose

1. This is a cover report for the 'Wellington Regional Emergency Management Office – Lessons Learnt from Cyclone Gabrielle and Regional Exercises' presentation (**Attachment 1**) which will cover the following topics:
 - a Key lessons.
 - b Findings and recommended actions.
 - c Joint exercise feedback and key findings from our Māori kaimahi.
 - d Any findings or detail that can help our region's resilience and preparedness. Such as our existing urban form and planning settings suitability for the risks we are facing, and what might need to be communicated to Territorial Authorities and the wider community.
 - e Potential Long Term Plan impacts.

Te horopaki

Context

2. On February 13 and 14 2023, Cyclone Gabrielle lashed Hawke's Bay with gale-force winds, a large easterly swell and record rainfall causing rivers to flood. It had a devastating effect on the Upper North Island with total damages estimated to be at least \$13.5 billion and 11 fatalities.
3. In May 2023 the Wellington Civil Defence Emergency Management Group (CDEM) ran Exercise Whero, an exercise to practice and assess the region's operational readiness and response capability. For this exercise, on 24 May 2023, the region's Emergency Coordination Centre (ECC) used the scenario: a Cyclone Gabrielle type event impacting the region.
4. In August 2023 the Environment Group took the Committee through a presentation titled the 'Potential Impacts of a major storm on the Wellington Region' (Attachment 2). This presentation provided a narrative of what impact a Cyclone Gabrielle scale storm could have on our region, described an overview of potential impacts from Mountains to Sea, identified potential areas of concern in each District and provided an overview of Greater Wellington Regional Council's role during an event, including governance.

Ngā āpitihanga
Attachments

Number	Title
1	Wellington Regional Emergency Management Office – Lessons Learnt from Cyclone Gabrielle and Regional Exercises Presentation (<i>to come</i>)
2	Potential Impacts of a major storm on the Wellington Region Presentation

Ngā kaiwaitohu
Signatories

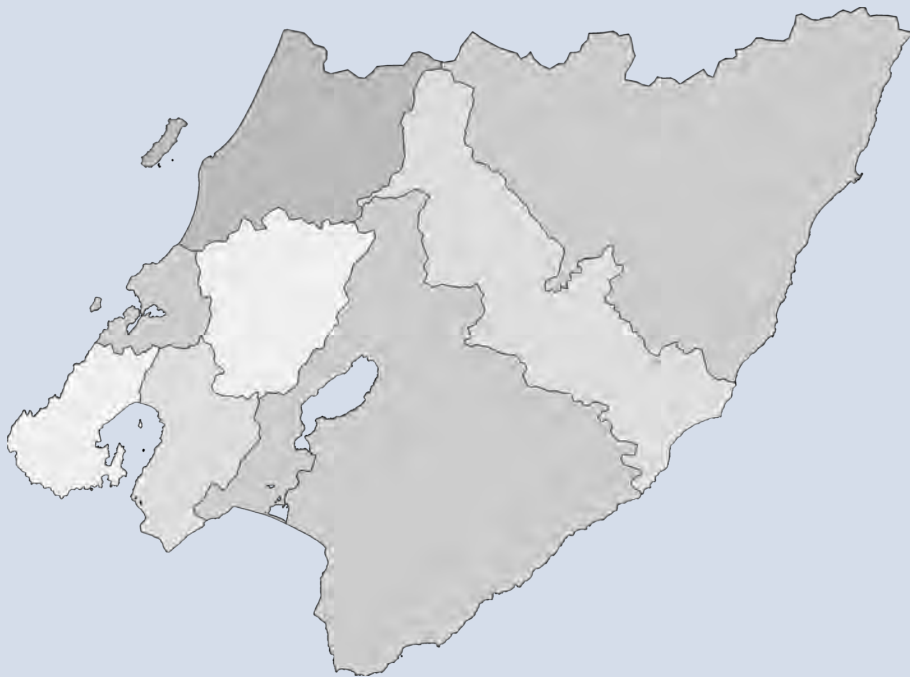
Writer	Andy Brown – Team Leader Knowledge Water, Knowledge & Insights, Environment
Approvers	Dave Hipkins – Director Knowledge & Insights Lian Butcher – Group Manager, Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>The Environment Committee has responsibility to oversee the development, implementation and review of Council's regional resilience priorities in the delivery of plans, programmes, initiatives and activities for flood protection, erosion control, and regional parks and forests.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>This is a lessons learnt update for the Environment Committee. The recommendations made link to items contained with the Long Term Plan both for the Wellington Region Emergency Management Office (WREMO) and the Environment Group.</p>
<p><i>Internal consultation</i></p> <p>This presentation from WREMO has been prepared in consultation with Knowledge Water, Knowledge & Insights in the Environment Group.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>The contents of this presentation relate to the matters pertaining to Greater Wellington's flood warning and response capability and emergency coordination centre lessons learnt.</p>

Attachment 1 to Report 23.616

Lessons Learned from Cyclone Gabrielle and Regional Exercises

23 November 2023



CW Environment Committee 23 Nov 2023 WREMO/GWRC Flood Team



Environmental Committee workshop 10 August 2023

Attached with these papers

The slides provide an overview of impacts on:

- Community & Infrastructure
 - Over 200,000 people exposed to 1% AER across the region
 - 80,000 residential and commercial properties affected
 - Huge transport disruption and localised flooding
- Marine & Coastal
 - Silting and algal blooms
- Catchments, ground and environment
 - Risks of contamination or over-extraction from the aquifer

GW Environment Committee 23 Nov 2023 WREMO/GWRC Flood Team

Overview

- A narrative of what impact a Cyclone Gabrielle scale storm could have on our region.
- Overview of potential impacts from Mountains to Sea
- Identify potential areas of concern in each District.
- Provide an overview of GWRCs role during an event, including governance.

Attachment 1 to Report 23.616


As the storm takes hold

The Wellington Region is more fragile than most. Our transport links and lifeline infrastructure weaves through the steep hillslopes and catchments of our suburbs.

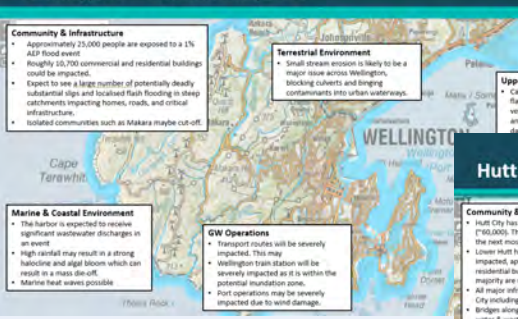
With this vulnerability we could easily experience significant utility outages particularly power and more importantly communication.

At this point our partner agencies and response team maybe in rescue mode rescuing people from flood and slip damaged homes.

Further into an event of this magnitude we would see rivers in flood which will lead to erosion, overtopping and in some areas asset failure. Asset failure such as a breach causes deep fast flowing water to flow through communities posing a real threat to life.



Wellington – Potential Impacts



Community & Infrastructure

- Approximately 25,000 people are exposed to a 1% AEP flood event
- Enough 20,700 commercial and residential buildings could be impacted.
- Expect to see a large number of potentially deadly substantial slips and localised flash flooding in steep catchments impacting homes, roads, and critical infrastructure.
- Isolated communities such as Makara maybe cut-off.

Terrestrial Environment

- Small stream erosion is likely to be a major issue across Wellington, blocking culverts and bringing contaminants into urban waterways.

Upper Catchments

- Flashy, violent, erratic

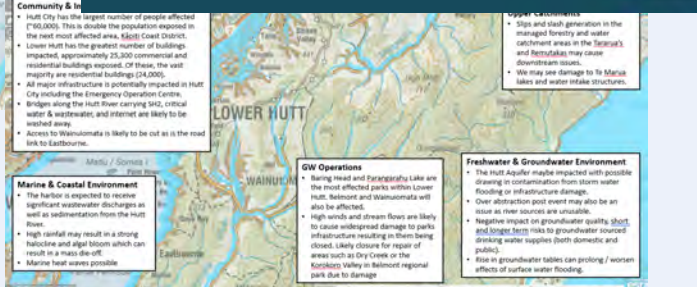
Marine & Coastal Environment

- The harbour is expected to receive significant wastewater discharges in an event
- High winds may result in a strong halocline and algal bloom which can result in a mass die-off.
- Marine heat waves possible

GW Operations

- Transport routes will be severely impacted. This may
- Wellington train station will be severely impacted as it is within the potential foundation zone.
- Port operations may be severely impacted due to wind damage.

Hutt – Potential Impacts of a major storm on the Wellington Region.



Community & Infrastructure

- Hutt City has the largest number of people affected (760,000). This is double the population exposed in the next most affected area, Sŏtŏt Coast District.
- Lower Hutt has the greatest number of buildings impacted, approximately 25,300 commercial and residential buildings exposed. Of these, the vast majority are residential buildings (24,000).
- All major infrastructure is potentially impacted in Hutt City including the Emergency Operation Centre.
- Bridges along the Hutt River carrying S42, critical water & wastewater, and internet are likely to be washed away.
- Access to Wainuiomata is likely to be cut as is the road link to Eastbourne.

Upper Catchments

- Slips and slash generation in the managed forestry and water catchment areas in the Tŏrŏrŏs, and Repurŏs may cause downstream issues.
- We may see damage to ŏr Marŏs lakes and water intake structures.

Marine & Coastal Environment

- The harbour is expected to receive significant wastewater discharges as well as sedimentation from the Hutt River.
- High rainfall may result in a strong halocline and algal bloom which can result in a mass die-off.
- Marine heat waves possible

GW Operations

- Bearing head and Stratfordŏr Lake are the most effected parts within Lower Hutt, Belmont and Wainuiomata will also be affected.
- High winds and stream flows are likely to cause widespread damage to parks infrastructure resulting in them being closed. Likely closure for repair of areas such as Dry Creek or the Koorŏrŏs Valley in Belmont regional park due to damage

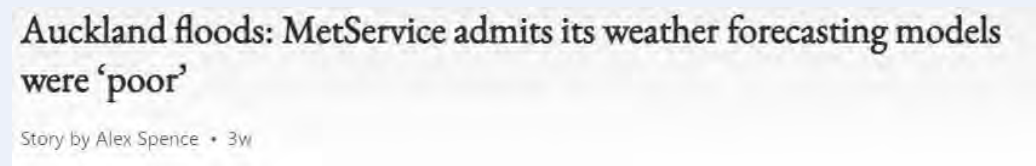
Freshwater & Groundwater Environment

- The Hutt Aquifer maybe impacted with possible drawing in contamination from storm water flooding or infrastructure damage.
- Over abstraction pool event may also be an issue as free sources are unusable.
- Negative impact on groundwater quality (short and longer term) risks to groundwater sourced drinking water supplies (both domestic and public).
- Rise in groundwater tables can prolong / worsen effects of surface water flooding.

Post-Gabrielle: multiple reviews are underway

- Auckland – Bush review (first 48hrs, published) and Martin Jenkins Action Plan
- Hawke's Bay - Bush review (interim report due end of year)
- WREMO – Wairarapa Cyclone Gabrielle After Action Review (published)
- Multiple partner agencies reviews, some of which are now public, or have been released under OIA, such as FENZ
- Government Inquiry into the Response to the North Island Severe Weather Events – due 26 March 2024
 - Likely greater scope and recommendations than the 2018 Ministerial ‘TAG’ report
 - Royal Commission COVID-19 Lessons Learned also likely to have implications for the Emergency Management sector

CW Environment Committee 23 Nov 2023 WREMO/GWRC Flood Team



Emerging national themes include:

- Agencies were ***under prepared for the magnitude and speed*** of extreme events
- ***Roles and responsibilities were unclear and misaligned***, including between operational and governance roles
- ***Public communication and stakeholder confidence is critical***, across all phases of the response and recovery
- There are ***finite resourcing gaps*** around coordination centre personnel, response facilities (including Emergency Assistance Centres), and specialist resources such as flood rescue, as well as routine resources like 4wd vehicles
- There is a ***lack of situational awareness tools needed for a 'common operating picture' as well as 'needs assessment'*** to support impacted communities
- ***Some operational activity***, like mass-distribution of household goods and services, or the operation of large-scale distribution centres, ***is extremely challenging and staff lack experience and expertise***
- There is ***growing recognition of the importance of Community Resilience***, and several other CDEM Groups are now supporting Community Emergency Hubs in addition to their official Assistance Centres



Response staff, including volunteers, at Hawke's Bay Distribution Centre (photo C Blanch)

Implications for Wellington region

- Flooding and Storms are identified within the top 5 regional hazards in the Group Plan
- WREMO's continuous improvement & assurance function (1 person) is reviewing reports and after-action reviews
- Wellington has a mature Training and Exercising Plan across the councils, with capability steps across foundation, intermediate and advanced levels for coordination centre staff
- This includes twice yearly coordination centre exercises (1 day)
- On 24 May 2023, we used this to test the Regional Emergency Coordination Centre (ECC) (exercise Whero) with a regional severe weather event similar to Cyclone Gabrielle. It resulted in a breach of the Hutt River stop-bank requiring the evacuation of 15,000 people.



Ex Whero, Wellington Group ECC, at the Royal Society (photo WREMO)

Ex Whoero identified some key areas to strengthen. These were:

- The importance of timely and effective flood forecasting
- The capacity and capability of ECC staff to manage short notice, fast moving, large scale, complex events could be improved
- The recovery from the potential short-, medium- and long-term impacts of such an event in our region will be challenging and is not well understood
- The need to promote and invest in effective risk reduction (natural hazard planning and managed retreat in particular) to reduce the overall level of risk posed to communities during such events in the first place

Cyclone Gabrielle: Leaked emails show failure to evacuate as rivers rose

By Henry McMillan, Hawke's Bay Reporter | SA, Aug 26

Scathing review into Auckland Council's flood response reveals officials acted 'too late'

UPDATED

12/04/2023

Seni Iasona



Adam Hollingworth

Submissions now open on Auckland's \$2 billion flood recovery package

8:30 pm on 12 September 2022

Share this



SCIENCE

Landslides and law: The questions Cyclone Gabrielle raises about where we build

Timely & effective flood forecasting

Situation:

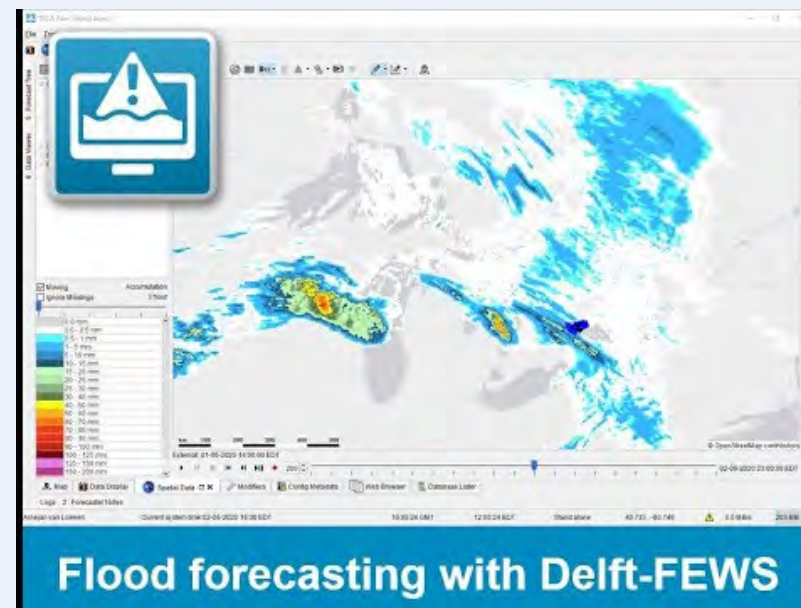
- When requested, the GWRC Flood Team were unable to produce the required impact assessments that were expected from the levels of rainfall that were predicted.
- As a result the ECC did not have access to required forecast mapping for ‘most likely’ and ‘most dangerous’ scenarios and did not receive dynamic flood forecasting in response to specific reports of weather impacts across the region.

Recommendations:

- **GWRC invest in building flood forecasting capabilities as a matter of priority.**
- In the **short term**, these could comprise of a number of **pre-generated maps, based on different rainfall scenarios**, that could be produced at a moment’s notice to help inform urgent planning and implementation of an emergency response.
- In the **medium term**, they could comprise of a **dynamic flood forecasting model** that is able to generate expected flood impacted in near-real time as warnings are received from the MetService and/or instruments on the ground.

Flood forecasting

- Flood forecasting is critical to proactive flood incident management
- GWRCs flood incident exercises tested the information flow to Civil Defence and reinforced the need for earlier impact-based warnings to facilitate large scale evacuations.
- GWRC is investing in flood forecasting capability and automated warning systems.
- The challenge will be calibrating and operationalising the system to ensure that the capability can be deployed effectively in flood events.



Capacity & capability of ECC Staff

Situation:

- While the numbers of staff attending the exercise were good, many struggled to understand the potential impacts of such an event, what was required and produce the products that were required to make effective decisions in a timely manner.
- What this showed was the importance of having enough appropriately trained and experienced staff in key appointments to know what was required in each of the different ECC functions and lead the efforts of those who are not so well trained or experienced.

Recommendations:

- **More effective use is made of the limited number of people who have the required level of training and experience** to operate effectively in this space.
- A concerted effort be made to **increase the number of people who have the required level of training and experience** to operate effectively in this space.
- In the **short term**, this comprises of completing work to **co-locate the ECC with the Flood Operations Centre at Cuba Street** to concentrate subject matter experts in one location and ensure their efforts are more joined up (already started).
- In the **medium term** this comprises of **increasing the number of regional emergency management subject matter experts** that are available in the region to help manage such events in the future (LTP bid).

LTP Enhancement to ECC Staff capacity & capability

- Dedicated regional emergency management experts to:
 - Support all CIMS functions develop local and regional plans and procedures
 - Mentor and support function staff in larger events
 - Lead the development of complex regional plans; such as evacuation and shelter for emergencies like a Hutt Valley stop-bank breach



Buller District EOC, prior to becoming the ECC, during the July 2021 Greymouth flooding (photo C Blanch)

Recovery impacts of such an event in our region

Situation

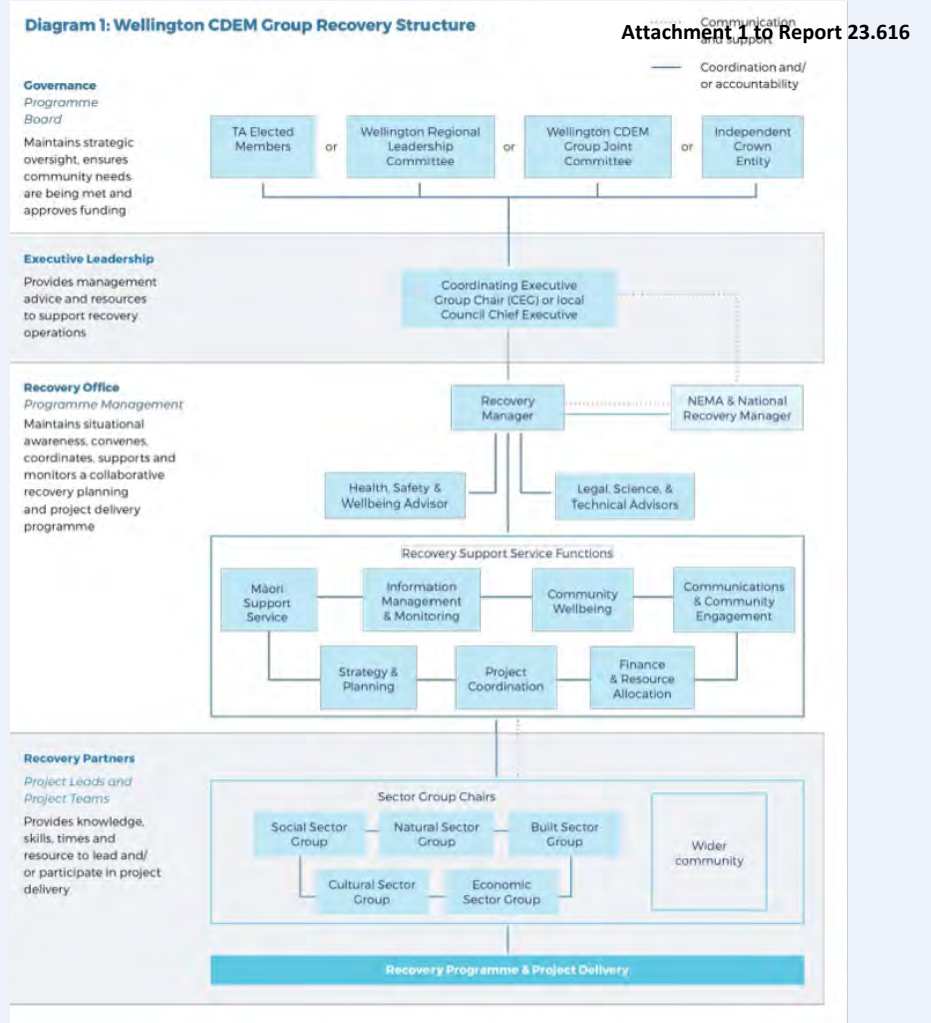
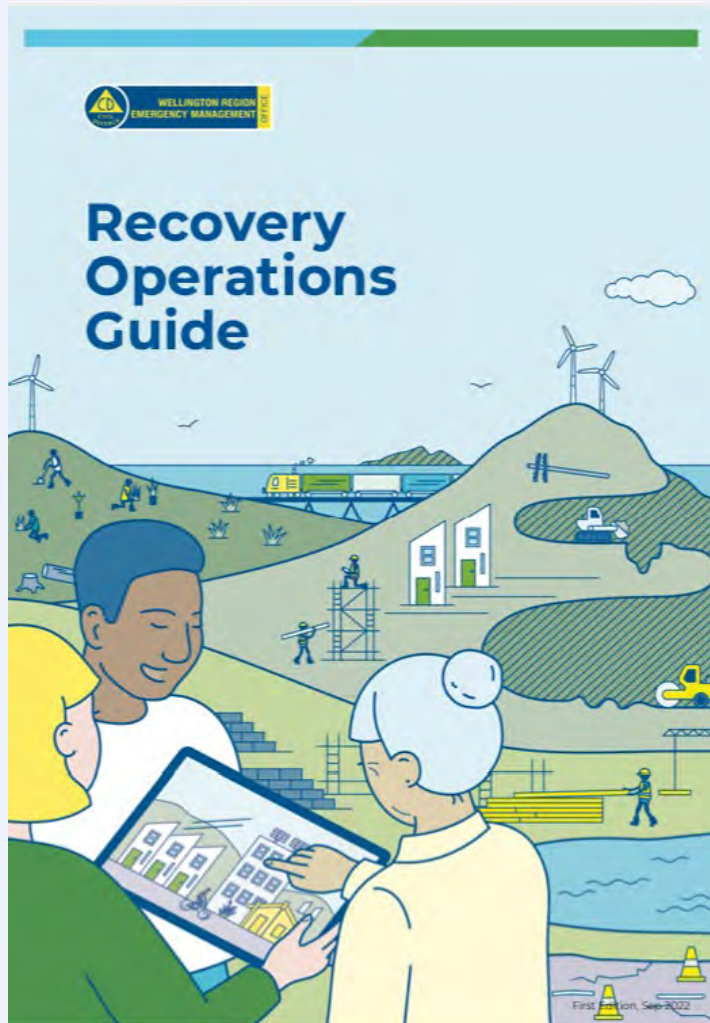
- While the short time impacts of deaths, injuries, large scale evacuations and property damage are likely to be significant, so too are the medium- and longer-term impacts.
- Large numbers of the region's population are likely to be displaced and out of their homes and workplaces for months, requiring temporary housing and support for an extended period until suitable alternatives can be found. Lifeline utilities, including essential services like power, water and emergency satiation, are likely to be severely impacted and unable to be restored for months in some places.
- Some communities are likely to be isolated for extended periods and this isolation is likely to adversely impact their health and wellbeing and that of those around them. Mental health is likely to be a significant issue comprising of PTSD and similar impacts during the initial weeks and months after the event, and more widespread issues of depressions and frustration (including public anger) the longer the recovery process takes.
- Recovery costs are likely to be in the billions of dollars and are likely to run for many years impacting other regional work program and priorities.
- GWRC staff, and other staff involved in coordinating the response and overseeing the recovery process for such an event, are also likely to be severely impacted, both as residents of the region who have experienced and/or seen first-hand the impacts of the event itself, and those who the public are relying on to help restore a sense of normalcy after the event has passed.

CW Environment Committee 23 Nov 2023 WREMO/GWRC Flood Team

Recovery impacts of such an event in our region

Recommendations

- A **concept of recovery operations** be developed (underway)
- **Regional recovery staff and a suitable workspace** for them be identified within GWRC for it to meet its legislative responsibilities for recovery (underway)
- WREMO convene work with recovery managers from around the country to develop three key **nationally consistent outputs**
 - a pre-disaster recovery planning process and format;
 - tactical level templates and processes to support the Recovery Operations Guide; and
 - capability development opportunities for people operating in a recovery environment (work on these projects is expected to start shortly).
- WREMO work with NEMA and GW HR to **improve the HSW tools and processes** that are available to ECC staff (underway)



Recovery

National Recovery Projects led by WREMO

1. Pre-disaster Recovery Planning
2. Tools and processes to support the Recovery Operations Guide
3. Capability development for Recovery practitioners



Flood recovery from another breached levy – Hurricane Katrina

Risk Reduction

Situation:

- The need to promote and invest in effective risk reduction (natural hazard planning and managed retreat in particular) to reduce the overall level of risk posed to communities during such events in the first place.
- While various steps can be taken to help reduce the level of risk to communities who already live in the areas that are likely to be impacted by such an event (such as improving flood protection defences, improving flood warning processes and large-scale evacuation procedures), the overall scale, impact and complexity of such an event is likely to have a devastating impact on the region for decades.

Recommendations:

- ***Any steps that can be taken now reduce the potential impact of such an event should be taken now.***
- These include such actions as: ***ensuring effective natural hazard planning is done in all newwork*** in the region to ensure that the level of risk posed to communities is either eliminated or reduced to an acceptable level before building starts; and ***looking seriously at those communities that are likely to be impacted by this and other similar events and start implementing strategic managed retreat*** (large scale managed retreat over a multi-year period) ***to re-locate those who are most at risk.***

Risk Reduction: Return on Investment

1:6



FEMA

Federal Insurance and Mitigation Administration

Fact Sheet

June 2018

Natural Hazard Mitigation Saves Interim Report

Overall Findings

Natural hazard mitigation saves \$6 on average for every \$1 spent on federal mitigation grants, according to an analysis by the National Institute of Building Sciences. An earlier (2005) study by NIBS found a benefit-cost ratio (BCR) of 4:1.

The new study also estimates what society could save if buildings were to be constructed to exceed the minimum requirements of the 2015 International codes. The study further differentiates the BCRs of building resiliently for a range of different hazard types. These BCRs are averages and will differ among specific mitigation efforts. Additionally, BCR may be only a part—even a small part—of a well-thought-out mitigation decision.

Some mitigation benefits such as the reduction in domestic violence, the conservation of heirlooms and photos, and the preservation of community and culture can be extremely difficult to quantify, and as such, were omitted from the analyses. Therefore, the results of this study are considered to be quite conservative.

Flood Mitigation Results

The bottom-line is that above-code design and public-sector mitigation grant projects for riverine floods save more than they cost. The losses avoided by federally-

National Benefit-Cost Ratio (BCR) Per Peril <small>*BCR numbers in this study have been rounded</small>	Beyond Code Requirements	Federally Funded
Overall Hazard Benefit-Cost Ratio	\$4:1	\$6:1
Riverine Flood	\$5:1	\$7:1
Hurricane Surge	\$7:1	<small>Too few grants</small>
Wind	\$5:1	\$5:1
Earthquake	\$4:1	\$3:1
Wildland-Urban Interface Fire	\$4:1	\$3:1

Wind Mitigation Results

Mitigating for wind hazards—in the form of building improvements, tornado safe rooms, and other methods analyzed in this study—offers a 5:1 BCR.

BCR estimates have risen from 4:1 (in the 2005 Mitigation Saves study) to 5:1 in the new study, largely because this new study assessed the country's major investment in tornado safe rooms in the intervening 13 years. Safe rooms offer significant savings when constructed in medium or high hazard areas and are utilized by schools, communities, hospitals, and in the home.

Conclusion

If the above actions are taken by GWRC in the short and medium-term, we believe, the risks that have been identified from Exercise Whero will be significantly mitigated:

- the level of risk posed to impacted communities will be reduced,
- timely and effective warning will be received of an imminent event,
- a timely and effective regional response will be carried out, and
- the amount of work that will need to be done in recovery will be significantly reduced.

Potential Impacts of a major storm on the Wellington Region.

Overview

- A narrative of what impact a Cyclone Gabrielle scale storm could have on our region.
- Overview of potential impacts from Mountains to Sea
- Identify potential areas of concern in each District.
- Provide an overview of GWRCs role during an event, including governance.



Scene Setter



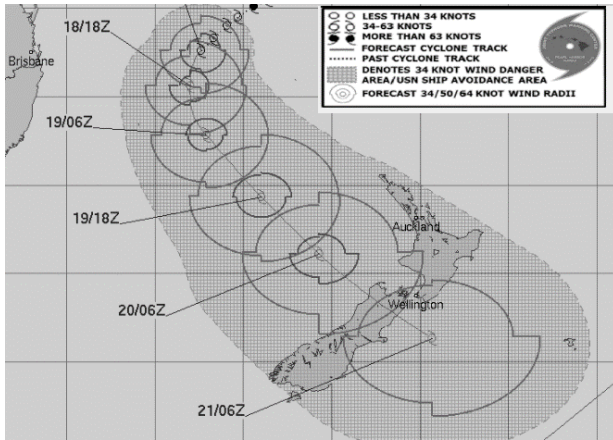
On February 13 and 14, Cyclone Gabrielle lashed Hawke's Bay with gale-force winds, a large easterly swell and record rainfall causing rivers to flood.

It had a devastating effect on the Upper North Island with total damages estimated to be at least \$13.5 billion (costliest tropical cyclone on record in the Southern Hemisphere) and 11 fatalities.

This was third major event of 2023 following Cyclone Hale and the Auckland Anniversary Floods.

But what would happen if a similar scale of event hit the Wellington Region?

As the storm approaches



The first impacts of the storm as it approached our Region would be;

- High waves potentially causing coastal flooding.
- High winds potentially causing damage to homes & disrupting transport routes with downed trees.

As the event progresses, we would start to see localised stormwater flooding and slips. In some cases, these could be significant with the water deep and swift enough to move vehicles.

Transport routes are likely to become choked both as people try to leave the CBD and as landslips impede key transport links.

Wellington City Council recorded a record 1143 slips in the winter of 2022.



<https://www.thepost.co.nz/a/nz-news/350007890/the-perfect-wellington-storm-could-test-even-our-best-laid-emergency-response-plans>
Ethan Te Ora – May 6th 2023

As the storm takes hold

The Wellington Region is more fragile than most. Our transport links and lifeline infrastructure weaves through the steep hillslopes and catchments of our suburbs.

With this vulnerability we could easily experience significant utility outages particularly power and more importantly communication.

At this point our partner agencies and response team maybe in rescue mode rescuing people from flood and slip damaged homes.



Further into an event of this magnitude we would see rivers in flood which will lead to erosion, overtopping and in some areas asset failure. Asset failure such as a breach causes deep fast flowing water to flow through communities posing a real threat to life.

Community mobilisation in isolated pockets will starting to be seen and as a region we will rely on this for during the event and into the immediate recovery. Particularly while communities are cut off and communications out.

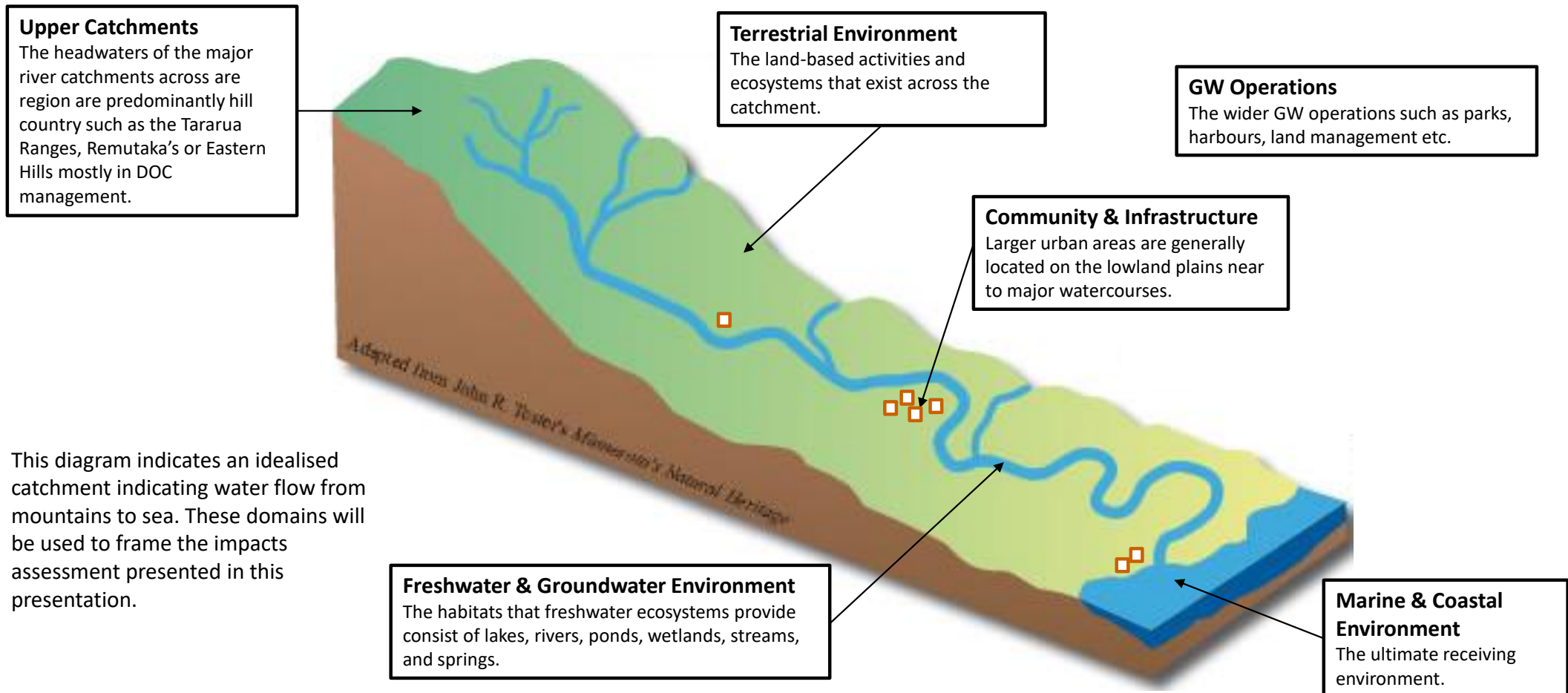
At this stage of the event Duty Staff, responders and civil defence personnel would be fatigued.

<https://www.thepost.co.nz/a/nz-news/350007890/the-perfect-wellington-storm-could-test-even-our-best-laid-emergency-response-plans>
Ethan Te Ora – May 6th 2023





Assessing the potential impacts – Mountains to Sea



This diagram indicates an idealised catchment indicating water flow from mountains to sea. These domains will be used to frame the impacts assessment presented in this presentation.

Regional longer-term impacts to consider.



- **Displaced People** – Large swathes of our communities could be out of their homes and workplaces for months requiring temporary housing and support.
- **Recovery Costs** – Recovery costs could be in the \$billions and could go on for many months impacting other work programmes and priorities.
- **Impact on social fabric** – Major weather events do not only cause physical damage but can irrevocably degrade communities.
- **Mental Health** – PTSD and similar impacts maybe felt in the weeks and months after an event.
- **Impact on Life-lines** – As we saw in Tairāwhiti Gisborne the immediate recovery period can be complicated by secondary impacts such as loss of water supply or over reliance on groundwater increasing contamination risk
- **Demand for action** – Post flood the demand for action from communities is loud and focused.
- **Insurance** – The insurance process can be lengthy, complicated and traumatic for some in the community.
- **Impact on staff** – Staff welfare will be tested during and after a major event. Both as residents of the region, but also dealing with a complex disaster and what is likely to become an expectant community.



Kāpiti – Potential Impacts

Community & Infrastructure

- 30,000 people exposed to a 1%AEP flood
- 12,000 buildings situated in flood prone areas.
- Estimated 15-20 schools and early education centres at risk of inundation.
- Wastewater treatment plant at risk of inundation
- Police Station at risk of inundation
- High risk communities such as Rangiuru maybe come inundated in depths of water exceeding 2m.
- Rail network likely to be affected by landslips along to coast
- Kāpiti Airport will be inundated.
- Significant inundation across Coastlands Mall.
- Riverside tracks and trails will likely be destroyed by erosion.

Terrestrial Environment

- Substantial storm water flooding on low lying coastal plains such as Te Horo which may become isolated.

Upper Catchments

- Slips and slash generation in the managed forestry in the catchments above Otaki & Waikanae.
- Large land movement maybe an issue destroying 'Jobs for Nature planting'. Potential mass movement has been identified in the Upper reaches of the Otaki.

Marine & Coastal Environment

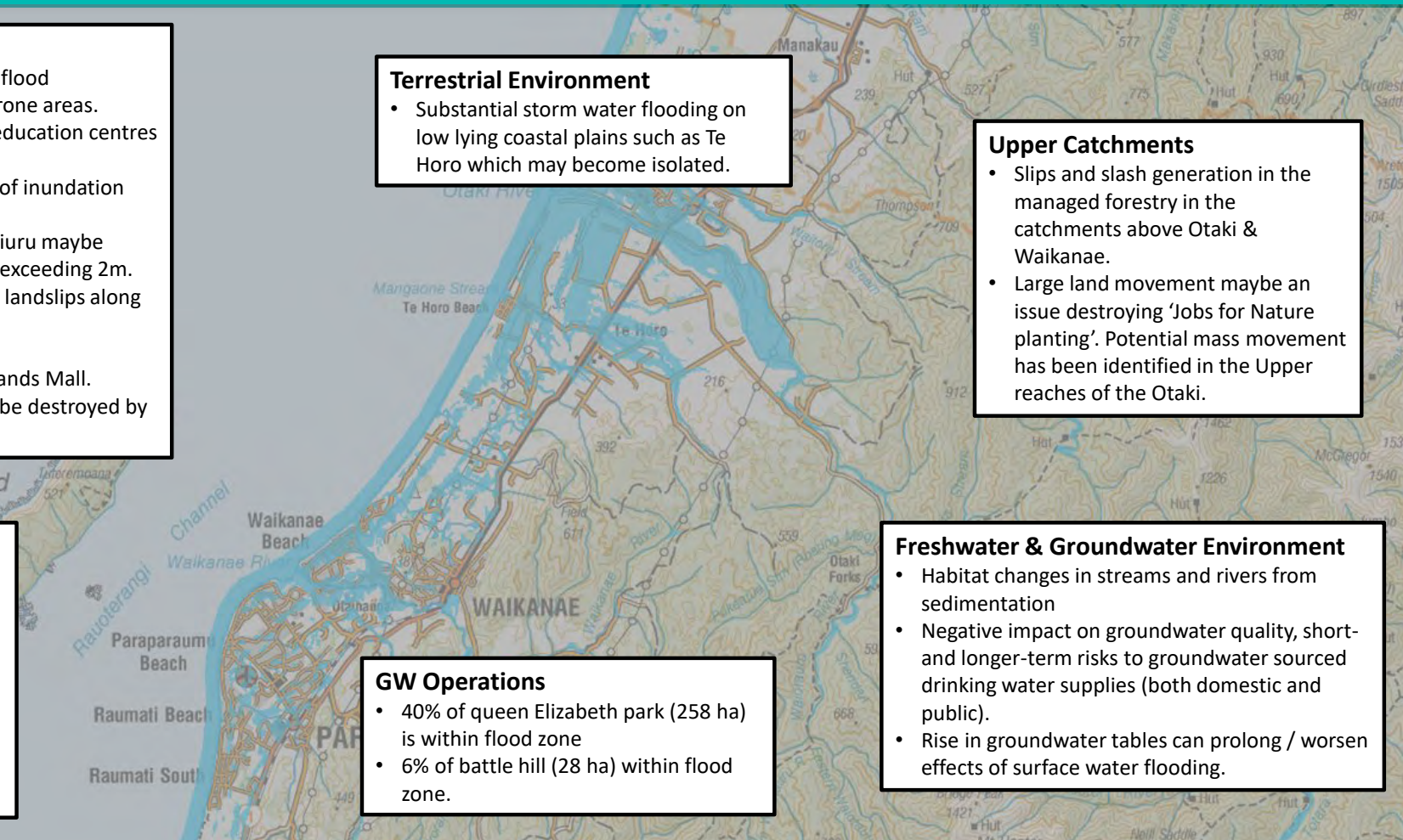
- Potential for strong halocline and algal bloom which can result in a mass die-off
- Beach/estuarine recontouring affecting habitat in sensitive areas such as the Waikanae Estuary Scientific Reserve
- Areas of coastal erosion along Waikanae Beach, Otaki Beach

GW Operations

- 40% of queen Elizabeth park (258 ha) is within flood zone
- 6% of battle hill (28 ha) within flood zone.

Freshwater & Groundwater Environment

- Habitat changes in streams and rivers from sedimentation
- Negative impact on groundwater quality, short- and longer-term risks to groundwater sourced drinking water supplies (both domestic and public).
- Rise in groundwater tables can prolong / worsen effects of surface water flooding.



Porirua – Potential Impacts

Community & Infrastructure

- Approximately 1,000 people live in flood prone areas.
- Roughly 2,100 commercial and residential buildings are currently exposed to a 1% AEP flood
- Kenepuru hospital is above the potential inundation zone, though egress is likely to be cut off. Getting people in and out of the hospital will be difficult.
- Porirua Train station is likely to get inundated. It is close to the Porirua Stream, so high velocities could cause erosion. Also risk of prolonged inundation, as stormwater will discharge in this location.
- Major inundation will be within the CBD, this will mostly likely cut off Titahi Bay.

Terrestrial Environment

- Hill slope erosion is likely to be a major issue in the Porirua catchment in excess of what riparian planting programmes are capable of dealing with.

Upper Catchments

- Catchments are smaller and flashier. This creates higher velocities and channeled flows so anticipate high erosion rates and damage in upper catchments.

Marine & Coastal Environment

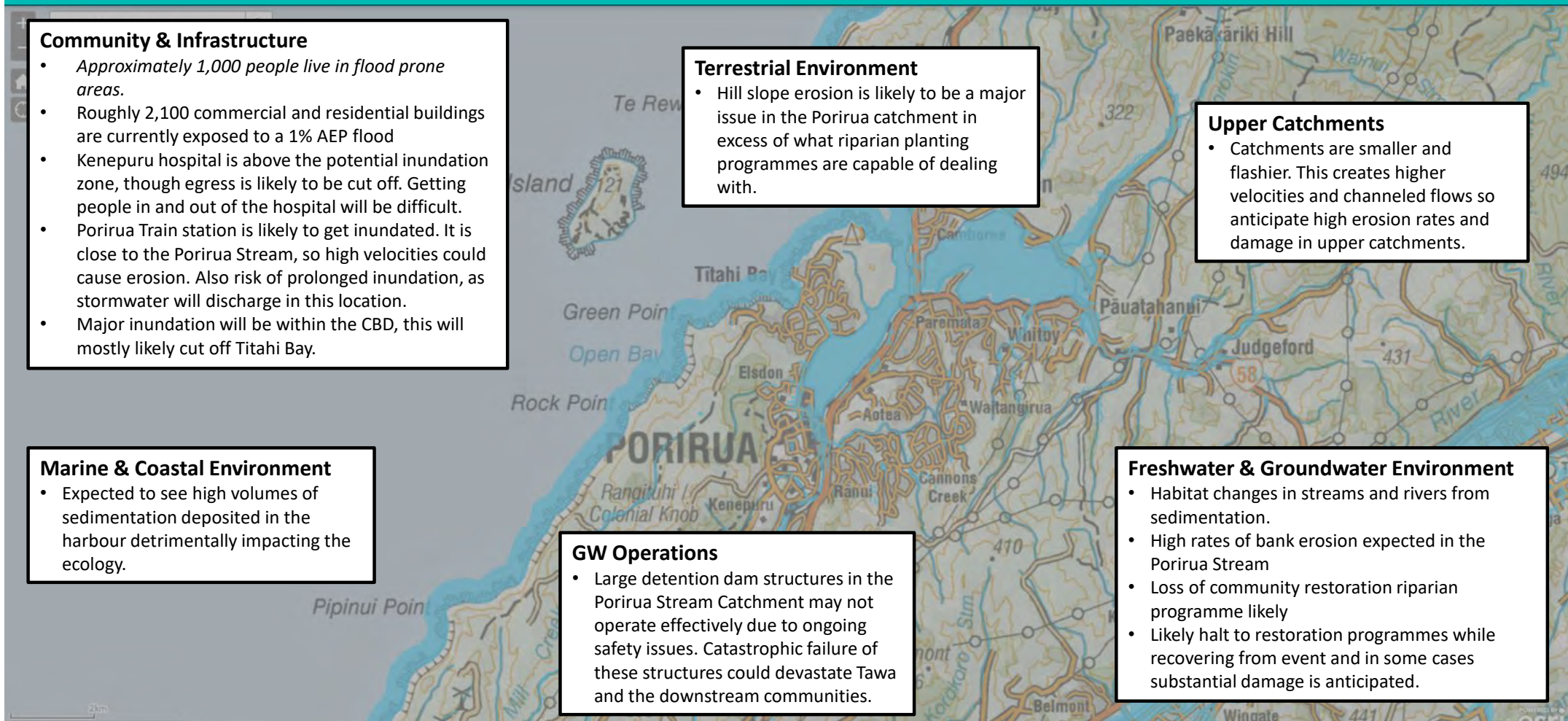
- Expected to see high volumes of sedimentation deposited in the harbour detrimentally impacting the ecology.

GW Operations

- Large detention dam structures in the Porirua Stream Catchment may not operate effectively due to ongoing safety issues. Catastrophic failure of these structures could devastate Tawa and the downstream communities.

Freshwater & Groundwater Environment

- Habitat changes in streams and rivers from sedimentation.
- High rates of bank erosion expected in the Porirua Stream
- Loss of community restoration riparian programme likely
- Likely halt to restoration programmes while recovering from event and in some cases substantial damage is anticipated.



Wellington – Potential Impacts

Community & Infrastructure

- Approximately 25,000 people are exposed to a 1% AEP flood event
- Roughly 10,700 commercial and residential buildings could be impacted.
- Expect to see a large number of potentially deadly substantial slips and localised flash flooding in steep catchments impacting homes, roads, and critical infrastructure.
- Isolated communities such as Makara maybe cut-off.

Terrestrial Environment

- Small stream erosion is likely to be a major issue across Wellington, blocking culverts and binging contaminants into urban waterways.

Upper Catchments

- Catchments are smaller and flashier. This creates higher velocities and channeled flows so anticipate high erosion rates and damage in upper catchments.

Marine & Coastal Environment

- The harbor is expected to receive significant wastewater discharges in an event
- High rainfall may result in a strong halocline and algal bloom which can result in a mass die-off.
- Marine heat waves possible

GW Operations

- Transport routes will be severely impacted. This may
- Wellington train station will be severely impacted as it is within the potential inundation zone.
- Port operations may be severely impacted due to wind damage.

Freshwater & Groundwater Environment

- Habitat changes in streams and rivers from sedimentation.
- High rates of bank erosion expected in the Porirua Stream
- Loss of community restoration riparian programme likely
- Likely halt to restoration programmes while recovering from event and in some cases substantial damage is anticipated.

Hutt – Potential Impacts

Community & Infrastructure

- Hutt City has the largest number of people affected (~60,000). This is double the population exposed in the next most affected area, Kāpiti Coast District.
- Lower Hutt has the greatest number of buildings impacted, approximately 25,300 commercial and residential buildings exposed. Of these, the vast majority are residential buildings (24,000).
- All major infrastructure is potentially impacted in Hutt City including the Emergency Operation Centre.
- Bridges along the Hutt River carrying SH2, critical water & wastewater, and internet are likely to be washed away.
- Access to Wainuiomata is likely to be cut as is the road link to Eastbourne.

Marine & Coastal Environment

- The harbor is expected to receive significant wastewater discharges as well as sedimentation from the Hutt River.
- High rainfall may result in a strong halocline and algal bloom which can result in a mass die-off.
- Marine heat waves possible

Upper Catchments

- Slips and slash generation in the managed forestry and water catchment areas in the Tararua's and Remutakas may cause downstream issues.
- We may see damage to Te Marua lakes and water intake structures.

GW Operations

- Baring Head and Parangarahu Lake are the most effected parks within Lower Hutt. Belmont and Wainuiomata will also be affected.
- High winds and stream flows are likely to cause widespread damage to parks infrastructure resulting in them being closed. Likely closure for repair of areas such as Dry Creek or the Korokoro Valley in Belmont regional park due to damage

Freshwater & Groundwater Environment

- The Hutt Aquifer maybe impacted with possible drawing in contamination from storm water flooding or infrastructure damage.
- Over abstraction post event may also be an issue as river sources are unusable.
- Negative impact on groundwater quality, short and longer term risks to groundwater sourced drinking water supplies (both domestic and public).
- Rise in groundwater tables can prolong / worsen effects of surface water flooding.

Upper Hutt – Potential Impacts

Community & Infrastructure

- Approximately 9,600 commercial and residential buildings are exposed to a 1% AEP flood event in Upper Hutt City.
- Some communities such as Riverstone Terraces may be cut off from the valley floor. Significant flooding maybe experienced in Stokes Valley as occurred in the storms of the 70's.
- Roughly 10-12 schools at risk of inundation, high school and intermediate
- Hutt Valley cut off due to SH2 closure and railway line impacts.

Terrestrial Environment

- Small stream erosion is likely to be a major issue across Upper Hutt, blocking culverts and binging contaminants into urban waterways.

Upper Catchments

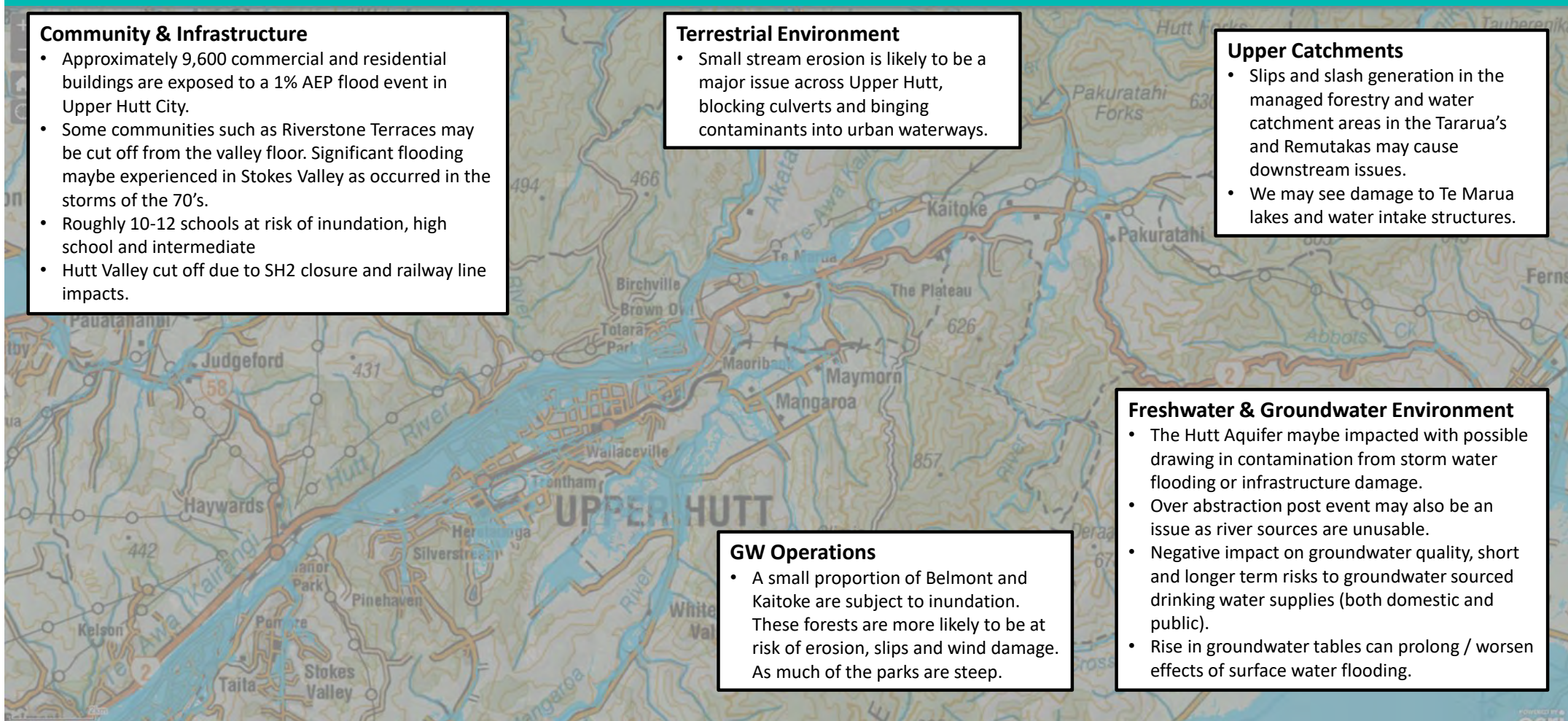
- Slips and slash generation in the managed forestry and water catchment areas in the Tararua's and Remutakas may cause downstream issues.
- We may see damage to Te Marua lakes and water intake structures.

Freshwater & Groundwater Environment

- The Hutt Aquifer maybe impacted with possible drawing in contamination from storm water flooding or infrastructure damage.
- Over abstraction post event may also be an issue as river sources are unusable.
- Negative impact on groundwater quality, short and longer term risks to groundwater sourced drinking water supplies (both domestic and public).
- Rise in groundwater tables can prolong / worsen effects of surface water flooding.

GW Operations

- A small proportion of Belmont and Kaitoke are subject to inundation. These forests are more likely to be at risk of erosion, slips and wind damage. As much of the parks are steep.



South Wairarapa – Potential Impacts

Community & Infrastructure

- Approximately 5,300 buildings are exposed to a 1% AEP flood event. The vast majority of these, 5,100 are residential, representing 40% of all housing stock.
- Communities likely to become isolated, particularly the Wairarapa Coast
- Loss of communication – phone lines and cellular highly likely
- Loss of farm infrastructure, i.e. fences expected to be widespread
- Farmland flooding will be widespread, with a high risk to stock.
- Key road and rail bridges likely to be damaged
- Significant inundation around Wairarapa Moana.
- Significant sections of vineyards within inundation hazard.
- Possible flow path formation across farmland. Low area of the Ruamāhanga, extremely likely to have silt and gravel deposition over farms. This can take weeks – months for clean up. also cost of disposing contaminated material

GW Operations

- Impacts on GW operations will be primarily on flood protection and land management activities which are likely to be severely impacted by an event of this scale.

Upper Catchments

- Slips and slash generation in the managed forestry and water catchment areas in the Tararua's and Eastern Hills may cause downstream issues.
- Upland planting anticipating

Freshwater & Groundwater Environment

- Forestry slash
- Silt /gravel deposits throughout floodplain
- Changes to river course impacting land stability
- Sedimentation and slash effects in eastern Wairarapa streams
- Increased contaminant load into Lake Wairarapa due to spillway operation
- Landfill and wastewater treatment ponds failure contaminating rivers
- Negative impact on groundwater quality, short and longer term risks to groundwater sourced drinking water supplies (both domestic and public).
- Rise in groundwater tables can prolong / worsen effects of surface water flooding.

Marine & Coastal Environment

- Sedimentation effects in coastal areas off the eastern Wairarapa coast
- High rainfall may result in a strong halocline and algal bloom which can result in a mass die-off.
- Marine heat waves possible

Carterton – Potential Impacts

Community & Infrastructure

- 95% are residential properties in Carterton are situated in flood prone areas.
- Loss of communication – phone lines and cellular highly likely
- Loss of farm infrastructure, i.e. fences expected to be widespread
- Farmland flooding will be widespread, with a high risk to stock.
- Key road and rail bridges likely to be damaged
- The rail embankment is likely to be washed away. This is shown to impound water in modelling but is not designed to retain flowing water.
- Carterton water treatment plant is at risk from erosion and inundation.

Freshwater & Groundwater Environment

- Forestry slash
- Silt /gravel deposits throughout floodplain
- Changes to river course impacting land stability
- Sedimentation and slash effects in eastern Wairarapa streams
- Landfill and wastewater treatment ponds failure contaminating rivers
- Negative impact on groundwater quality, short- and longer-term risks to groundwater sourced drinking water supplies (both domestic and public).
- Rise in groundwater tables can prolong / worsen effects of surface water flooding.

Upper Catchments

- Slips and slash generation in the managed forestry and water catchment areas in the Tararua's and Eastern Hills may cause downstream issues.
- Upland planting anticipating

GW Operations

- Impacts on GW operations will be primarily on flood protection and land management activities which are likely to be severely impacted by an event of this scale.

Marine & Coastal Environment

- Sedimentation effects in coastal areas off the eastern Wairarapa coast
- High rainfall may result in a strong halocline and algal bloom which can result in a mass die-off.
- Marine heat waves possible

Masterton – Potential Impacts

Community & Infrastructure

- At present day, Masterton District has approximately 9,400 residential and commercial buildings exposed to a 1% AEP flood event if no stop banks are in place.
- The vast majority of these (~9,000) are residential, representing 41% of all residential buildings in Masterton District. The 400 commercial buildings impacted represent 66% of commercial building stock in the area.
- Communities likely to become isolated, particularly the Wairarapa Coast
- Loss of communication – phone lines and cellular
- Loss of farm infrastructure, i.e. fences
- Farm land flooding, risk to stock
- Hood Aerodrome will be cut off, and is also subject to potential erosion from the Waingawa River.
- Wairarapa Hospital, which is in Masterton, is likely to be flooded.

Upper Catchments

- Slips and slash generation in the managed forestry and water catchment areas in the Tararua's and Eastern Hills may cause downstream issues.
- Upland planting anticipating

GW Operations

- The Greater Wellington Masterton office is located within the inundation zone.

Freshwater & Groundwater Environment

- Forestry slash
- Silt /gravel deposits throughout floodplain
- Changes to river course impacting land stability
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- Landfill and wastewater treatment ponds failure contaminating rivers
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Marine & Coastal Environment

- Sedimentation effects in coastal areas off the eastern Wairarapa coast
- High rainfall may result in a strong halocline and algal bloom which can result in a mass die-off.
- Marine heat waves possible

What will GW be doing in such an event?

During a major flood GW will play three key roles staffing the ECC, providing flood intelligence, and supporting GW functions.

Emergency Coordination Centre & Wairarapa EOC

- GW will staff the Emergency Coordination Centre (ECC). The ECC will coordinate the response to the event with key partners like GW Flood Response, Fire and Emergency NZ, NZDF, Police, and lifelines and utilities.
- The ECC will also provide support to the local level Emergency Operation Centres (EOC) as well as providing information and sending requests for support to the National Coordination Centre (NCC).
- It is likely that the majority of GW staff will be in the ECC unless they carry out a critical business function as identified in the Business Continuity Plans.
- Some GW staff may go to their local EOC, or into the NCC to support the response as needed.



Flood Incident Management & Asset Management

- Civil Defence is the lead agency for flood.
- GWs Flood Incident Management Team provides intelligence to Civil Defence to support proactive action during a flood event.
- This intelligence is what we term 'flood potential'.
- 'Flood Potential' is the integration of key data flows such as flood forecasting, live telemetry, asset condition, flood hazard mapping, engineering assessments and flood and erosion risk management plans to provide impact-based intelligence on flood impacts.



Business Continuity & Health & Safety

- GWRC are also responsible for staff health and safety, GW Operations and the safety of the public using our sites and services.
- Metlink would enact our Internal Business Continuity Plan
- Metlink PT operators would enact their Business Continuity Plans
- The Waka Kotahi Regional Transport Response Team (RTRT) would likely be stood up, which Metlink are a member of.
- Harbours would be considering safety of vessels and infrastructure during the storm and working to prioritise and repair damage in the aftermath.
- Parks would be ensuring parks were closed during storms to reduce the risk from high winds and flash flooding. In the aftermath they would be ensuring the parks were safe for public access.



Summary

Cyclone Gabrielle has been described by some as an unprecedented event but has been the latest in a series of major floods across Aotearoa. Indeed flooding is New Zealand's number one hazard. This is no different in the Wellington Region, where the majority of our towns are located on the floodplains of major rivers.

We estimate;

- Approximately 200,000 people live in flood prone areas.
- Approximately 80,000 properties (residential & commercial)

We know that;

- Climate change is increasing the frequency, unpredictability and severity of storm events.
- Rising seas are exacerbating coastal flood risk and increasing the damage done by storm surges.
- Development pressure is seeing more houses being built in marginal flood prone land increasing our region's exposure to flood hazard.
- We are living in a complex digital age with fragile infrastructure links increasing societies vulnerability to major storms.



GWs role in managing to major floods.

Flood Incident Management

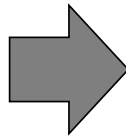
Provision of specialist 'intelligence' to Civil Defence

- This intelligence is what we term 'Flood Potential'.
- 'Flood Potential' is the integration of key data flows such as flood forecasting, live telemetry, asset condition, flood hazard mapping, engineering assessments and flood and erosion risk management plans to provide impact-based intelligence on flood impacts.

Asset Management

Management of flood protection assets to agreed levels of service.

- This includes the full spectrum of asset management activities such as;
- Asset condition inspection
- Asset investigations
- Maintenance
- Design & construction
- Consenting



Asset Management - major floods

Before



- Before major flood events we maintain our stop banks according to their level of service.
- Working with our Engineers we assess condition, investigate, and triage issues to ensure the standard is maintained.
- Where large defects are identified we deliver capital works projects to address (Riverlink)

During



- During flood events we may deploy asset management staff to key location to monitor performance.
- This forms a component of our intelligence provision to Civil Defence.
- We are very unlikely to attempt repair during a flood due to the risk, ability to manoeuvre and inability to access plant & materials.

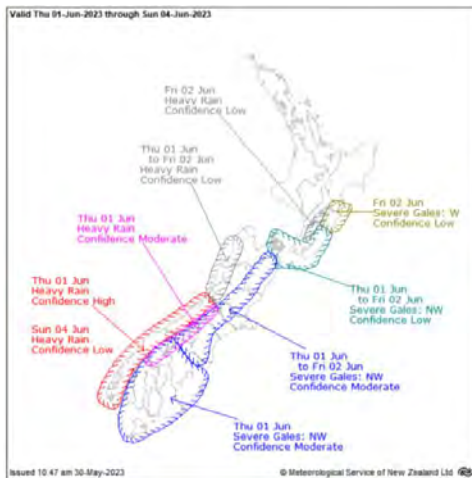
After

- After a major flood we will quickly deploy staff to inspect assets, plan & priorities repairs.
- The focus is on preparing for the next flood while planning for longer term recovery.
- This may mean temporary repairs are conducted and action plans put in place for reduced levels of service.



Flood Incident Management - major floods

Before



- Before major flood events we assess flood potential from weather forecasts, and asset condition.
- We activate flood warning lists, stand-up rosters, and inspect high risk sites.
- We work with the MetService and Civil Defence to establish a regional state of readiness.

During



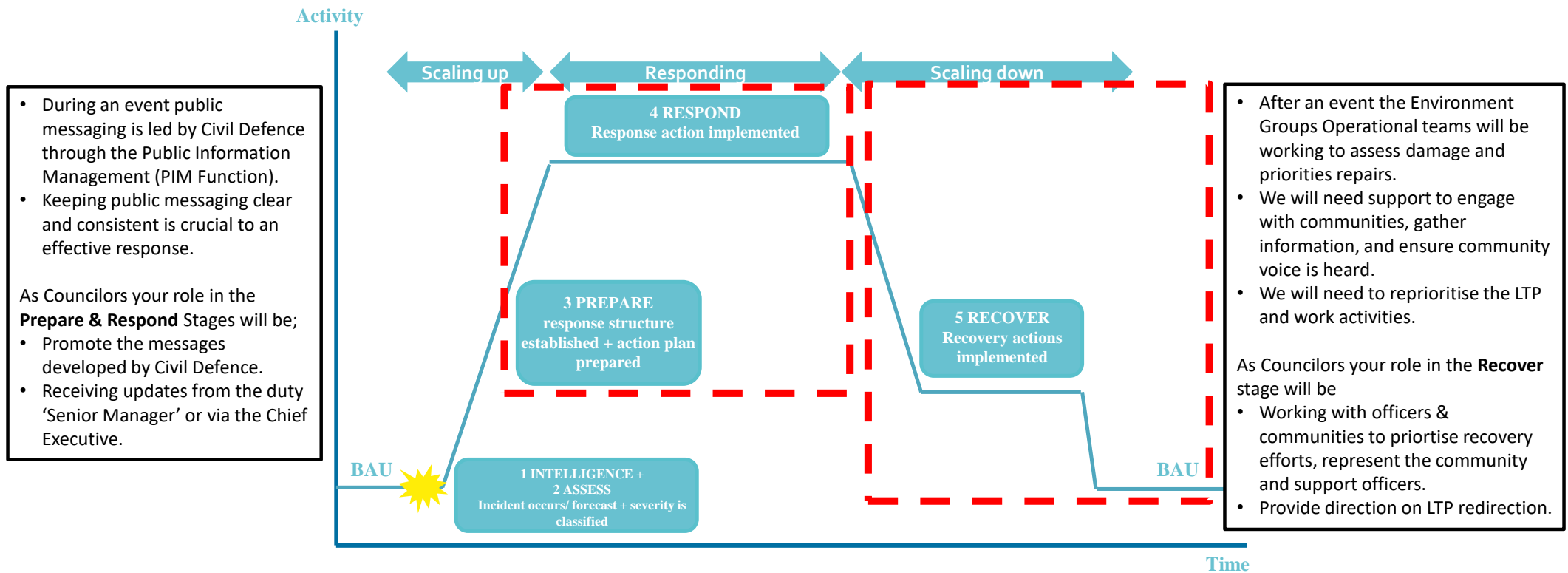
- During flood events we monitor, flood forecasting, live telemetry, asset condition, flood hazard mapping, engineering assessments and flood and erosion risk management plans to provide impact-based intelligence on flood impacts.
- This specialist intelligence supports a proactive Civil Defence Response.

After

- After a major flood we continue to monitor forecast and river levels.
- We collect data, review our procedures, and learn lessons with Civil Defence.
- We support asset management by developing actions plans for damaged assets



Your role as Governance



Link to LTP

What are we doing?

- Improving our asset management approach
- Implementing a comprehensive approach to Flood Risk Management (Multi Toolled approach)
- Improving flood incident management through new procedures and flood forecasting.
- Investing in new assets (RiverLink)
- Raising the bar in flood hazard mapping

What challenges do we face?

- Class action and liability if assets fail to provide agreed levels of service (eg Edgecumbe)
- Auckland Anniversary Flood (The Mike Bush report on Response) we don't want to be there.
- Still seeing new development in high-risk areas.
- Climate Change will see more extreme and unpredictable events
- Increasing community and environmental expectations.

What further support do we require?

- System wide conversations on avoiding further development in high-risk areas
- Continue to build engagement around managed retreat options
- Continued investment to improve Asset Management systems, the monitoring network and Flood Response Procedures
- Continued willingness to explore a multitool approach to flood resilience (Nature based solutions)



Environment Committee
23 November 2023
Report 23.569



For Information

WHAITUA IMPLEMENTATION UPDATE

Te take mō te pūrongo

Purpose

1. The purpose of this report is to update the Environment Committee on progress to date in implementing received Whaitua Implementation Programmes (WIPs). It includes the detailed progress reports for each WIP in **Attachments 1-3**.

Te horopaki

Context

2. Three Whaitua Implementation Programmes (WIPs) and two mana whenua-led documents have been received by Council:
 - a Ruamāhanga WIP, in August 2018 (*Completion of the Ruamāhanga Whaitua Implementation Programme – Report 18.289*)
 - b Te Awarua-o-Porirua WIP and Ngāti Toa Rangatira Statement, in April 2019 (*Completion of Te Awarua-o-Porirua Whaitua Implementation Programme – Report 19.121*)
 - c Te Whaitua te Whanganui-a-Tara WIP and Te Mahere Wai o Te Kāhui Taiao, in September 2021 (*Te Whanganui-a-Tara Whaitua Implementation Programme and Te Mahere Wai o Te Kāhui Taiao – Report 21.422*).
3. A review was undertaken in 2021 of progress in implementing the WIPs. The primary recommendation from the review was to use a project management approach to articulate non-regulatory recommendations as tangible deliverables that can be commissioned. Other recommendations were also identified, including actions regarding governance and reporting.
4. The Whaitua Operational Implementation Programme (Implementation Programme) was established to implement recommendations from the review. It has now transitioned to the new Rōpū Taiao Environment Group.
5. Since the last progress report, the Whaitua Te Whanganui-a-Tara Reference Group has been established to support community engagement with implementation of that WIP. The group comprises most of the former members of the Whaitua Te Whanganui-a-Tara Committee and is therefore a great sounding board for testing interpretation of the recommendations, and their implementation, although in its early days. Arrangements for stronger community engagement with the other two WIPs are being explored.

Te tātaritanga Analysis

6. Whaitua recommendations have been assessed and categorised in a systematic way (*June 2023 Whaitua implementation Update– Report 23.249*). The table below shows this categorisation, with updates to the figures.

Category	Ruamāhanga	Te Awarua -o-Porirua	Te Whanganui -a-Tara	Total
Fully implemented	3	10	0	13
<i>Regulatory change underway:</i>				
• Regional Policy Statement	1	5	0	6
• Natural Resources Plan Change by 2024	51	21	26	99
• Natural Resources Plan Change after 2024	3	0	2	5
• Currently being implemented (non-reg.)	45	35	32	107
• To be commissioned by deliverables (non-reg.)	13	17	39	76
<i>Other:</i>				
• To be confirmed (eg, to discuss with TAs)	0	4	20	21
• No applicable deliverables to implement	3	0	3	6
Total	119	92	122	333

Note: the numbers in the table exceed the number of recommendations in the WIPs as some recommendations have multiple sub-recommendations to be implemented through different mechanisms.

7. Since our last report, Council has notified Plan Change 1 to the Natural Resources Plan (NRP) for the Wellington Region. This is a major milestone towards implementing many of the recommendations in the Te Awarua-o-Porirua and te Whanganui-a-Tara WIPs.
8. Work towards a plan change to implement relevant recommendations in the Ruamāhanga WIP will include renewed engagement with mana whenua and community. This is a requirement of the RMA, which specifies that consultation on the preparation of a proposed plan must occur within three years of the plan change notification (the Ruamāhanga WIP was presented to Council in 2018). Work to scope this is underway.
9. Non-regulatory recommendations in the WIPs are being considered by the Environment Group as part of catchment planning processes in development. This requires coordination across the work programmes as part of business planning cycles.
10. A small number of the recommendations have changed categories since the June 2023 report. These are highlighted in the appended progress reports for each WIP with more detail. This includes five recommendations for the Porirua WIP, and 13

recommendations for Te Whanganui-a-Tara, driven by the NRP plan change and progress with our environmental reporting platform, He Kākano.

Reflections from the progress reporting

11. To create this progress report, information about work to implement many of the recommendations has been gathered from across Greater Wellington by the Environment Group Catchment function. As signalled in our previous update, we have also highlighted recent success stories in each catchment that demonstrate practical examples of Whaitua implementation.
12. The WIPs and mana whenua documents also contain high level objective statements that support implementation. For example, they articulate high level outcome statements that can be used to guide our work and collaboration with others.
13. The progress reports showing detailed tracking of each recommendation are included as **Attachments 1-3** of this report. These reports provide an update on progress since June 2023, and include a broader look at other activities that contribute to the Whaitua objectives. Following the Environment Committee meeting, these reports will be loaded to the Greater Wellington website.
14. While the progress updates provide additional information since the June 2023 report, there is still further improvement possible around the level of detail and integration of supporting work to be done. This is being designed alongside other improvements to Environment Committee reporting and future catchment plan reporting. It is likely these reports will change further to provide a useful holistic picture of progress and to avoid duplication.

Ngā hua ahumoni Financial implications

15. There are no direct financial implications from this report.
16. Regulatory components of the WIPs will continue to enter into the existing Regional Policy Statement/Natural Resources Plan Change programme, which is already funded. Non-regulatory elements will continue to be prioritised and resourced through the Long Term Plan and Annual Plan processes and internal change control management considerations as part of wider funding and prioritisation requirements.

Ngā Take e hāngai ana te iwi Māori Implications for Māori

17. Development of the WIPs has included substantial input from mana whenua over many years. Mana whenua led the development of the Ngāti Toa Rangatira Statement and Te Mahere Wai o Te Kāhui Taiao.
18. This relationship creates space for mana whenua to reiterate their obligations as kaitiaki and recognises a need for Greater Wellington to create space to enable mana whenua the opportunity to determine their rangatiratanga. Partnership with mana whenua remains paramount for the organisation.

19. As we move away from engagement with mana whenua on Whaitua implementation towards a space where we partner, the role of mana whenua and their solutions will become clearer. Kaupapa funding will support their aspirations.
20. Mana whenua representation at all levels of this work, from governance to implementation, is key to achieving successful outcomes for the environment and in giving effect to our responsibility to Te Tiriti o Waitangi.

Ngā tūāoma e whai ake nei

Next steps

21. These progress reports will be published on the Greater Wellington website and communications undertaken with interested parties, including Te Whanganui-a-Tara Whaitua reference group.
22. The next progress report will be provided in June 2024.
23. The Catchment function will continue to coordinate Whaitua implementation across the Environment Group through the internal business planning and prioritisation process, as well as through partnership with others.

Ngā āpitihanga

Attachments

Number	Title
1	Ruamāhanga Whaitua Implementation Programme (WIP) Progress Report
2	Te Awarua-o-Porirua Whaitua Implementation Programme (WIP) Progress Report
3	Whaitua Te Whanganui-a-Tara Implementation Programme (WIP) Progress Report

Ngā kaiwaitohu

Signatories

Writers	Pete Huggins– Catchment Manager, Ruamāhanga Jimmy Young – Catchment Manager, Te Awarua-o-Porirua Tim Sharp – Catchment Manager, Te Whanganui-o-Tara Nicola Patrick – Director, Catchment
Approver	Lian Butcher – Group Manager, Environment

<p>He whakarāpopoto i ngā huritaonga Summary of considerations</p>
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>The Environment Committee has a responsibility to review periodically the effectiveness of implementing and delivering Council's environmental strategies, policies, plans, programmes, initiatives and indicators.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>Implementing the WIPs and companion mana whenua documents are core activities in the Long Term Plan for Rōpū Taiao Environment Group.</p>
<p><i>Internal consultation</i></p> <p>Nearly all business units in Rōpū Taiao Environment Group and Te Hunga Whiriwhiri have contributed to the progress reports over time as implementation requires work from across the groups. Te Hunga Whiriwhiri has reviewed this report.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>There is significant environmental, reputational and legal risk if the WIPs and companion mana whenua documents are not implemented. Environmental risks include that water quality and biodiversity will continue to decline. Reputational risk includes that our partners, stakeholders and communities consider that implementation has not been given sufficient priority. Whaitua committees and mana whenua have invested significant time and knowledge to the development of WIPs and companion mana whenua documents. There is a legal risk to Council if the statutory obligations of the NPS-FM 2020 are not met.</p>

Ruamāhanga Whaitua Implementation Programme (WIP) Progress Report November 2023

This report provides an update on progress made with implementing the recommendations of the Whaitua Implementation Programme (WIP), developed by the Ruamāhanga Whaitua Committee, and received by Greater Wellington (GW) in August 2018. The previous report was in June 2023.

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Ruamāhanga catchment highlights



Wairarapa Moana Wetlands Restoration Project 22/23

The project planted 30,500 native plantings between July 2022 and June 2023 over 8.16 hectares, supporting the whaitua objectives of habitat restoration generally and wetlands specifically.

Funding last financial year was made available to iwi partners to pursue their own investigations and studies into Wairarapa Moana fish populations and water quality as well as pursue their own plans and ideas to reconnect with Wairarapa Moana. The project supported Kohunui Marae Nursery by purchasing plants from them this winter, and will continue to support them with future plantings. These are small steps towards a partnership approach to whaitua implementation.

Supports delivery of recommendations: 29 and 31

Major River Project 22/23



This reach on the Ruamāhanga in South Wairarapa was fenced (6.6km) and planted in the 22/23 year. The work is 100% funded between GW and MfE and directly contributes to the whaitua objective of restoring ecological habitats. The old oxbow and wetland at the top right of picture are being planted through the current Spring.

Greater Wellington has worked with two Wairarapa nurseries, Pae tū Mōkai o Taurira in South Wairarapa and Norfolk Road Nursery near Masterton to source plants for this work.

The Major River project is aiming for 100ha, 150,000 plants and 30km of fencing across the region.

Supports delivery of recommendations: 29, 44, 54

Implementation of Regulatory Recommendations

NRP Chapter 7 includes minimum flows and allocation limits in the Ruamāhanga. While these are only recently operative, the analysis used to produce them pre-dates the NPS-FM 2020 and the 2018 WIP recommendations. A number of 'sunset clauses' are included in the plan in recognition of this.

Plan changes to adopt new minimum flows, allocation rules and other target attribute states will be informed by WIP recommendations and other inputs in due course. Greater Wellington will be working with mana whenua and wider community as we develop these final proposed numbers for the plan.

Implementation of Complementary Measures (non-regulatory recommendations)

Non-regulatory work programmes are central to the Ruamāhanga WIP.

Some complementary measures are fully integrated into Greater Wellington’s work. These include:

- support for landowners to implement Good Management Practice such as co-funding for farm planning, fencing, and planting.
- riparian planting and in-river activities that seek to minimise habitat destruction during flood risk management work.

Greater Wellington also leads or partners on special projects such as the Wairarapa Moana Project and Major River Project that provide non-regulatory pathways to WIP objectives.

The table in the WIP Reporting section provides information and analysis on WIP recommendations for non-regulatory programmes. This update provides some additional detail to the previous (June 2023) report.

Community partnerships

Collective action is a key principle within the Ruamāhanga WIP. Support for mana whenua participation and leadership is outlined in the first recommendation.

The following key activities to advance collective action have occurred since the previous (June 2023) report.

Description	Date	Notes
Meetings with former whaitua committee members	July / August	Former committee members were sent copies of the June 2023 report
Wairarapa Moana Steering Group hui	27 July	
Wairarapa Collective steering group meeting focused on catchment community group support (MPI, Mountains to Sea, Catchment community leadership, Greater Wellington, WaiP2K)	28 July	

Attachment 1 to Report 23.569

Relationship meeting, Catchment Function and Rangitāne ki Wairarapa	25 August	
Presentation to Combined Council meeting on Wairarapa Water Resilience Strategy (WWRS)	30 August	The WWRS incorporates and endorses the water resilience recommendations in the Ruamāhanga WIP
Relationship meeting, Catchment Function and Kahungunu ki Wairarapa	20 October	
Establishment Governance Group meeting for the WWRS	09 November	Councillors and CEs from relevant territorial authorities met with GW and agreed to collaborate on a work programme

Whaitua objectives

We're exploring ways to make whaitua objectives relating to mauri, habitat, fish and mahinga kai more visible and connected to work programmes across the Environment Group.

Operating at the level of objectives may help us to partner better with external organisations and groups.

The whaitua objectives are listed below:

Mauri, natural form and character and habitat objectives

- The mauri of water bodies is enhanced by restoring ecological habitats (such as through riparian planting), improving water quality and ensuring that healthy and abundant mahinga kai is readily available.
- The rivers, streams, lakes and wetlands in the Ruamāhanga whaitua have diverse natural characteristics (e.g. riffles, pools, runs, backwaters and wetland margins) suitable to support abundant and healthy indigenous fauna and taonga species.
- Significant indigenous ecosystems in rivers, lakes and wetlands are protected and restored, including habitat for threatened and/or at-risk species, migratory fish and īnanga spawning (as identified in Schedule F of the PNRP).
- Indigenous fish and taonga species are able to access all tributaries of the Ruamāhanga system from the coast and lowland wetlands, up to and including first-order streams, throughout the catchment to complete their life cycles.
- Adequate habitat space is provided for the life-supporting capacity of indigenous fish and other aquatic life in rivers and streams, including at times of low flow.

Fish and mahinga kai objectives

- Tuna fishery is restored and populations are healthy and can sustain recreational and customary harvests
- Wetlands are restored and their extent increased to support thriving mudfish, īnanga spawning and tuna populations

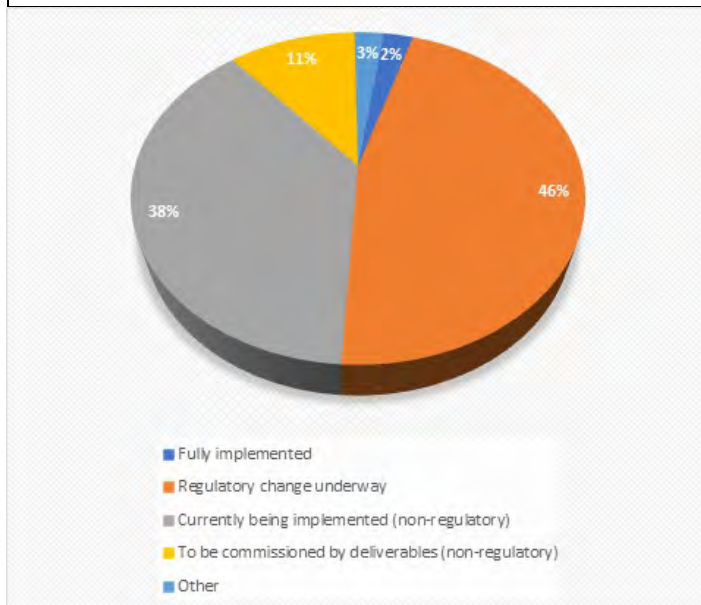
- Urban streams are protected from development and piping to support tuna, kōkopu and redfin bully
- Exotic fish populations are at a level where they are not restricting the vitality of indigenous fish populations and the ability of mana whenua to undertake mahinga kai harvests
- Marae and mana whenua urban communities have access to abundant and healthy mahinga kai species that are safe to eat and are available in quantities that enable sustainable harvests and support the manaakitanga of Wairarapa marae communities
- Watercress is abundant and healthy, safe to eat and free from spray and other contaminants

WIP reporting

WIP recommendations

The table and pie chart below show progress towards implementation of the WIP. There are no changes to category of recommendations for the Ruamāhanga WIP.

Implementation Category	Number of recommendations
Fully implemented	3
Regulatory change underway	55
Currently being implemented (non-regulatory)	45
To be commissioned by deliverables (non-regulatory)	13
Other	3
Total	119



Accessing the WIP

This report needs to read in conjunction with WIP which can be accessed here: [Greater Wellington Regional Council — Ruamahanga \(gw.govt.nz\)](https://www.gw.govt.nz/ruamahanga/wip/). This document provides context to each recommendation.

WIP recommendations – Complementary measures

Rec#	Recommendation wording	Implementation category	June 2023 Comment	Nov 2023 Comment
1.1	<p>Greater Wellington will:</p> <ul style="list-style-type: none"> • Support mana whenua as active partners in the management of the Ruamāhanga whaitua • Work in partnership with mana whenua to develop a management structure that includes a permanent role for hapū/marae at the FMU level • Work in partnership with mana whenua to establish and resource a kaitiaki support structure that ensures that Ruamāhanga whaitua hapū and marae are enabled to participate fully in FMU and catchment community planning, including: <ul style="list-style-type: none"> • Identification of indicators Monitoring programme Kaitiaki training Development of mataūranga Māori • Ensure that sufficient funding and dedicated resourcing to enable mana whenua participation are available as soon as the implementation of an FMU/freshwater objective framework begins • Establish operative roles for mana whenua and hapū/marae in the management of water quality and quantity and river management activities in the Ruamāhanga whaitua • Support hapū/marae to develop their own indicators for each FMU, including one for Ruamāhanga as a whole. This process to start as 	To be commissioned by deliverables	<p>New deliverable name: Partnering with marae. Greater Wellington led (Te Hunga Whiriwhiri team). This will be a dedicated project with a focus on creating structures and ways of working with hapū and marae together (by working through marae). Some existing work is underway with hapū and marae through individual projects. This project will need to be aware of this work and could learn lessons about what is working e.g., from the Gladstone cluster.</p>	<p>Greater Wellington is meeting regularly with Kahungūnu and Rangitāne to advance aspects of whaitua implementation with mana whenua as active partners.</p> <p>A dedicated project to pursue this specific recommendation through a more formal structure and approach could be a result of these meetings.</p>

	<p>soon as the implementation of an FMU/freshwater objective framework begins</p> <ul style="list-style-type: none"> • Include hapū/marae indicators in reporting on progress towards meeting freshwater objectives • Establish and support the process for mana whenua analysis and interpretation of hapū/marae indicators • Encourage and work with mana whenua on the development and inclusion of mātauranga Māori innovative regulatory and non-regulatory approaches to achieving improved water quality 			
5	<p>The Ruamāhanga whaitua integrated land and water management system should:</p> <ul style="list-style-type: none"> • Seek to be a comprehensive, catchment-wide system that increases ecological and social health and wellbeing as well as improving water use reliability • Create resilience to the pressures of changing weather systems under climate change • Empower communities to identify and implement suitable processes and management options in their sub-catchments in order to contribute to the whaitua-wide approach. 	No applicable deliverables to implement	<p>These are guiding high-level principles and outcomes, achieved through other recommendations, rather than having deliverables themselves.</p> <p>These directions feed into the Catchment planning processes underway.</p>	<p>Greater Wellington is working as part of the Wairarapa Collective to support landowners and catchment communities in suitable management choices.</p> <p>Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.</p>
6	<p>In order to see the effective implementation of all the objectives, limits and policy packages described in this WIP, the Committee supports:</p> <ul style="list-style-type: none"> • A programme of actions where rural and urban catchments have a collective responsibility to make change and improve water quality • A mainly non-regulatory approach to staying within discharge limits for diffuse contaminants 	No applicable deliverables to implement	<p>These are guiding high-level principles and outcomes, achieved through other recommendations, rather than having deliverables themselves.</p>	<p>Greater Wellington is working as part of the Wairarapa Collective to support landowners and catchment communities in suitable management choices.</p>

	<ul style="list-style-type: none"> An emphasis on the use of integrated planning tools (sub-catchment groups, farm planning tools and user groups), supported by education and incentives Regulation of point-source discharges of contaminants, land use activities and water takes Seeking means for promoting and ensuring continuous improvement and innovation across all sectors and communities Collecting and making available information on resource use in the whaitua as a way of enabling better decision-making at all scales. 			
7	Greater Wellington, along with iwi and other partners, develops a coherent FMU implementation framework that results in effective and successful managing to limits at an FMU scale, in both rural and urban environments, to achieve freshwater objectives.	Currently being implemented	The stand up of Greater Wellington's new Rōpū Taiao Environment Group in May 2023, including the introduction of catchment plans will encompass this recommendation.	Greater Wellington is preparing for action plans under the NPS-FM. These may support an FMU implementation framework as identified in this recommendation.
8	Greater Wellington resources the Freshwater Management Unit Implementation Framework sufficiently to support the development of an implementation work programme.	Currently being implemented	To be provided through the stand up of Greater Wellington's new Rōpū Taiao Environment Group in May 2023, the introduction of catchment plans, and the inclusion of implementation work in the Long Term Plan (LTP) if necessary.	No current update
10.3	Innovation in land and water management practice in the Ruamāhanga whaitua should be encouraged and actively facilitated by Greater Wellington, including by: <ul style="list-style-type: none"> Actively reviewing the effectiveness of the implementation of Greater Wellington operational activities and planning practices and of the 	Currently being implemented	Aligns with the Greater Wellington Policy Effectiveness Monitoring Programme (Environmental Science team).	No current update

	recommendations in this WIP in order to promote continued improvement and learning, and to ease bottlenecks			
10.4	<p>Innovation in land and water management practice in the Ruamāhanga whaitua should be encouraged and actively facilitated by Greater Wellington, including by:</p> <ul style="list-style-type: none"> Ensuring that management processes within Greater Wellington reflect a desire to support innovation. This may include internally rewarding “bright ideas” and establishing/fostering internal practices that support and reward innovation. 	To be commissioned by deliverables	<p>New deliverable name: Review of GW processes which hinder innovation. Greater Wellington led. Workshop that culminates in a report with recommendations for improved practices and processes internally to support land and water management practices externally. Should consider innovation across new Rōpū Taiao Environment Group. Should include reviewing policy effectiveness related to plans. May include identifying opportunities to use science and other knowledge, and external partnerships and tools.</p>	Greater Wellington is celebrating leadership and innovation through its Mauri Tu Maori Ora Awards for staff.
11.1	<p>The Committee recommends that:</p> <ul style="list-style-type: none"> GMP be emphasised and innovation fostered as part of every farm plan and by the operational practices of Greater Wellington and territorial authorities in the Ruamāhanga whaitua Industry guidelines are the primary source of GMP guidance Sub-catchment groups, communities and industry bodies help to develop and apply appropriate GMP specific to the identified requirements of FMUs 	Currently being implemented	<p>Industry Good Management Practice (GMP) is already being utilised by Greater Wellington. Note: All new and reviewed farm plans include this. However, not all existing farm plans have been reviewed/updated to include GMP.</p>	Greater Wellington is working as part of the Wairarapa Collective to support landowners and catchment communities in suitable management choices.

	<ul style="list-style-type: none"> As Greater Wellington cannot implement GMP on its own, it develops partnerships with industry, stakeholders and communities for supporting the implementation and adoption of GMP, with the critical role of industry recognised. 			
12.1	<p>The Committee recommends that water use efficiency be improved among all water users in the Ruamāhanga whaitua, including by:</p> <ul style="list-style-type: none"> Local councils (as suppliers of water) improving water conservation by residential, commercial and industrial users, establishing appropriate demand management strategies during water shortages, improving resilience and reducing demand in issuing of consents for new builds and subdivisions, and investigating opportunities for water re-use Group and community water suppliers appropriately managing demand during water shortages and supporting improved resilience of supply 	To be commissioned by deliverables	<p>New deliverable name: Water Conservation Programme. Proposed that this be led by Masterton District Council, Carterton District Council and South Wairarapa District Council (or Wellington Water on their behalf). Each of the above Councils would lead their own document.</p>	<p>Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.</p>
12.2	<p>The Committee recommends that water use efficiency be improved among all water users in the Ruamāhanga whaitua, including by:</p> <ul style="list-style-type: none"> Irrigation users meeting at least 80% efficiency of application and further improving practices through recognised programmes Greater Wellington recognising that exceptions to the “80% efficiency of application” requirement may be appropriate where the financial return from a less efficient water application can be shown to be high (i.e. the water use is highly economically efficient) or where there are meaningful benefits for the environment in a 	Currently being implemented	Being delivered through farm plan tools.	<p>Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.</p>

	<p>less efficient water use, effectively offsetting the benefits of being 80% efficient</p> <ul style="list-style-type: none"> Increasing education opportunities across types of water users. 			
12.3	<p>The Committee recommends that water use efficiency be improved among all water users in the Ruamāhanga whaitua, including by:</p> <ul style="list-style-type: none"> Greater Wellington and territorial authorities working together to develop long term plans for the management of water races in the Ruamāhanga whaitua that meet the objectives of this WIP and provide for the values of the water bodies and communities 	To be commissioned by deliverables	<p>New deliverable name: Water Races Long Term Management Options Project. Greater Wellington led. This will be a dedicated project. Work will commence with identifying objectives, preliminary scope and resource requirements, then testing these through a project brief (or business case or similar mechanism) to identify whether there is a mandate to proceed further. The project will need to align with the Wairarapa Water Resilience Programme. This deliverable is shared with Recommendation 107.</p>	<p>Greater Wellington is mapping water races for the purpose of identifying the correct regimes under freshwater regulations for natural waterways. The Opaki water race consent has been submitted with the intention of closing the race in 2026. Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.</p>
13	<p>All people of the whaitua need to be involved in efforts to ensure that water is used efficiently and with care, and the burden of change in order to improve water quality should be borne across communities.</p>	No applicable deliverables to implement	<p>This is a principle and addressed through other recommendations, rather than having specific deliverables attached to it.</p>	<p>Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.</p>
14	<p>Greater Wellington establishes as an urgent priority, and actions, a monitoring plan as required by Policy CB1 of the NPS-FM for the monitoring of each FMU.</p>	To be commissioned by deliverables	<p>New deliverable name: Whaitua Monitoring Plan encompassing each FMU.</p>	No current update

			<p>Greater Wellington led. Word document for each Whaitua. Each FMU is to be represented. To meet requirements of NFS-FM 2020 s3.18.</p> <p>Note: although each FMU will be addressed, this will not necessarily mean monitoring sites will be implemented. Modelling or extrapolation may be utilised.</p> <p>To action the plan, a revised monitoring programme will need to be put in place. This deliverable is also shared with recommendations 17, 19, 20 and 21.</p>	
15	<p>Greater Wellington establishes as an urgent priority, and operates, a freshwater quality accounting system as required by the NPS-FM (Policy CC1). The existing water take accounting system should be upgraded so that it is compatible with the quality system and is accessible to the public and water users.</p>	Currently being implemented	<p>Greater Wellington's Environment Group have been progressing this but identified issues with data which are being resolved. An ICT component may be progressed separately.</p>	No current update
16	<p>Greater Wellington requires the provision of information on contaminant inputs, sources and/or losses and mitigation activities from resource users, as appropriate to the issues, suitable for the development, operation and use of fit for purpose freshwater accounting.</p>	Currently being implemented	<p>A Freshwater accounting system is being developed by Greater Wellington, as described in Recommendation 15.</p>	No current update
17	<p>Greater Wellington develops a suitable monitoring programme(s) to establish in-river sediment loads and/or concentrations, including confirming relationships to sediment loads off land and the effectiveness of</p>	To be commissioned by deliverables	<p>New deliverable name: Whaitua Monitoring Plan encompassing each FMU. Greater Wellington led.</p>	No current update

	mitigations. Greater Wellington requires the progress of actions to mitigate sediment loss, including riparian planting and hill-slope erosion practices, to be regularly reported.		Refer to recommendation 14 for details.	
18	Greater Wellington establishes a data protocol and reporting plan to ensure that all aggregated data collected is publicly available and provided in a fit for purpose and transparent manner.	Currently being implemented	Being implemented by Greater Wellington through an accounting system. Data is currently aggregated and publicly available but not in a fit for purpose manner. Remainder of the recommendation will be delivered through the data platform project.	No current update
19	Greater Wellington supports community monitoring and the wider integration of monitoring results to support FMU outcomes.	To be commissioned by deliverables	New deliverable name: Whaitua Monitoring Plan encompassing each FMU. Greater Wellington led. Refer to recommendation 14 for details.	Greater Wellington is working as part of the Wairarapa Collective to support landowners and catchment communities in suitable management choices, including community monitoring.
20	Greater Wellington undertakes a review of flow monitoring sites in the Ruamāhanga whaitua. Where necessary, to ensure that the network is fit for purpose in implementing this WIP, it makes changes to the network, including the establishment of new sites.	To be commissioned by deliverables	New deliverable name: Whaitua Monitoring Plan encompassing each FMU. Greater Wellington led. Refer to recommendation 14 for details.	No current update
21	Greater Wellington establishes a social and economic monitoring and assessment framework with indicators agreed by the community. Greater Wellington includes social and economic monitoring in the monitoring plan for the Ruamāhanga whaitua.	To be commissioned by deliverables	New deliverable name: Whaitua Monitoring Plan encompassing each FMU. Greater Wellington led. Refer to recommendation 14 for details.	No current update

<p>25</p>	<p>Greater Wellington plans and implements the Committee’s vision for healthy rivers and lakes in the Ruamāhanga whaitua by:</p> <ol style="list-style-type: none"> 1. Ensuring that the river and lake management functions of the Council achieve freshwater objectives and targets in each FMU 2. Working with mana whenua and communities in co-creating what river and lake management for the health of the river looks like within each FMU. 	<p>Currently being implemented</p>	<p>Te Kāuru Upper Ruamāhanga Floodplain Management Plan sets out a change in river management to improve the health of the rivers in the Upper Ruamāhanga catchment. Such as allowing the river more room, less in river works and planting of the buffer (riparian). Intervention methods have changed since the adoption of Te Kāuru (circa 2019) with many small erosion events being left and watched as they are deemed not to be of any risk to people or infrastructure. The lower catchment will require a wider plan, which is to be developed over the next six years. The Waiohine River Plan has now been adopted by Council. Within this river plan it talks about water quality and outlines the WIP water quality targets for the Waiohine River Plan. The plan outlines recommended plan (PNRP) changes to align water allocation as well as planting for river management, biodiversity, and cultural resource.</p>	<p>Greater Wellington is meeting with community members from around the Mangatārere Stream and Waipoua Urban Reach to explore how values relating to river health can be integrated into flood risk management works. Meetings of the Upper Ruamāhanga River Management Advisory Committee and it’s associated sub-committees have occurred through July/August.</p>
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26	<p>Greater Wellington identifies and implements methods for further enabling mana whenua participation in land and water resource management, including with papa kāinga, marae and hapū (as appropriate), to ensure that the values of mana whenua are appropriately reflected in freshwater planning and regulatory processes and in flood protection strategic and operational planning and implementation.</p>	Currently being implemented	<p>Greater Wellington’s work programmes includes incorporation of Mana Whenua values in the following areas:</p> <ul style="list-style-type: none"> • freshwater planning and regulatory processes • flood protection strategic activities • flood protection operational planning • flood protection implementation. 	No current update
28	<p>Greater Wellington reviews current planning and implementation activities relevant to the health of lakes and rivers in order to:</p> <ol style="list-style-type: none"> 1. Identify any changes necessary to planning, governance, investment and practice to deliver the Ruamāhanga whaitua objectives through river and lake management 2. Identify new multidisciplinary systems to deliver integrated river and catchment management 3. Progressively implement the findings of this review work. <p>“Activities” could include institutional delivery structures, the alignment of future relevant land and water</p>	Currently being implemented	<p>Being implemented by Greater Wellington through several initiatives. Floodplain Management Plan Guidelines are currently being reviewed to ensure they capture WIP recommendations and are relevant to how flood protection is undertaken in today’s environment. The review will be completed late 2023. Flood Protection also have a Code of Practice that has been updated to reflect WIP</p>	<p>Greater Wellington’s Environment Group operating model is being implemented to support integration of delivery work including for lakes and rivers. Greater Wellington is meeting with community members from around the Mangatāre Stream and Waipoua Urban Reach to explore how values relating to river health can be integrated into flood risk management works.</p>

	programmes and investments, and the application of GMP in operational and capital expenditure works.		recommendations around water quality/healthy rivers and streams.	Meetings of the Upper Ruamāhanga River Management Advisory Committee and it's associated sub-committees have occurred through July/August.
29	<p>Greater Wellington seeks and takes opportunities to enhance the natural form and character, aquatic ecosystem health and mahinga kai of rivers, streams, lakes and wetlands across the Ruamāhanga whaitua, including by:</p> <ol style="list-style-type: none"> 1. Aligning the planning and operation of flood management activities (e.g. floodplain planning) with the Ruamāhanga whaitua objectives and policies 2. Identifying and implementing management options to enhance natural character and to achieve the Ruamāhanga freshwater objectives when undertaking operational works (e.g. willow removal and gravel extraction) 3. Aligning and supporting farm planning and farm plan implementation with the Ruamāhanga whaitua objectives 4. Investing in riparian planting for shading and stream bank erosion management and in wetland restoration 5. Supporting and undertaking the restoration of native fish spawning habitat, including in water bodies affected by flood management activities. 	Currently being implemented	<p>Te Kāuru Upper Ruamāhanga Floodplain Management Plan covers river activities within the Upper Ruamāhanga catchment. It has objectives in the plan that seek to achieve this recommendation. The Code of Practice is also aligned to meet this recommendation. Riparian planting is part of the implementation of Te Kāuru. Funding was achieved through the Ministry for the Environment 'Jobs for Nature' programme that has seen 150,000 native plants planted over 100ha over the last 4 years. This funding was based off Te Kāuru. Te Kāuru funding has now become available to enable us to continue this work in the upper catchment, along with the appointment of Riparian and Community officers. The river schemes also undertaken</p>	<p>The Wairarapa Moana Project has made progress in enhancing natural character, e.g. through planting. The Major Rivers Project is also delivering natural form and character habitats in the Ruamāhanga catchment.</p>

			<p>enhancement work restricted to scheme funding.</p> <p>The lower valley work is via the current scheme structure, where substantial planting is undertaken through each work programme. Over the next six years a river and/or catchment plan will be developed that with mana whenua, TAs and the community that will align with all relevant WIP recommendations.</p> <p>The Waiohine River Plan has now been adopted by Council. Within this river plan it talks about water quality and outlines the WIP water quality targets for the Waiohine River Plan. The plan outlines recommended plan (PNRP) changes to align water allocation as well as planting for river management, biodiversity and cultural resource. The vision, targets and requirements of the Whaitua programme and Te Mana O Te Wai are incorporated into the Waiohine River Plan.</p> <p>There is also farm planning and riparian planting and biodiversity work underway.</p>	
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31	<p>Greater Wellington commits to the restoration of the health of Wairarapa Moana, including Lake Wairarapa and Lake Ōnoke, by undertaking research, investigations and experiments in management approaches, strategic planning and changes to operational activities to progressively improve the lake health and to reach the objectives of this WIP by 2080 at the latest.</p>	Currently being implemented	<p>All falls under Wairarapa Moana Wetland Project. Wairarapa Moana will form part of the Lower Valley catchment/river plan that will be developed over the next 6 years with mana whenua, TAs and community. The current barrage gate consent will expire in 6 years so that a catchment/river plan is able to be thoroughly investigated (with or without the gates). Some parts of this recommendation are also covered in the following recommendations. Governance arrangements will change with the introduction of a Statutory Board.</p>	<p>Greater Wellington has established an integrated approach to scoping the review of the Lower Wairarapa Valley Development Scheme.</p>
32	<p>Greater Wellington undertakes feasibility studies of “in-lake” management options for the purposes of providing for the community values of Wairarapa Moana and achieving the freshwater objectives identified in this WIP. Options to investigate include:</p> <ul style="list-style-type: none"> • Rerouting the Ruamāhanga River into Lake Wairarapa, particularly at flows below the median flow, with higher flows bypassing the lake • Alternative management regimes for the lake level gates at Lake Wairarapa • Alternative management regimes for Lake Ōnoke, including in relation to the timing, location and operation of lake mouth openings 	Currently being implemented	<p>This recommendation is being implemented through the Lower Wairarapa Valley Development Scheme Review and Management Plan Project Plan led by Greater Wellington. Knowledge Water are progressing with the development of a hydraulic model to test the options identified by this recommendation.</p>	No current update

	<ul style="list-style-type: none"> • Experimenting with alternative management options, such as temporarily holding Lake Wairarapa at higher levels than current practice, as a means of testing proof of concepts for potential broader application. <p>All such feasibility studies of in-lake management options should be completed within 10 years of the issuing of this WIP (i.e. by 2028). Experimentation should ensure an appropriate consideration of the WCO. Effective and early engagement with the Ruamāhanga whaitua community and broader public as part of any such feasibility work will help to underpin successful experimentation and the robust identification of management choices for future implementation.</p>			
33	<p>Greater Wellington investigates further options for restoring the health of Wairarapa Moana, including restoring the Ruamāhanga River flow into Lake Wairarapa, including to:</p> <ul style="list-style-type: none"> • Mitigate the impacts of wave action • Reduce the re-suspension of sediments in order to improve clarity • Create conditions suitable for macrophytes to survive and thrive • Remove nutrients and sediments • Restore the health of mahinga kai species • Enhance the health of wetlands. 	Currently being implemented	As per Recommendations 32 & 34 this is being implemented through the Lower Wairarapa Valley Development Scheme Review. Jobs for Nature funding has a research component for fish and water quality.	No current update
34	<p>Greater Wellington recognises and supports research being undertaken by external groups, mana whenua and the whaitua community on means to improve the health of Lake Wairarapa and Lake Ōnoke, and actively considers the application of new knowledge to the management of activities affecting the lakes, including through planning, consent practice and operational management practices.</p>	Currently being implemented	This recommendation is being implemented through the Lower Wairarapa Valley Development Scheme Review and Management Plan Project Plan.	Greater Wellington is working to identify the range of studies currently being conducted by external groups.

35	Greater Wellington actively informs and works with external agencies, including the Department of Conservation, to link the management of non-native fisheries and the commercial harvest of native fish species with achieving the Ruamāhanga whaitua objectives and to deliver on the needs of catchment communities.	To be commissioned by deliverables	New deliverable name: Meeting with DoC re fisheries with identification of any next steps Greater Wellington led. Meeting with DoC representative for Wairarapa fisheries to be initiated by Greater Wellington as part of Wairarapa Moana project discussions. To be followed by written advice (for example a memo or similar) to any local whaitua governance group overseeing implementation of the Ruamāhanga WIP.	Greater Wellington is reviewing how fish monitoring work should be conducted in relation to the roles of the Wairarapa Moana Statutory Board, DOC, Greater Wellington and Fish & Game.
42	Across the whaitua, Greater Wellington supports and drives improved management of critical source areas and high-risk land uses in line with GMP, including through working with industry partners.	Currently being implemented	Being implemented by Greater Wellington’s Environment Restoration team.	No current update
43	In the “top 5” FMUs, Greater Wellington undertakes further sub-FMU scale planning with local communities to establish the locations of highest priority in which to undertake sediment mitigation works in order to achieve the targets in Table 3.	Currently being implemented	Across the whaitua, Greater Wellington supports and drives improved management of critical source areas and high-risk land uses in line with good management practice, including through working with industry partners.	Greater Wellington uses the “top 5” FMUs identified in the WIP to inform prioritisation, alongside other factors.
44	Greater Wellington aligns the planning, funding and support of sediment mitigation activities, including both riparian restoration and hill-slope erosion and sediment control, with the identified priority areas and targets and the suitable mitigation approaches.	Currently being implemented	Across the whaitua, Greater Wellington supports and drives improved management of critical source areas and high-risk land uses in line with GMP,	Greater Wellington uses the “top 5” FMUs identified in the WIP to inform prioritisation, alongside other factors.

			including through working with industry partners.	
45	Greater Wellington promotes the uptake of sediment mitigation through connections with new research into sediment mitigation measures , practices and adoption mechanisms, and Greater Wellington, industry and community extension services to enable the uptake of constantly improving practice.	Currently being implemented	Across the whaitua, Greater Wellington supports and drives improved management of critical source areas and high-risk land uses in line with GMP, including through working with industry partners.	No current update
47	Greater Wellington and industry promote and support the implementation of farm planning as a primary tool of management at a farm scale.	Currently being implemented	Being implemented by Greater Wellington's Environment Restoration team.	Greater Wellington supports farm planning services as a key tool for good management practise.
48	Greater Wellington further incentivises and promotes the adoption of farm planning and the activation and review of existing farm plans.	Currently being implemented	Being implemented by Greater Wellington's Environment Restoration team.	Greater Wellington supports farm planning services as a key tool for good management practise.
49	Greater Wellington and iwi partners and industry work together to promote and implement GMP in both rural and urban contexts. Appropriate GMP for the Ruamāhanga catchment should be defined.	Currently being implemented	Being implemented by Greater Wellington's Environment Restoration team. Good Management Practice (GMP) is a long-standing aspect of farm environment planning. Recent developments in this work include updating the GMP competencies of staff with deliberate training, staff development. GMP advisory services are planned in line with catchment priorities as determined by Whaitua water quality objectives and land enhancement grant	No current update

			programmes support landowners implementing farm system changes to enhance GMP at a property scale based on catchment priorities. GMP promotion in urban context is not being implemented, apart from a minor amount of services (less than 5% of total programmes) provided to lifestyle block owners on the fringes of urban areas.	
50	GMP should be emphasised as part of farm planning.	Currently being implemented	Being implemented by Greater Wellington’s Environment Restoration team.	No current update
52	Greater Wellington actively promotes and enforces the requirements of the permitted activity rules for break-feeding, cultivation and livestock exclusion.	Currently being implemented	Being implemented by Greater Wellington’s Environment Restoration team. This work aligns with Recommendation 49, GMP. Riparian restoration programme and various land enhancement grant support opportunities are enabling compliance through a farm environment planning delivery model. Enforcement of the requirements, where the above is not successful, is a standard regulation response.	No current update

53	Greater Wellington provides a new rule for land use changes where a new land use results in an increase in contaminant load as a discretionary activity in the PNRP. A land use change that results in a decrease in contaminant load shall be a permitted activity.	Fully implemented		No current update
54	<p>Greater Wellington expands its support for extensive, whaitua-wide riparian planting for the management of stream bank erosion and for in-stream benefits (e.g. shade to reduce periphyton), including through:</p> <ul style="list-style-type: none"> • Priority in farm planning design and implementation • Increasing funding for riparian planting, as well as improving access to and awareness of the funds • Producing plants (e.g. at Akura nursery) or assisting communities to produce plants fit for such a programme. 	Fully implemented	<p>The implementation of Te Kāuru Upper Ruamāhanga Flood Management Plan is to riparian plant the buffer along the Upper Ruamahanga catchment. This was limited to the Ministry for the Environment Jobs for Nature funding as Te Kāuru did not have funding available. However, this has since changed, and planting can now occur under this funding base. The Waiohine River Plan has now been adopted by Council. Within this river plan it talks about water quality and outlines the WIP water quality targets for the Waiohine River Plan. The plan outlines recommended plan (PNRP) changes to align water allocation as well as planting for river management, biodiversity and cultural resource.</p> <p>The vision, targets and requirements of the Whaitua programme and Te Mana O Te</p>	No current update

			Wai are incorporated into the Waiohine River Plan.	
61	Greater Wellington, along with iwi and other partners, supports the formation and coordination of catchment communities in both urban and rural environments.	Currently being implemented	Being implemented by Greater Wellington's Environment Restoration team.	Greater Wellington is working as part of the Wairarapa Collective to support landowners and catchment communities in suitable management choices, including community monitoring.
62	Greater Wellington supports and contributes to the continued development of the Wairarapa Catchment Communities/Pūkaha to Palliser project, which aims to bring catchment community groups together and "make it easier" for them to achieve desired outcomes for their communities, whether they are environmental, social, cultural or economic outcomes.	Currently being implemented	Riparian planting programme is working closely with the community where possible. Te Kāuru now has funding, this will open up a significant ability for GW to work with communities to establish riparian margins throughout the upper catchment. It is early days for the funding, so work needs to commence on developing a programme for this in conjunction with the new Rōpū Taiao Environment Group and Te Hunga Whiriwhiri. The Lower Valley, as stated in other recommendations, will require community input to enable a successful catchment plan. The Waiohine River Plan covers the restoration and conservation of the riverside to	As part of the Wairarapa Collective, WaiP2K has supported new partners to join the work. Greater Wellington is working with Mountains to Sea Wellington and a new farmer-led organisation to make it easy to coordinate and pursue desired outcomes.

			enable catchment community groups to become involved.	
63	Greater Wellington supports and contributes to the development of a multi-agency delivery platform that will effectively respond and deliver resources effectively and efficiently to the needs of catchment communities. This agency coordinated response will enable communities to make changes ahead of regulation and support innovation.	Currently being implemented	Once the Lower Valley catchment plan is completed Greater Wellington will be able to support and contribute to developing a multi-agency platform.	Greater Wellington is working with partner agencies to coordinate funding and other support. As part of the Wairarapa Collective, Greater Wellington is working with Mountains to Sea Wellington and a new farmer-led organisation to make it easy to coordinate and pursue desired outcomes.
64	Greater Wellington writes a compliance plan with the community for compliance with rules in the PNRP, including targets and limits.	Currently being implemented	Will dovetail with Greater Wellington catchment plans.	Greater Wellington is considering how Action Plans under the NPS-FM will provide support for this recommendation.
65	Greater Wellington implements good compliance systems e.g. strategic compliance across activities (prioritising compliance on higher risk activities).	Fully implemented	Strategic compliance programme is already operating.	No current update
66	Greater Wellington undertakes a prioritisation exercise to determine the further investigations that need to be completed in the catchment to better understand effects and/or to establish causality to inform future management. The priorities identified in the following recommendation should also be included.	To be commissioned by deliverables	New deliverable name: Investigation Strategy for the Whaitua. Greater Wellington led. Report with recommendations on priorities for science investigations across the whaitua, including noting priorities already highlighted within the WIP.	Greater Wellington has established an integrated approach to scoping the review of the Lower Wairarapa Valley Development Scheme, which will include prioritisation of investigations to inform future management.

67.1	<p>The following investigations should be considered priorities as part of the implementation of Recommendation 66:</p> <ul style="list-style-type: none"> Establish sedimentation rates (and gather other information on the impacts of sediment on lake health and river health) for Lake Ōnoke, including to establish a relationship between catchment loads and lake health. 	Currently being implemented		Greater Wellington has established an integrated approach to scoping the review of the Lower Wairarapa Valley Development Scheme, which will include prioritisation of investigations to inform future management.
67.2	<p>The following investigations should be considered priorities as part of the implementation of Recommendation 66:</p> <ul style="list-style-type: none"> Complete a further investigation of contaminant pathways through groundwater, including soil vulnerability and attenuation processes. 	To be commissioned by deliverables	<p>New deliverable name: Contaminant Pathway Investigation. Greater Wellington led. This would need a staged approach. Would need to wait for completion of SkyTEM to begin the groundwater portion, expected to be a couple of years away (see work underway to implement recommendation 89).</p> <p>Stage 1: Desktop and scoping</p> <ul style="list-style-type: none"> Consider what national/research work has been undertaken in this area already. Consider how work can be used in FMUs. Scope investigations to apply national programmes for soil. 	Greater Wellington has established an integrated approach to scoping the review of the Lower Wairarapa Valley Development Scheme.

			<p>Stage 2: Soil attenuation study</p> <ul style="list-style-type: none"> • Undertake soil investigations <p>Stage 3: Groundwater Monitoring programme.</p> <ul style="list-style-type: none"> • Targeted monitoring where you have a groundwater issue (in a groundwater management zone). <p>Stage 4: Catchment Pathways</p> <ul style="list-style-type: none"> • Attenuation pathways report outlining results. • Could potentially then apply results to other similar catchments. • Would need to involve a soil/land scientist. 	
67.3	<p>The following investigations should be considered priorities as part of the implementation of Recommendation 66:</p> <ul style="list-style-type: none"> • Complete a further investigation, including via modelling, of sediment loads lost from land use activities, including to identify how loads are changing over time. 	Currently being Implemented		No current update

68	<p>Greater Wellington advocates for, and actively seeks out, alternative funding models for mitigation measures in order to promote successful and extensive implementation.</p>	<p>Currently being implemented</p>	<p>Greater Wellington Flood Protection actively searched out additional/alternative funding through the first Covid19 lockdown, successfully obtaining a \$5 million, 5 year riparian planting programme through MfE. Also obtained shovel ready funding through the Provisional Development Fund for erosion works, one of which is for River Road, Masterton (\$2 million). This work is to protect the Ruamāhanga River from the closed MDC landfill.</p>	<p>Greater Wellington is working with partner agencies to coordinate funding and other support. As part of the Wairarapa Collective, Greater Wellington is working with Mountains to Sea Wellington (MfE funded) and a new farmer-led organisation (MPI funded) to make it easy to coordinate and pursue desired outcomes. Jobs4Nature funding has been applied to the Wairarapa Moana Project and Major Rivers Project in the Ruamāhanga.</p>
69	<p>Greater Wellington should actively seek capital from central government and promote external capital investment, such as carbon offsetting programmes, in assisting landowners in extensive uptake of sediment mitigations across the whaitua.</p>	<p>Currently being implemented</p>	<p>As per Recommendation 68. Flood Protection has obtained central government funding to assist with erosion control (riparian planting and hard engineering). We will continue to apply for capital funding from central government when it is available.</p>	<p>No current update</p>
70	<p>To improve water supply reliability, the Ruamāhanga whaitua integrated land and water management system should:</p> <ul style="list-style-type: none"> Integrate multiple management options for water retention, including attenuation, storage and harvesting at a range of scales, and efficient 	<p>Currently being implemented</p>	<p>Being implemented through Wairarapa Water Resilience Strategy.</p>	<p>Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.</p>

	<p>use in the long and short terms, rather than be dependent on any one mechanism</p> <ul style="list-style-type: none"> Actively promote attenuation of water in soils, wetlands, lakes and groundwater systems across the catchment Ensure an equitable approach to improved water storage and water use efficiency by both rural and urban users. 			
74	<p>Greater Wellington further investigates integrated solutions to water reliability. These should include integrating storage, harvesting, attenuation and managed aquifer recharge, and facilitate pilot projects to prove feasibility.</p>	<p>Currently being implemented</p>	<p>Being implemented through Wairarapa Water Resilience Strategy.</p>	<p>Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.</p>
86	<p>Greater Wellington undertakes further investigations to ensure that those groundwater takes classified as Category A do have a direct connection with nearby river, stream or lake.</p>	<p>Currently being implemented</p>	<p>Investigations have been completed but may be refined in the future using additional information about the geology (e.g., results from Sky TEM project). An assessment of the gaps and confidence in information for each area may be needed.</p>	<p>No current update</p>
87.1	<p>Greater Wellington undertakes targeted investigations into the Parkvale Stream, Booths Creek, Mākōura Stream, Kuripuni Stream and Tauanui and Tūrangānui Rivers to determine the specific minimum flow requirements and allocation limits for each river or stream, within three years of the plan notification or by 2022.</p>	<p>Currently being implemented</p>	<p>Small Stream Investigations work led by Greater Wellington. This work is currently underway.</p>	<p>No current update</p>
87.2	<p>Greater Wellington undertakes targeted investigations into the Parkvale Stream, Booths Creek, Mākōura Stream, Kuripuni Stream and Tauanui and Tūrangānui Rivers to determine the specific minimum flow requirements and</p>	<p>To be commissioned by deliverables</p>	<p>New deliverable name: Minimum flow requirements and allocation limits for Mākōura Stream, Kuripuni Stream.</p>	<p>No current update</p>

	allocation limits for each river or stream, within three years of the plan notification or by 2022.		Greater Wellington led. Study to match other streams in Recommendation 87. Note that these streams were excluded in existing work (the streams covered in Recommendation 87.1) due to the high cost of implementing this recommendation.	
98	In order to help meet minimum flow requirements, the Committee strongly supports the use of rainwater tanks and encourages territorial authorities to require rainwater tanks in new subdivisions to promote the efficient use of water.	Regional Policy Statement	Being managed by Greater Wellington through its regulatory programmes of work.	Water tank requirements are included in a proposed rule in the draft Wairarapa Combined District Plan for new residential developments. Some Territorial Authorities offer support for rain tank costs.
107	Greater Wellington works with territorial authorities and landowners to collect information and develop long-term management options (in conjunction with Recommendations 9 and 11) for all water races in the Ruamāhanga whaitua. The information should be collected and assessed in the order that water races come up for consent renewal.	To be commissioned by deliverables	New Deliverable name: Water Races Long Term Management Options Project. Greater Wellington led. See Recommendation 12.3 which shares this deliverable for details.	Greater Wellington is mapping water races for the purpose of identifying the correct regimes under freshwater regulations for natural waterways. The Opaki water race consent has been submitted with the intention of closing the race in 2026. Greater Wellington is working with territorial authorities and others to establish a work programme under the Wairarapa Water Resilience Strategy.

Te Awarua-o-Porirua Whaitua Implementation Programme (WIP) Progress Report November 2023

This report provides an update on progress made with implementing the recommendations of the WIP, since June 2023. In addition, this progress report draws in other activities that support environmental outcomes, including WIP recommendations.

This report has been prepared to cover the following subject areas.

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Te Awarua-o-Porirua Catchment Highlights

Restoration Mahi

Winter 2023 has been a very productive one for planting and restoration within the Catchment.

The larger programmes of work have included:

- The continuation of Transmission Gully Expressway mitigation planting.
- Greater Wellington's Recloaking Papatūānuku Parks Restoration Programme and PCC's riparian programmes have planted 260,000 native plants this winter across 90ha of retired grazing land in Regional Parks in West Belmont/Waitangirua and Battle Hill. A further 6ha in West Belmont has been *direct seeded* with native seeds as an alternative to planting.
- In collaboration, Porirua City Council and Greater Wellington's respective riparian programmes have delivered 8 riparian restoration projects in 2023 on private land. Porirua City Council and Greater Wellington supported 3.13ha and 3.63 ha of restored riparian zone respectively.
- Greater Wellington's Environment Restoration programmes worked with a further 12 private land properties with the provision of advice on good management practices, the planting of 10,000 native plants, the planting of poplar and willow poles and the retirement of 15.4 ha of erosion prone land.

Smaller community projects like the Ngāti Toa led Hukarito Stream restoration provide opportunity for mana whenua to connect with their land, local school children to engage in the environment and PCC and GW the opportunity to work alongside mana whenua.

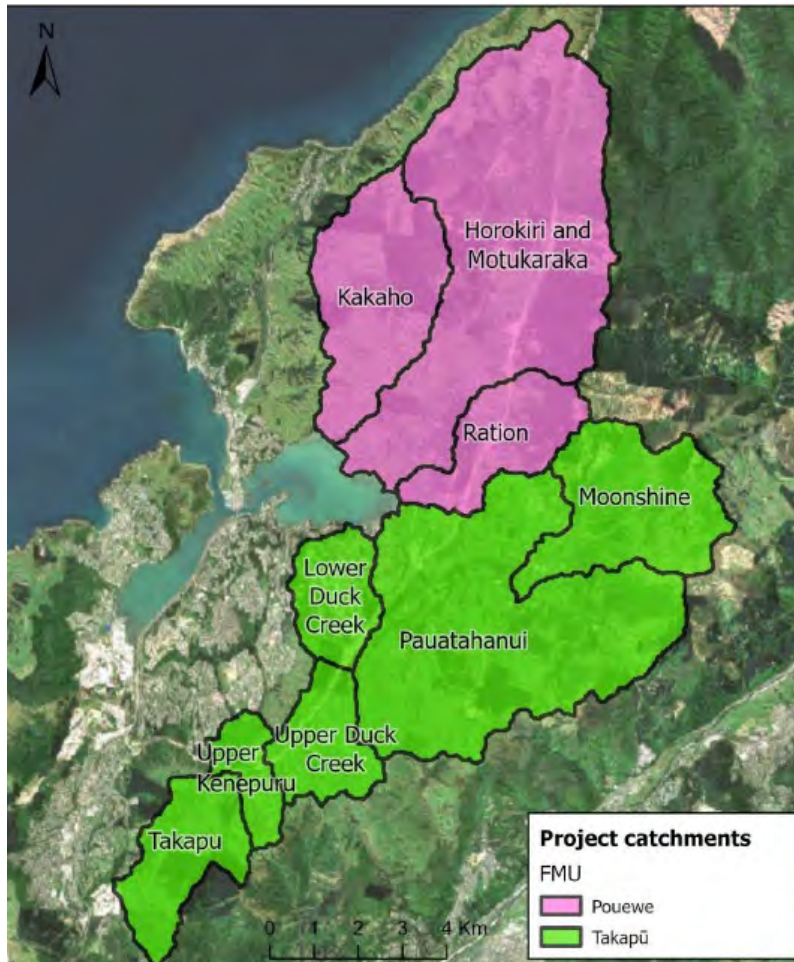


Planting at Hukarito Stream on 12th September 2023

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Pouewe & Takapu Sediment Project

Pouewe and Takapu are priority catchments for Greater Wellington and as a result were included in the Mahi Waiora prototype programme. The Pouewe Working Group (which includes TRoTR and PCC representatives) coordinated by GW are investigating an approach to identify erosion sources and tools to better manage erosion and reduce sediment loads from the Pouewe and Takapu freshwater management units (FMUs, see map below).



The project is aligned with the Porirua Whaitua Implementation Plan (WIP), specifically addressing several Recommendations (11, 16, 58, 59 and 60) to identify and mitigate sediment loading from priority areas.

The first phase of this project has been completed, with finer scale mapping of the Whaitua data completed the areas of highly erodible land can be easily identified and therefore prioritised. This mapping has also been used in the development of the draft Plan Change 1 policy, which went out for public consultation in late October.

The second phase of the Pouewe project will involve working in partnership with TRoTR and PCC to:

- Develop and identify existing tools and approaches that effectively reduce fine sediment that links to the critical sediment source and erosions process occurring within the project area catchments.

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- Undertake prioritisation analysis for actions to reduce critical sediment sources areas using a scientific evidence, areas of identified ecological significance, and sites/areas of significance traditional and customary use as determined by Ngāti Toa RaNgātira.
- Use Mātauranga approaches to inform both public and private investment decisions to get best possible outcome from limited available resources.
- Development a guidance framework to inform sediment reduction works plans and programmes – both public, private, Ngāti Toa RaNgātira and community.

Te Awarua-o-Porirua Forestry Sector Engagement and Behaviour Change Plan

Forestry is estimated to make up 13% of the Te Awarua-o-Porirua catchment area with a large proportion of this due for harvest within the next five years. The environmental impacts of sediment eroded from forest harvest sites can have a significant effect on the sensitive receiving environment of Porirua Harbour.

As a result, Greater Wellington has started a project to engage with the forestry sector to help incorporate best practice into forestry activities. There are two drivers for this approach - The NES for Plantation Forestry (NES-PF)¹ and the Te Awarua-o-Porirua Whaitua Implementation Plan (WIP):

1. The NES-PF aims to maintain or improve the environmental outcomes associated with plantation forestry activities nationally and to increase certainty and efficiency in the management of plantation forestry activities.
2. The Te Awarua-o-Porirua whaitua was established by GW in response to the National Policy Statement for Freshwater Management (NPSFM) to provide advice and direction on how to manage land and water within Porirua and Northern Wellington’s catchments.



Cutting Right Forestry harvesting at Battle Hill Farm Park (March, 2023)

¹ The NES-PF has now been replaced by the NES – CF (Commercial Forestry) as of 4 November 2023

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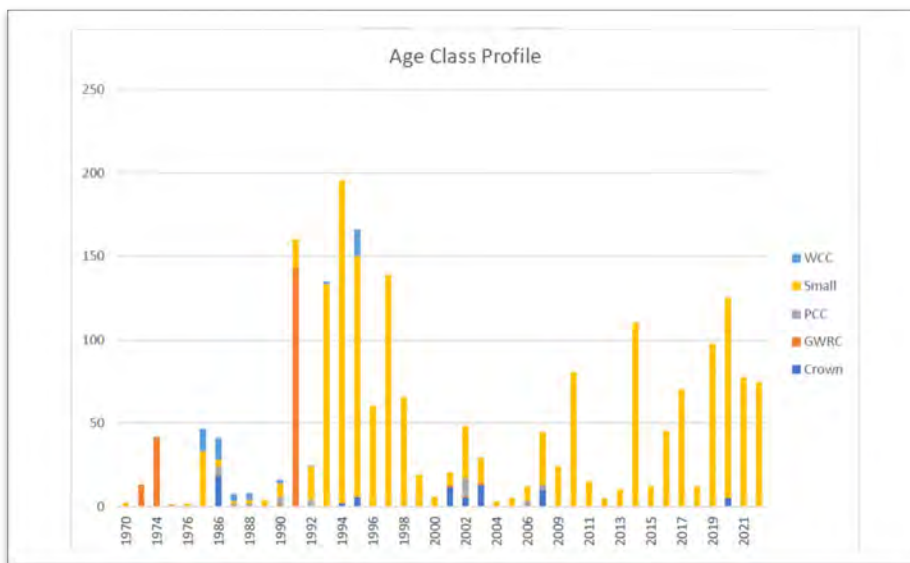
Project scope

The project scope is based on recommendation 54 and 56 in the WIP. These recommendations state: **54:** *Greater Wellington works with the forestry sector to identify potential barriers and risks to good practice in reducing sediment from forestry operations and works with the industry to overcome the risks and barriers.*

56: *Greater Wellington provides sufficient resources to deliver consistent advice on forestry good practice and compliance, both within the Whaitua and across the region.*

The scope of this project is to engage a consultant to develop and implement a plan to engage with forestry companies operating in the Porirua catchment.

The preliminary catchment overview report was received in September. Age class profile and ownership data outline a large proportion of the forests are reaching harvest age (e.g. trees planted in the mid to late 1990s) in the coming years.



Porirua Catchment Area (hectares) planted by year and land owner type

As outlined in the table below, the report also identified that 83% of these forests are spread across 122 small private landholdings. The next step of the project will be to develop an engagement plan with identified key private forest owners.

Owner	Net Stocked Area (ha)	%	Number
Council Owned (GWRC, WCC, PCC)	294.6	14	3
Crown	73.4	3	1
Other Private forest Owners	1,752.921	83	122
Total ha	2,120.3		126

Regulatory Focus

Plan Change 1 to the Natural Resources Plan

Plan Change 1 to the Natural Resources Plan (Greater Wellington's regional plan), notified on 30 October 2023, implements a number of the recommendations in the WIP (and the Whanganui-a-Tara WIP and Te Mahere Wai) and Ngāti Toa Statement.

Plan Change 1 includes objectives and policies, rules and other methods to manage activities such as earthworks, stormwater discharges including from new urban development, wastewater discharges, and rural land use to achieve water quality and ecological health objectives within Te Awarua-o-Porirua Whaitua and Whaitua Te Whanganui-a-Tara.

Summary of the key changes and the WIP recommendations addressed:

- Include Freshwater objectives from WIP (Tables 3-4) R1
- Setting of water quality limits, targets, concentrations (e.g. E.coli, ammonia, nitrogen, zinc, copper, sediment and nutrients (R4-10)
- Urban Development setbacks from streams (R12.1)
- Protection of aquatic ecosystems and avoidance of reclamation, drainage of lakes, streams and wetlands (R14)
- Policy to recognise innovative practices (R19.2)
- Control of location and extent of new urban development (R27)
- Control effects of urban development on water quality and catchment hydrology (R28.1)
- Greenfield development no increase in mean annual runoff volume (R30.1)
- Stormwater discharges – more stringent and requirement for management strategies (R31.2)
- Improve wastewater discharges (R40)
- New urban developments do not increase issues with wastewater (R41.1)
- Discharge standards for earthworks that require consent (R49)
- Under NESPF GW requests erosion and sediment management plans and actively monitors (R55)
- Reducing sediment, GW working with landowners in priority areas to develop FEPs (R58)
- Mapping of rural land to identify erosion prone land and priority areas (R59)
- Water take and use policy and rules (R68-71,74)

Collaboration and Partnerships

Collaboration is a key principle within the Porirua WIP. Since the stand up of the new Rōpū Taiao group Catchment have been meeting with our mana whenua partners and key stakeholders to reconnect our respective organisations on the WIP.

Establishing and maintaining key relationships within the catchment will be key to achieving the objectives contained within the WIP. These relationships need to be at all levels from political to executive leadership and management to our delivery staff on the ground.

The objectives and recommendations contained within the WIP and Ngāti Toa Statement need good line of sight across all our partners at all levels to enable effective collaboration. This will also make the process of prioritisation more effective.

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The following collaboration activities have occurred since the previous (June 2023) report:

- Te Whakaritenga Core Project Team (Harbour Accord) fortnightly hui with TRoTR, PCC and WCC
- Planting day with Ngāti Toa at Hukarito Stream
- Porirua City Council – initial meeting and regular 4-6 weekly catchups
 - PCC Community Workshop for development of the Harbour Strategy
 - Operational hui aligning work programmes and contractors and possibly co-funding for delivery
- Wellington City Council – initial meeting
- Pauatahanui Freshwater Catchment Community group – initial meeting
- Wellington Water Limited catchup - Initial meeting, discussed community engagement and work programmes
- Porirua large rural landowner engagement evening - Draft Plan Change 1 policy
- Porirua Harbour Trust - attended their August meeting
- Wai Collective workshop with Mountains to Sea

Porirua Harbour Accord/Te Whakaritenga

This is a critical piece of work for the Porirua catchment that should create a structure for implementation and provide more ownership and accountability for delivery.

The Accord is an agreement to restore the health of Te Awarua o Porirua. It acknowledges that restoring the health of Te Awarua o Porirua is a priority for the partner organisations Porirua City Council, Te Rūnanga o Toa RaNgātira, Greater Wellington, Wellington City Council, Wellington Water Limited and the many stakeholders, community groups and other organisations that wish to see the health of the harbour restored.

The intention of the Accord is to provide the partners, stakeholders, community groups and other organisations with a clear focus to help prioritise and drive actions that will improve harbour health.

The Accord will also assist and support the various organisations to work together to achieve the shared vision and gives effect to the Ngāti Toa Statement and Te Awarua o Porirua Whaitua Implementation Plan.

The Accord is being facilitated by Porirua City Council with the partners. The core project team have been working on the draft documents that will be shared with respective partner executive leadership teams before year end for feedback. The draft documents include the Accord, Performance Monitoring Framework and the structure.

WIP and Ngāti Toa Statement Recommendations

The following WIP table includes a column showing Implementation Category. This is a high-level grouping used by Greater Wellington for reporting purposes.

The category 'NRP Plan Change by 2024' means a change to the Natural Resources Plan (Greater Wellington's regional plan) to be undertaken by 2024. This was publicly notified on 30th October

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2023. Note there are a few category changes from the June 2023 Report from ‘regulatory change underway’ to ‘To be Confirmed’ (TBC), these are detailed in the table.

The category ‘RPS’ means a change to Greater Wellington’s Regional Policy Statement. A recommendation will not be considered fully implemented until the changes in the RPS are fully operative as until then they are subject to change through the RMA Schedule 1 process and the freshwater planning process.

Note that the category ‘To be commissioned by deliverables’ indicates that the work is not currently being implemented so needs to be commissioned. This means an assessment has been made that a new deliverable is required to implement the recommendation, including identifying which organisation will lead its implementation. These are the outstanding recommendations that need resourcing and need to go through the relevant lead agency’s business planning and prioritisation processes to be confirmed.

WIP Summary of Progress

The table and pie chart below show progress towards implementation of the WIP. Many of the WIP recommendations require multiple agencies to work together, particularly to implement the urban water recommendations. In some cases, this has meant implementation has been slower but is creating more enduring, integrated responses.

A reasonable proportion of the non-regulatory recommendations are underway as they’ve been picked up through business-as-usual work in the years since the WIP was completed.

Changes in Category from June 2023 Report:

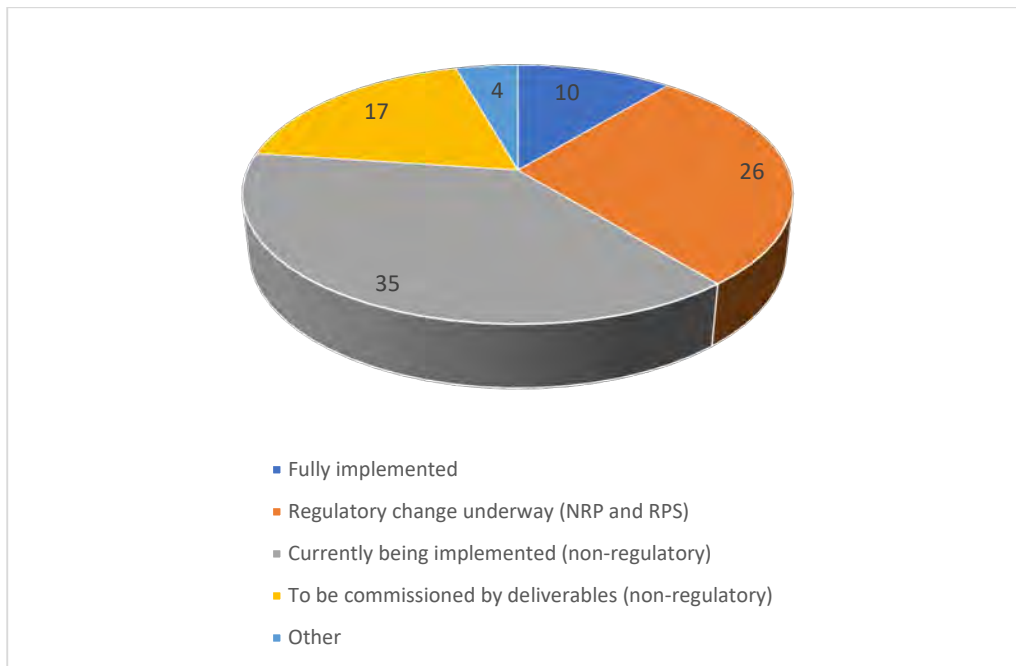
Five recommendations were previously identified as being addressed by the NRP plan change but were not taken forward. Of those five:

- four (R12.1, 31.2, 41.1, 71) need further assessment (category “Other”) and
- one (R14) is now being implemented.

Implementation Category	Number of recommendations (number in brackets indicates change since 2023)
Fully implemented	10
Regulatory change underway (NRP and RPS)	26 (-5)
Currently being implemented (non-regulatory)	35 (+1)
To be commissioned by deliverables (non-regulatory)	17
Other	4 (+4)
Total	92

Note: The numbers in the table exceed the number of recommendations in the original WIP as some recommendations have multiple sub-recommendations to be implemented through different mechanisms.

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Ngāti Toa Statement

The Statement contains a series of statements and recommendations that are outlined in the table included in this section. A number of these statements align with WIP recommendations while some stand alone. GW looks forward to reviewing these in more detail with Ngāti Toa in 2024.

Accessing the WIP and Ngāti Toa Statement

This report needs to read in conjunction with WIP and Ngāti Toa Statement which can be accessed here: [Te-Awarua-o-Porirua-Whaitua-Implementation-Programme.pdf \(gw.govt.nz\)](#) and [Ngāti-Toa-Statement.pdf](#).

Te Awarua-o-Porirua WIP – Progress by Individual Recommendation

Interpreting the tables

The table below is broken down by recommendation as recorded in the Whaitua Implementation Programme (WIP). Some recommendations in the WIP list multiple actions to be completed. Where these actions require different mechanisms to implement them, the recommendation is broken down in the table as sub-recommendations, reflecting the distinct pieces of work to be implemented.

Information provided here is provisional as it includes implementation attributed to organisations other than Greater Wellington and in some cases their agreement has not yet been obtained and therefore may be revised.

Rec #	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
1	Greater Wellington amends the Proposed Natural Resources Plan (PNRP) to include the objectives set out in Table 3 and 4 (including the numeric objectives in Appendix 3) and the narrative objectives in Section 4.8.	Natural Resources Plan (NRP), Plan Change by 2024	Being managed by Greater Wellington (GW) through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
2	Greater Wellington undertakes a full review at the next regional plan review (in 10 years) on progress towards achieving the objectives in this Whaitua Implementation Programme (WIP) and the effectiveness of the management responses and makes changes as necessary to the PNRP to ensure progress is satisfactory.	Currently being implemented	Greater Wellington led. This is a regulatory review that will happen at the appropriate time but won't be completed through either of the 2023 or 2024 plan changes as it's a review of the progress from the changes made in those plan changes.	No current update
3	Greater Wellington works with Ngāti Toa RaNgātira, Porirua City Council (PCC) and Wellington Water through various mechanisms (including the Harbour Strategy) to implement this WIP and prioritise actions within the Rangituhi water management unit (WMU) and the catchments that contribute to hotspot areas of elevated metal concentrations within the harbour. This work will comprise:			
3.1	<ul style="list-style-type: none"> identifying the catchments that contribute to the harbour hotspot areas 	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Supported by PC1, notified 30 October 2023. PC1 includes a method that requires the development of a Freshwater Action Plan for the Rangituhi catchment that prioritises improvements to hotspot areas of elevated metal concentrations within the harbour.
3.2	<ul style="list-style-type: none"> identifying areas of piped stream in the lower reaches of the Rangituhi WMU that could be day-lighted 	To be commissioned by deliverables	New deliverable name: Map of streams that could be feasibly daylighted. Porirua City Council led. NB: relates to second bullet point in the recommendation. Proposed as a digital map showing all streams that could be daylighted. To be succeeded by a feasibility	Supported by PC1, notified 30 October 2023. PC1 includes a method that requires the development of a Freshwater Action Plan for the Rangituhi catchment that will include identifying areas of piped stream in the lower reaches of the catchment that could be daylighted.

			assessment and to identify next steps for subsequent implementation (for this deliverable to provide value). Could help form part of a wider catchment plan.	
3.3	<ul style="list-style-type: none"> targeting a pollution prevention programme (Recommendation 36) within these catchments. 	To be commissioned by deliverables	<p>New deliverable name: Reinstate Take Charge Programme.</p> <p>Greater Wellington led.</p> <p>Proposed as reinstatement of Greater Wellington’s previous Take Charge Programme.</p> <p>NB this is also the deliverable for recommendations 36.2, 36.3, 37 and 39 (also Te Whanganui-a-Tara recommendation 46).</p>	<p>Further discussion both within GW and with our partners is required prior to reinstating or developing a new pollution prevention programme.</p> <p>Supported by PC1, notified 30 October 2023. PC1 includes a method that requires the development of a Freshwater Action Plan for the Rangituhi catchment that will include implementing a targeted pollution prevention programme.</p>
4	Greater Wellington amends the policy and rule framework of the Proposed Natural Resources Plan (PNRP) to set water quality limits and targets for E.coli for each freshwater water management unit (WMU) within Te Awarua-o-Porirua Whaitua, in accordance with the E.coli objectives set out in Table 14 (Appendix 3).	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
5	Greater Wellington amends the policy and rule framework of the PNRP to set water quality limits and targets for ammonia for each freshwater WMU within Te Awarua-o-Porirua Whaitua, in accordance with the ammonia objectives in Table 15 (Appendix 3).	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
6	Greater Wellington amends the policy and rule framework of the PNRP to set total nitrogen and total phosphorus load limits entering the Onepoto Arm WMU and Pauatahanui Inlet WMU to maintain the current loads (as shown in Tables 5 and 6).	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	<p>Addressed in PC1, notified 30 October 2023</p> <p>Noting that total Nitrogen and total Phosphorus load limits entering each harbour arm catchment are not included in PC1. However, DIN and DRP freshwater target attributes state are set, and these will maintain the current loads into the harbour. There is no intention to do a future plan change to implement this recommendation.</p>
7	Greater Wellington amends the policy and rule framework of the PNRP to set total zinc and copper load limits and targets entering the Onepoto Arm WMU and Pauatahanui Inlet WMU, in accordance with Tables 7 and 8.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
8	Greater Wellington amends the policy and rule framework of the PNRP to set sediment load limits and targets entering the Onepoto Arm WMU and Pauatahanui Inlet WMU, in accordance with Table 9.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023

9	<p>Greater Wellington amends the policy and rule framework of the PNRP to include incrementally decreasing limits for each contaminant over time.</p>	<p>NRP Plan Change by 2024</p>	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p>	<p>Addressed in PC1, notified 30 October 2023</p> <p>Noting that incrementally decreasing limits are not set for each contaminant. Environmental outcomes are articulated for two timeframes (100 years and 2040). Target attribute states are set for 2040. Wastewater and stormwater network consents are required, through policy direction, to show progress towards achieving the target attribute states, rather than incrementally decreasing limits. There is no intention to do a future plan change to implement this recommendation.</p>
10	<p>Greater Wellington amends the policy and rule framework of the PNRP to set nutrient concentration criteria for DIN and DRP concentrations for each freshwater WMU within Te Awarua-o-Porirua Whaitua, in accordance with Table 10.</p>	<p>NRP Plan Change by 2024</p>	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p>	<p>Addressed in PC1, notified 30 October 2023.</p> <p>Noting that the guidance for setting nutrient outcomes has changed. PC1 follows current guidance rather than the WIP.</p>
11	<p>Together with Harbour Strategy partners Porirua City Council (PCC), Wellington City Council (WCC) and Ngāti Toa RaNgātira, Greater Wellington develops and implements an aquatic ecosystem and habitat strategy for Te Awarua-o-Porirua Whaitua to achieve the freshwater and coastal water objectives.</p> <p>Greater Wellington amends the PNRP to include this strategy as a method for achievement of the objectives.</p> <p>The strategy must include the following components.</p> <p>1) Baseline assessment including identification, analysis and mapping of:</p> <ul style="list-style-type: none"> - aquatic habitats, including wetland seep areas and streams (perennial, intermittent and ephemeral) - existing riparian vegetation and its protection (e.g. fenced areas) and - areas of ecological significance, including spawning areas. <p>2) Identification of factors affecting ecosystem health including:</p> <ul style="list-style-type: none"> - locations with streambank erosion - stormwater outfalls and retaining structures - high-risk sediment source areas - fish passage barriers and - modified areas of water courses (e.g. straightened, piped, hard edged or bottomed streams). 	<p>Currently being implemented</p>	<p>Multiple leads.</p> <p>This recommendation is being implemented through multiple mechanisms:</p> <ul style="list-style-type: none"> • Catchment plans, including where required through the National Policy Statement for Freshwater Management (NPS-FM) will encompass an ecosystem action plan. • Changes to the Natural Resources Plan (NRP) will include policies and methods to implement the National Policy Statement for Freshwater Management (NPS-FM) to formulate action plans which include limits and timeframes. • Greater Wellington’s science work informs water quality limits. • Ecosystem health work on attributes has been done. • Porirua City Council commissioned the Cardno report which looks at existing riparian vegetation across the catchment and opportunities. • Wetlands not currently assessed but will be before 2030 as part of national regulation requirements (National Environmental Standard for Freshwater). • Work has been undertaken on spawning areas. • Locations of streambank erosion and high-risk sediment source areas have been identified at the sub-catchment scale, based on whaitua modelling. Greater Wellington technical action plans will be further refined through catchment plans. 	<p>GW in partnership with Ngāti Toa kamahi and PCC continue to plant riparian margins in Regional Parks at West Belmont/Waitangarua and Battle Hill.</p> <p>The Pouewe Project phase 1 completed to identify highly erodible land. The project is yet to commence Phase 2 – co-designing action plans with Ngāti Toa and PCC.</p>

	<p>3) Implementation plan, including:</p> <ul style="list-style-type: none"> - prioritisation - criteria for re-vegetation and other measurable targets - targets and timeframes to protect and restore aquatic habitats and - a description of commitments by Greater Wellington and landowners. <p>When developing and implementing the strategy, Greater Wellington should:</p> <ul style="list-style-type: none"> - work with landowners, councils, sectors and community groups - incorporate traditional and local knowledge - ensure all riparian margins on Greater Wellington land are protected and planted (where practicable) as a matter of priority to showcase best practice - align with existing programmes, including those in the <i>Te Awarua-o-Porirua Harbour and Catchment Strategy and Action Plan</i> and - recognise, review and align with PNRP changes, including schedules identifying areas of significance. <p>This aquatic ecosystem and habitat strategy will inform the actions of Harbour Strategy partners (Greater Wellington, PCC, WCC and Ngāti Toa RaNgātira) in the updated Harbour Strategy.</p>		<ul style="list-style-type: none"> • Fish passage barriers have been mapped by Greater Wellington (but excluding piped etc where there is no access). • NB Wellington Water will hold information on outfall structures. • Greater Wellington is currently prioritising areas and interventions with greatest impact through technical actions plans. 	
12				
12.1	<p>Greater Wellington, amend the policy and rule framework in the PNRP to control the effects of urban development on riparian margins. The framework must require:</p> <ul style="list-style-type: none"> • setbacks from streams for any activity (excluding riparian restoration activities) 	<p>Other – NEW <i>(was NRP Plan Change by 2024, June Report)</i></p>	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p>	<p>Not addressed by PC1.</p> <p>The effects of urban development on aquatic ecosystem health and water quality is managed through PC1. However, setbacks from streams are not explicitly required as the plan change is focused on stormwater quality and quantity. There is no intention to do a future plan change to implement this recommendation.</p>
12.2	<p>WCC and PCC amend the policy and rule framework in the district plans to control the effects of urban development on riparian margins. The framework must require:</p> <ul style="list-style-type: none"> • restrictions on hard surfaces. 	<p>Currently being implemented</p>	<p>NB relates to second bullet point in the recommendation.</p> <p>Being implemented through changes to WCC and PCC district plans. Addressed through Greater Wellington submitting on District Plans where necessary.</p>	<p>No current update</p>

<p>13</p>	<p>Greater Wellington work with WCC and PCC:</p> <ul style="list-style-type: none"> to identify options to protect, restore and enhance riparian margins in greenfield and brownfield developments on a Whaitua-wide riparian protection, planting and maintenance programme by: <ul style="list-style-type: none"> increasing funding (and awareness of existing funding) for riparian protection and restoration (including fencing, planting and maintenance) building partnerships and supporting existing and new restoration projects providing educational programmes and expert advice. 	<p>Currently being implemented</p>	<p>Porirua City Council and Greater Wellington led.</p> <p>Porirua City Council have a Ministry for the Environment (MfE) funded programme that encompasses all parts of the recommendation.</p> <p>Also addressed through consenting business as usual (developments).</p> <p>Greater Wellington Catchment Management Plans will also provide assurance in this area.</p>	<p>Supported by PC1, notified 30 October 2023</p> <p>PC1 includes a requirement for Freshwater Action Plans in Te Awarua-o-Porirua Whaitua. Where applicable the Freshwater Action Plan(s) will include the planning and delivery of a riparian restoration programme.</p>
<p>14</p>	<p>Greater Wellington amends the PNRP policy and rule framework to require, where necessary:</p> <ul style="list-style-type: none"> protection and restoration of all aquatic ecosystems in the Te Awarua-o-Porirua Whaitua the avoidance of reclamation and/or drainage of beds of lakes, streams (including intermittent) and wetlands, with no exemption for special housing areas and urban growth areas. 	<p>Currently being implemented - NEW</p> <p><i>(was NRP Plan Change by 2024, June Report)</i></p>	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p>	<p>Addressed in PC1, notified 30 October 2023</p> <p>Noting that PC1 does not include provisions for reclamation as the operative NRP provisions are sufficient.</p>
<p>15</p>	<p>Greater Wellington works with PCC, WCC and Wellington Water to identify opportunities to enhance the natural form, character, ecosystem health and capacity for mahinga kai of streams and the harbour, including:</p> <ul style="list-style-type: none"> restoring modified streams, including hard-edged, hard-bottomed (e.g. concreted) or channelled sections, to provide physical diversity of banks and bed habitat restoring natural meander in straightened channels restoring piped or culverted reaches to a more natural state by daylighting streams protecting native aquatic species habitat protecting fish passage, including removal of tide valves from stream outlets or use of valves which enable fish passage and investigating fish passage barriers in piped streams and developing methods to enhance their ecological connectivity. 	<p>Currently being implemented</p>	<p>Will be achieved through implementation of Recommendation 11 and other initiatives.</p>	<p>No current update</p>

16	<p>Greater Wellington works towards reducing streambank erosion by:</p> <ul style="list-style-type: none"> investigating the causes of streambank erosion identifying land-use activities that contribute to streambank erosion exploring options for streambank protection and rehabilitation, including options to support and incentivise landowner action. 	Currently being implemented	<p>This recommendation is being implemented for rural settings.</p> <p>Wellington Water has established an urban stormwater design standard (relates to third bullet).</p>	The Pouewe Project phase 1 completed to identify highly erodible land. Yet to commence Phase 2 – co-designing action plans with Ngāti Toa and PCC.
17	<p>Greater Wellington works together with Ngāti Toa Rangātira, Porirua City Council (PCC), Wellington City Council (WCC) and other relevant stakeholders to help set up and/or support catchment and community groups to identify and implement optimal local solutions to achieve the objectives, limits and targets in this WIP.</p>	Currently being implemented	<p>Multiple leads. Currently being implemented through:</p> <ul style="list-style-type: none"> Community Environment Fund - Contestable fund (Greater Wellington and Ngāti Toa). Porirua City Council riparian planting, starting new community groups and existing groups. Greater Wellington is supporting a community catchment group. 	<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes provisions that state Greater Wellington shall in partnership with mana whenua, prepare and deliver Freshwater Action Plans. Freshwater Action Plans shall identify, in detail, the actions, including to support effective regulation, to achieve the target attribute states, and support relevant environmental outcomes, set in this Plan.</p>
18	<p>Greater Wellington, WCC, PCC and Wellington Water work together to raise water literacy, awareness of receiving freshwater and marine environments, and consumption and conservation practices. This work will be coordinated and delivered through various mechanisms (including the Harbour Strategy) and should include:</p>			<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes a method that states Greater Wellington will undertake programme(s) to support the health of urban waterbodies. These include developing stormwater educational materials in partnership with WWL.</p>
18.1	<ul style="list-style-type: none"> naming streams from headwaters to the harbour, including piped sections and drains, and using these in stormwater network infrastructure and asset plans installing signs at all freshwater outlets into the harbour, including pipes, to indicate that they are streams Greater Wellington developing an online interactive mapping tool with a GIS layer identifying WMUs and associated streams, including headwaters. 	Currently being implemented	<p>Porirua City Council led. NB relates to bullet points 2-4.</p> <p>These three bullet points are currently being implemented through Porirua City Council initiatives. However, the last is to catchment level not Water Management Unit (WMU) specifically although this is not expected to undermine the usefulness of this information.</p> <p>Need to measure what the current level of awareness is (baseline) so we can measure the success of future work.</p>	No current update
18.2	<ul style="list-style-type: none"> PCC and WCC adding an ‘Environmental Water Zone’ to residential and commercial Land Information Memorandum (LIM) reports to link properties with receiving freshwater and marine environments 	To be commissioned by deliverables	<p>New deliverable name: Receiving environments on Land Information Memorandum (LIM) reports.</p> <p>Porirua City Council and Wellington City Council led.</p> <p>NB relates to the first bullet point in the recommendation.</p>	No current update

			<p>Proposed deliverable is work programme to develop a process to identify information to be applied to LIMs. Then implement and notify the changes.</p> <p>Potentially a more effective outcome might be achieved by providing information as part of the new resident packs sent out by Porirua City Council.</p>	
19	Innovation in land and water management practice in Te Awarua-o-Porirua Whaitua is encouraged and actively facilitated by Greater Wellington, PCC, WCC and Wellington Water, including by:			
19.1	<ul style="list-style-type: none"> regularly monitoring and reviewing progress towards achieving the freshwater and coastal water objectives as set out in this WIP and the updated Harbour Strategy and the effectiveness of the management responses 	To be commissioned by deliverables	<p>New deliverable name: Whaitua Monitoring Plan encompassing each freshwater management unit (FMU). Greater Wellington led.</p> <p>NB relates to the first bullet point in the recommendation.</p> <p>Proposed as a Word document for each Whaitua. Each FMU is to be represented. To meet requirements of NFS-FM 2020 s3.18.</p> <p>Note: although each FMU will be addressed, this will not necessarily mean monitoring sites will be implemented. Modelling or extrapolation may be utilised.</p> <p>To action the plan, a revised monitoring programme will need to be put in place.</p> <p>NB this deliverable is also used for recommendations 22 and 73 (and also across other WIPs).</p>	No current update
19.2	<ul style="list-style-type: none"> adding a policy into the PNRP, to be considered in resource consent processes, that recognises the value of innovative practice in the achievement of the objectives of Te Awarua-o-Porirua Harbour Whaitua taking opportunities for ongoing plan changes and updates to guidance documents to provide for innovative practice 	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes a method that Greater Wellington will undertake a programme(s) to support the health of urban waterbodies including partnering with Wellington Water Limited to encourage and provide opportunities to develop innovative practice and investing in research and development</p>
19.3	<ul style="list-style-type: none"> avoiding resource consent conditions that would prevent trialling of alternative management approaches 	Currently being implemented	<p>Greater Wellington led.</p> <p>NB relates to bullet points 3-6 in the recommendation.</p>	No current update

	<ul style="list-style-type: none"> encouraging and providing opportunities for landowners and sector groups to develop innovative practice investing in research and development to identify and adopt innovative practice. 		<p>Greater Wellington is constrained by the Resource Management Act (RMA) to implement good management practice, rather than adaptive management. However, innovation is accommodated as part of the consents rather than conditions. Greater Wellington is already working to allow innovation where possible within the constraints.</p> <p>Greater Wellington provides incentives to improve good management practice understanding and is actively engaging in grant support for water quality improvement.</p>	
20	Greater Wellington, PCC, WCC and Wellington Water maximise opportunities to demonstrate good management practice in respect of ecosystem health and water management, including by:			
20.1	<ul style="list-style-type: none"> demonstrating water-sensitive urban design practice on projects such as town centre redevelopments, transport hubs and buildings <p>These opportunities will be identified and delivered through the various mechanisms, including the Harbour Strategy. They may also be included in other planning documents developed by Greater Wellington and the contributing agencies such as the Parks Network Plan. [included in all 20.1-20.5]</p>	To be commissioned by deliverables	<p>New deliverable name: Water sensitive design guidelines for GW projects</p> <p>Greater Wellington led.</p> <p>NB relates to the first bullet point of the recommendation.</p> <p>Potential to incorporate an assessment of Water Sensitive Urban Design into project guidelines for all GW projects.</p>	No current update
20.2	<ul style="list-style-type: none"> replacing copper brake pads in fleet vehicles with low copper or copper-free alternatives. 	Currently being implemented	<p>This recommendation is being managed by Greater Wellington as part of a wider work programme of zinc and copper related recommendations.</p> <p>It includes liaising with the Greater Wellington fleet manager and with Metlink regarding the bus fleet.</p> <p>Wellington Water has a voluntary measure in it's draft Stormwater Management Strategy to lead by example in replacing copper brake pads in its fleet.</p> <p>Unknown whether PCC and WCC are taking actions to implement this recommendation.</p>	No current update
20.3	<ul style="list-style-type: none"> increasing targeted street sweeping in high traffic locations 	Currently being implemented	This is a measure being proposed in Wellington Water's draft Stormwater Management Strategy. It will be implemented when the stormwater consent is granted.	No current update

20.4	<p>Greater Wellington, PCC, WCC and Wellington Water maximise opportunities to demonstrate good management practice in respect of ecosystem health and water management, including by:</p> <ul style="list-style-type: none"> demonstrating and showcasing good practice land and ecosystem management on council land, including in Greater Wellington’s regional parks. identifying opportunities to promote best practice water management messages through the media. <p>These opportunities will be identified and delivered through the various mechanisms, including the Harbour Strategy. They may also be included in other planning documents developed by Greater Wellington and the contributing agencies such as the Parks Network Plan.</p>	Currently being implemented	<p>Greater Wellington and Wellington Water led.</p> <p>NB relates to bullet points four and six of the recommendation.</p> <p>Bullet point 4 is being implemented through Greater Wellington Parks management.</p> <p>These opportunities will be identified and delivered through the various mechanisms, including the Harbour Strategy.</p> <p>They may also be included in other planning documents developed by Greater Wellington and the contributing agencies e.g., the GW Parks Network Plan.</p> <p>Bullet point 6 is being implemented through a number of initiatives, particularly by Wellington Water. Greater Wellington also have Listen to the Water, etc.</p>	No current update
20.5	<ul style="list-style-type: none"> promoting good practice by community and industry 	To be commissioned by deliverables	<p>New deliverable name: Promoting good practice for community and industry.</p> <p>Porirua City Council and Wellington City Council led.</p> <p>Format of the deliverable to be determined by leads (Wellington City Council and Porirua City Council).</p> <p>Urban focussed (picking after dogs, industry discharge, etc).</p> <p>Note: An industrial health check programme is being proposed by Wellington Water as part of the draft Stormwater Management Strategy. Would need to be worked on with TAs and GWRC to partly implement this recommendation.</p>	No current update
21	<p>Greater Wellington undertakes an exercise to determine additional investigations and monitoring needed to better understand the causes and effects of poor water quality to inform future management.</p>	Currently being implemented	<p>Fundamental role of Greater Wellington’s science work which is being implemented. No specifics mentioned beyond this that can be identified as new deliverables.</p>	No current update
22	<p>Greater Wellington works with relevant agencies and groups to support citizen science initiatives that enable communities to assess stream health and evaluate management activities.</p>	To be commissioned by deliverables	<p>New deliverable name: Whaitua Monitoring Plan encompassing each FMU.</p> <p>Greater Wellington led.</p> <p>See recommendation 19.1 for details which shares this deliverable</p>	No current update

23	Greater Wellington, PCC, WCC and Wellington Water reviews their compliance and enforcement practices to ensure:			
23.1	<ul style="list-style-type: none"> a consistent and reliable approach between institutions to the enforcement of all water-related policies, bylaws and regulations, creating a clear pathway for changing practice regulations are applied fairly and consistently sufficient resource is committed for compliance and enforcement activities, including the collection of financial fines for infringements 	Currently being implemented	<p>Greater Wellington led.</p> <p>Note: Relates to the first three of four bullet points in the recommendation.</p> <p>'REPO' forum provides coordination across Councils. Other Councils refer to Greater Wellington for wetlands and streams, etc. Greater Wellington has employed an additional three FTEs for enforcement with a further three planned through the Long-Term Plan (LTP).</p> <p>Work is underway on national compliance monitoring and enforcement, which crosses territorial authorities. Greater Wellington is undertaking a strategic compliance review which will align with the national compliance framework. As part of this, the recommendations of the WIPs are being reviewed and includes incident response (hotline).</p>	No current update
23.2	<ul style="list-style-type: none"> local communities are provided with enough information to enable them to more effectively assist with reporting of non-compliance and pollution incidents to the council. 	To be commissioned by deliverables	<p>New deliverable name: Reinstate Take Charge Programme</p> <p>See recommendation 3.3 for details.</p>	No current update
24	Greater Wellington, Wellington City Council (WCC), Porirua City Council (PCC) and Wellington Water look at options for spatial planning for the future development of Te-Awarua-o-Porirua Whaitua.	Currently being implemented	<p>Greater Wellington led.</p> <p>Being implemented via the new Spatial Planning Act and Natural and Built Environment Act, etc, if and when they are introduced as law. In interim some work underway identifying areas where development is not required etc.</p>	No current update

25	<p>Greater Wellington, WCC, PCC and Wellington Water work to align urban growth planning within Te Awarua-o-Porirua Whaitua to achieve social, cultural, economic and environmental objectives that provide for the values of Ngāti Toa RaNgātira and the community. Consideration must be given to the:</p> <ul style="list-style-type: none"> • National Policy Statement for Urban Development Capacity, including the results from the Wellington Housing and Business Capacity Assessment • National Policy Statement for Freshwater Management, including the freshwater objectives, limits and targets for Te Awarua-o-Porirua Harbour and streams • full cost of urban development, including construction and maintenance of infrastructure over its lifetime • specific characteristics of Te Awarua-o-Porirua Whaitua, including the relationship with Ngāti Toa RaNgātira, topography, demography, transport infrastructure and urban form. 	RPS	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p> <p>This has been partly implemented through notification of the Proposed Regional Policy Statement Change 1 in August 2022. There are updated provisions around urban development, freshwater and indigenous biodiversity.</p>	Submissions on Proposed RPS Change 1 have been received and hearings are underway.
26	<p>Greater Wellington, PCC, WCC and Wellington Water work together to provide a clear cohesive policy direction and align and streamline planning processes. This work may include:</p> <ul style="list-style-type: none"> • amendments to the Regional Policy Statement for the Wellington Region to guide regional and district plan changes • alignment of strategic plans, regional plans, district plans, and infrastructure plans and supporting documentation including water-sensitive urban design guidelines • joint resource consent application processing • joint plan change processing to add new urban areas to existing zoned areas • distinction in respect of any jurisdictional overlap • utilising the transfer of powers or delegated authority provisions in the RMA. 	Currently being implemented	<p>Greater Wellington led.</p> <p>This has been partly implemented through notification of the Proposed Regional Policy Statement (RPS) Change 1 in August 2022. The Proposed RPS requires joint consent processing for notified consents for urban development. It also provides further direction where there is jurisdictional overlap between regional council and territorial authorities.</p> <p>Remaining implementation will be largely achieved through upcoming Resource Management Act reform and local government reform.</p>	No current update
27	<p>Greater Wellington amends the PNRP to include a policy and rule framework that identifies the urban area and controls the location and extent of new urban development areas within Te-Awarua-o-Porirua. The framework must set a more stringent rule activity status for new urban development outside of the identified urban area.</p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
28				

28.1	<p>Greater Wellington, amend the policy and rule framework in the PNRP to control the effects of urban development on water quality and catchment hydrology. In particular the policy and rule framework must:</p> <ul style="list-style-type: none"> • require the design, construction and maintenance of developments to demonstrate good practice in water sensitive urban design • specify that a certain percentage of the mean annual volume of the catchment be treated by an approved device(s) to achieve a certain percentage reduction in total zinc and copper, these being proxies for a suite of other contaminants • manage the effects from both small infill developments and larger scale brownfield and greenfield developments through permitted activity conditions and the resource consenting process. 	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
28.2	<p>WCC and PCC amend the policy and rule framework and the district plans to control the effects of urban development on water quality and catchment hydrology. In particular the policy and rule framework must:</p> <ul style="list-style-type: none"> • require the design, construction and maintenance of developments to demonstrate good practice in water sensitive urban design • specify that a certain percentage of the mean annual volume of the catchment be treated by an approved device(s) to achieve a certain percentage reduction in total zinc and copper, these being proxies for a suite of other contaminants • manage the effects from both small infill developments and larger scale brownfield and greenfield developments through permitted activity conditions and the resource consenting process. 	RPS	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p> <p>This has been partly implemented through notification of the Proposed Regional Policy Statement (RPS) Change 1 in August 2022. The Proposed RPS directs district councils to require water sensitive urban design and includes a new definition of hydraulic controls as per this WIP recommendation. District plans will be required to consider the effects of both brownfield and greenfield development on freshwater and the harbour.</p> <p>Further implementation of this recommendation will be through changes to the relevant district plans.</p>	Submissions on Proposed RPS Change 1 have been received and hearings are underway.

29	<p>Greater Wellington, PCC, WCC and Wellington Water look for opportunities to initiate and incentivise the adoption of good practice in water-sensitive urban design, including through:</p> <ul style="list-style-type: none"> • development and implementation of an education programme for consultants, developers and council staff on the new policy direction and ways to meet requirements • programmes that improve industry and council capability and capacity • financial incentives • recognition and acknowledgement of good practice through certification schemes and design competitions. 	To be commissioned by deliverables	<p>New deliverable name: Water Sensitive Urban Design Work Programme</p> <p>Greater Wellington led.</p> <p>Work programme with specified deliverables. Work would likely include developing water sensitive urban design guidelines along the lines of GD04 developed by Auckland Council. All organisations would have a role in implementing this recommendation.</p>	<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes a method that states Greater Wellington will partner with WWL to develop stormwater education materials and a programme to support the uptake of water sensitive urban design and good practice around new aspects of stormwater management.</p>
30				
30.1	<p>Greater Wellington, amend the policy and rule framework in the PNRP and to control hydrological impacts of urban development by ensuring that the design, construction and maintenance of new developments manage stormwater runoff to mitigate changes in runoff volumes and flow rates. This will be achieved through good practice in water-sensitive urban design. In particular the policy and rule framework must require the following from developers.</p> <p>For greenfield development:</p> <ul style="list-style-type: none"> • the modelled mean annual runoff volume generated by the fully developed area must not exceed the mean annual runoff volume modelled from the site in an undeveloped (pastoral) state 	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	<p>Addressed in PC1, notified 30 October 2023</p> <p>Noting that the definition of hydrological controls has been amended.</p>

	<ul style="list-style-type: none"> the modelled mean annual exceedance frequency of the 2-year Average Recurrence Interval (ARI) so-called 'channel forming' (or 'bankfull') flow for the point where the fully developed area discharges to a stream must not exceed the mean annual exceedance frequency modelled for the same site and flow event arising from the area in an undeveloped (pastoral) state. <p>For brownfield and infill development:</p> <ul style="list-style-type: none"> the modelled mean annual runoff volume generated by the fully developed area must, when compared to the mean annual runoff volume modelled for the site prior to the brownfield or infill development, be reduced as far as practicable towards the mean annual runoff volume modelled for the site in an undeveloped state the modelled mean annual exceedance frequency of the 2-year ARI so-called 'channel forming' (or 'bankfull') flow for the point where the fully developed area discharges to a stream, or stormwater network, shall be reduced as far as practicable towards the mean annual exceedance frequency modelled for the same site and flow event in an undeveloped state. (See also implementation notes, below.) <p>Implementation notes for Recommendation 30</p> <ul style="list-style-type: none"> Potential developers will be required to demonstrate compliance with the above hydrological limits through the process of obtaining resource consent. The policy and rule framework will include a permitted activity threshold for small brownfield and infill developments, above which a consent pathway is required to demonstrate compliance with the hydrological limits. The permitted activity provision will include conditions requiring prescriptive, demonstrable minimum standards of practice to be met for small activities to be permitted. Guidance will be provided on acceptable models for developers to use in their consent application to demonstrate compliance with limits. This will include guidance on acceptable assumptions around the meaning of 'undeveloped state'. The same model must be used to assess the pre-, post- and undeveloped state for a given development application, in order to provide a robust assessment against the limits. For brownfield and infill developments, the practicability of the proposed reductions in mean annual runoff volume and mean annual exceedance frequency must be justified in the consent application for the proposed development. 			
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<p>30.2</p>	<p>WCC and PCC amend the policy and rule framework and/ the district plans, to control hydrological impacts of urban development by ensuring that the design, construction and maintenance of new developments manage stormwater runoff to mitigate changes in runoff volumes and flow rates. This will be achieved through good practice in water-sensitive urban design. In particular the policy and rule framework must require the following from developers.</p> <p>For greenfield development:</p> <ul style="list-style-type: none"> the modelled mean annual runoff volume generated by the fully developed area must not exceed the mean annual runoff volume modelled from the site in an undeveloped (pastoral) state 	<p>RPS</p>	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p> <p>This has been partly implemented through notification of the Proposed Regional Policy Statement (RPS) Change 1 in August 2022. The Proposed RPS requires district plans to manage the runoff from development as per the definition of hydrological controls in this WIP recommendation.</p> <p>Further implementation of this recommendation will be through changes to the relevant district plans.</p>	<p>Submissions on Proposed RPS Change 1 have been received and hearings are underway.</p>
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	<ul style="list-style-type: none"> the modelled mean annual exceedance frequency of the 2-year Average Recurrence Interval (ARI) so-called 'channel forming' (or 'bankfull') flow for the point where the fully developed area discharges to a stream must not exceed the mean annual exceedance frequency modelled for the same site and flow event arising from the area in an undeveloped (pastoral) state. <p>For brownfield and infill development:</p> <ul style="list-style-type: none"> the modelled mean annual runoff volume generated by the fully developed area must, when compared to the mean annual runoff volume modelled for the site prior to the brownfield or infill development, be reduced as far as practicable towards the mean annual runoff volume modelled for the site in an undeveloped state the modelled mean annual exceedance frequency of the 2-year ARI so-called 'channel forming' (or 'bankfull') flow for the point where the fully developed area discharges to a stream, or stormwater network, shall be reduced as far as practicable towards the mean annual exceedance frequency modelled for the same site and flow event in an undeveloped state. (See also implementation notes, below.) <p>Implementation notes for Recommendation 30</p> <ul style="list-style-type: none"> Potential developers will be required to demonstrate compliance with the above hydrological limits through the process of obtaining resource consent. The policy and rule framework will include a permitted activity threshold for small brownfield and infill developments, above which a consent pathway is required to demonstrate compliance with the hydrological limits. The permitted activity provision will include conditions requiring prescriptive, demonstrable minimum standards of practice to be met for small activities to be permitted. Guidance will be provided on acceptable models for developers to use in their consent application to demonstrate compliance with limits. This will include guidance on acceptable assumptions around the meaning of 'undeveloped state'. The same model must be used to assess the pre-, post- and undeveloped state for a given development application, in order to provide a robust assessment against the limits. For brownfield and infill developments, the practicability of the proposed reductions in mean annual runoff volume and mean annual exceedance frequency must be justified in the consent application for the proposed development. 			
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31	Greater Wellington amends the policy and rule framework in the PNRP to manage and progressively improve stormwater discharges to achieve the freshwater and coastal water objectives, limits and targets for Te Awarua-o-Porirua. In developing the amended framework Greater Wellington must:			No current update
31.1	<ul style="list-style-type: none"> tailor the framework to the different scales and types of stormwater discharges such as for individual properties, state highways and local authority stormwater networks 	Fully implemented	The tailored framework was implemented through the decisions of the PNRP.	Addressed in PC1, notified 30 October 2023
31.2	<ul style="list-style-type: none"> include a more stringent rule activity status for stormwater discharges that discharge into waterbodies where the current water quality is worse than the limit or target compared to those catchments where current water quality is better than the limit for a respective contaminant include requirements for resource consent applications and stormwater management strategies to demonstrate how they will meet the freshwater and coastal water objectives, limits and targets in this WIP, including a staged approach to meet progressively reducing limits 	Other – NEW <i>(was NRP Plan Change by 2024, June Report)</i>	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023 Noting that a more stringent rule activity status was not included in PC1. Stormwater discharges from networks are managed through global resource consents to achieve a reduction commensurate with the improvement required by the coastal water objectives and freshwater target attribute states. If the stormwater management strategy does not include a programme of works to achieve this reduction, the resource consent application must be assessed under a more stringent rule activity status. This was considered to be a more appropriate response than whether the receiving waterbody met the limit. There is no intention to do a future plan change to implement this recommendation.
31.3	<ul style="list-style-type: none"> investigate the potential to increase the alignment of the resource consent requirements with the service planning function undertaken by Wellington Water include policy direction to target 'priority' areas in both freshwater and coastal environments by prioritising improvements in the stormwater network. 	Currently being implemented	NB relates to bullet points 3 and 5. Bullet 3 is underway by Wellington Water who are requesting the amount of funding needed to deliver the stormwater outcomes required by the Proposed Natural Resources Plan (PNRP). Bullet 5 is already in Schedule N of Proposed Natural Resources Plan but potentially there will be amendments to align with the new limits framework.	Addressed in PC1, notified 30 October 2023
32	Greater Wellington, PCC, WCC and Wellington Water identify opportunities and investigate methods for incentivising stormwater mitigations within the existing urban footprint and maximise the opportunities provided by infill and brownfields redevelopments. This could include:			Supported by PC1, notified 30 October 2023 PC1 includes more lenient activity status rules for brownfield redevelopments.
32.1	<ul style="list-style-type: none"> identifying potential locations for stormwater mitigations providing public investment into upgrading existing stormwater infrastructure providing incentives to treat stormwater from the wider stormwater network within brownfield development sites 	Currently being implemented	Implementation is through the development of the Stormwater Management Strategy by Wellington Water, required by the Stage 2 global stormwater consent.	No current update

32.2	<ul style="list-style-type: none"> identifying potential brownfield redevelopment areas and supporting master planning at the outset to integrate water management with other development drivers exploring and promoting public-private partnerships and funding models to encourage redevelopment of brownfield sites. 	To be commissioned by deliverables	<p>New deliverable name: Incentivising stormwater mitigations in brownfield areas Porirua City Council led.</p> <p>Workshop with documented agreements. It needs to include an agreed process for how stormwater mitigations would be incentivised.</p>	No current update
33	<p>Greater Wellington, PCC, WCC and Wellington Water investigate and implement options to progressively upgrade or replace high zinc and copper-yielding building materials from existing urban areas. This may include:</p> <ul style="list-style-type: none"> developing and implementing an incentive scheme to paint or replace large-scale high zinc-yielding industrial and commercial roofs identifying and targeting high contaminant contributing areas prioritising catchments that contribute to the hotspot areas of degradation. 	Fully implemented	<p>In Porirua City Council District Plan to use low zinc and copper material in new builds and replacements.</p> <p>Bullet 2 will also be addressed through the National Objectives Framework (NOF) process as part of implementing the National Policy Statement for Freshwater Management.</p>	No current update
34	Greater Wellington advocates to central government that it initiate change at a national level to restrict the use of high zinc- and copper-yielding building materials.	Currently being implemented	This recommendation is being managed by Greater Wellington as part of a wider work programme of zinc and copper related recommendations. It includes liaising with other Councils nationally with similar concerns and jointly engaging with Ministry for the Environment.	<p>Supported by PC1, notified 30 October 2023</p> <p>PC1 includes a permitted activity condition that requires all new building materials associated with the development shall not include exposed zinc (including galvanised steel) or copper roof, cladding and spouting materials.</p>
35	PCC, WCC and Wellington Water work together in high-risk areas to increase and prioritise regular street sweeping and sump clearance and investigate other opportunities to capture and clear contaminants from stormwater drains.	Currently being implemented	This is a measure being proposed in Wellington Water's draft Stormwater Management Strategy. It will be implemented when the stormwater consent is granted.	No current update
36	Greater Wellington, PCC, WCC, Wellington Water and relevant industry groups develop and implement a pollution prevention programme. This will be outlined, delivered and monitored through various mechanisms, including the Harbour Strategy. The programme must:			<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes a method that requires Greater Wellington to develop and deliver a pollution prevention programmes.</p>
36.1	<ul style="list-style-type: none"> raise the awareness of the public about what they can do to reduce their impacts on harbour and stream health 	Currently being implemented	<p>Relates to first bullet point.</p> <p>Barriers removed through PNRP hearings have reduced regulation in terms of discharging hydrocarbons.</p> <p>Periodic communications campaigns have been run including by Greater Wellington e.g., save the drain for</p>	No current update

			<p>the rain which are implementing some of the bullets and are ongoing.</p> <p>Porirua City Council has just completed a communications strategy, which is now being implemented, for reducing impacts on the harbour and streams. This includes working with Wellington City Council and Sustainable Coastlines.</p> <p>Need to check with Wellington City Council about what they're currently doing.</p>	
36.2	<ul style="list-style-type: none"> promote and incentivise industry good management practice targeting high-risk land-use activities that contribute relatively high levels of contamination identify and target priority areas for contaminant reduction based on the identification of catchments that contribute to localised hotspot areas investigate opportunities to enable change by streamlining regulatory processes and removing barriers to businesses and industry initiating change work with specific industries/suppliers to increase understanding around risks from exterior chemical cleaning products with an aim to reduce usage through point of sale warnings and changes in product care advice. 	To be commissioned by deliverables	<p>New deliverable name: Reinstate Take Charge Programme</p> <p>Relates to second, fourth and fifth bullet point.</p> <p>See recommendation 3.3 for details.</p>	<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes policies and rules that manage the effects from high risk industrial or trade premises.</p>
37	Greater Wellington investigates options to revise the controls on chemical cleaning products (such as '30 seconds' type cleaning products) and advocates to central government for better control of these products at a national level.	To be commissioned by deliverables	<p>New deliverable name: Reinstate Take Charge Programme</p> <p>See recommendation 3.3 for details.</p>	<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes a rule that prohibits the discharge of chemical cleaning products to water, including via a stormwater network</p>
38	Greater Wellington advocates to central government that high zinc and copper yielding materials in vehicles be progressively replaced with lower yielding alternatives.	Currently being implemented	This recommendation is being managed by Greater Wellington as part of a wider work programme of zinc and copper related recommendations. It includes liaising with other Councils nationally with similar concerns and jointly engaging with Ministry for the Environment to seek abolition of copper brake pads.	<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 requires the development of Freshwater Action Plans. One of the necessary actions to be included in the Freshwater Action Plan(s) for Te Awarua-o-Porirua Whaitua to meet the dissolved copper and zinc attributes is to work with the Ministers of the Environment and Transport, Waka Kotahi NZ Transport Agency and the territorial authorities to promote source control for copper from vehicles.</p>
39	Greater Wellington, PCC and WCC raise the awareness of the public of the effects of copper brake pads and actively promote low-copper/copper-free alternatives.	To be commissioned by deliverables	New deliverable name: Reinstate Take Charge Programme	No current update

			See recommendation 3.3 for details.	
40	<p>Greater Wellington amends the policy and rule framework in the Proposed Natural Resources Plan (PNRP) as necessary to manage and progressively improve wastewater discharges in Te Awarua-o-Porirua Whaitua to achieve the freshwater and coastal water objectives, limits and targets in this WIP. The policy and rule framework must:</p> <ul style="list-style-type: none"> require resource consent applications and wastewater management strategies to demonstrate how they will meet the freshwater and coastal water objectives, limits and targets in this WIP, including through a staged approach recognise and address the complexities of the wastewater network, including issues with capacity, overflows, leaks, and cross connections require assessment of the progress towards achieving the <i>E.coli</i> and enterococci objectives and amendments of programmes and strategies if expected progress is not achieved acknowledge the interrelationship of stormwater and wastewater. 	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
41				
41.1	<p>Greater Wellington amends the policy and rule framework in the PNRP as necessary to ensure that new urban development and redevelopment do not exacerbate issues with the wastewater network by providing adequate on-site storage, including requirements for applicants to demonstrate how wastewater generated by development will be managed.</p>	Other – NEW <i>(was NRP Plan Change by 2024, June Report)</i>	Being managed by Greater Wellington through its regulatory programmes of work.	Not addressed by PC1. This was considered during the development of PC1 and was not progressed as a centralised management of wastewater (i.e. through WWL) is currently the best option for managing the capacity of the network and its effects on freshwater.
41.2	<p>PCC and WCC amend the relevant district plans as necessary to ensure that new urban development and redevelopment do not exacerbate issues with the wastewater network by providing adequate on-site storage, including requirements for applicants to demonstrate how wastewater generated by development will be managed.</p>	RPS	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p> <p>This has been partly implemented through notification of the Proposed Regional Policy Statement (RPS) Change 1 in August 2022. The Proposed RPS requires district plans to assess the adequacy of wastewater infrastructure when considering new development.</p> <p>Further implementation of this recommendation will be through changes to the relevant district plans.</p>	Submissions on Proposed RPS Change 1 have been received and hearings are underway.

42	<p>Wellington Water develops and implements wastewater programmes, strategies and/or plans to improve the wastewater network to achieve the freshwater and coastal water objectives, limits and targets in this WIP. The development and implementation of these programmes, strategies and plans must:</p> <ul style="list-style-type: none"> clearly set out the steps, actions and milestones to deliver the necessary improvements inform the investment strategies of the 2021-2031 Long Term Plans for Greater Wellington, PCC and WCC assess all wastewater management options and identify priority areas for actions provide an integrated assessment and management approach for all forms of wastewater discharges from the network and the associated effects on freshwater and coastal receiving environments address both dry weather wastewater discharges and wastewater network overflows adopt an integrated catchment approach that recognises the interconnected nature of the wastewater network and the receiving environments for these discharges align funding and investment with Greater Wellington, PCC and WCC for these actions and improvements to occur. 	Currently being implemented	<p>Wellington Water led.</p> <p>NB also supported through Proposed Natural Resources Plan.</p>	<p>Supported by PC1, notified 30 October 2023.</p> <p>PC1 includes policies and rules that require the development of a Wastewater Network Catchment Improvement Strategy.</p>
43	<p>Greater Wellington, WCC and PCC work together to integrate and align regional plans, district plans and infrastructure service plans to achieve the freshwater and coastal water objectives, limits and targets in this WIP.</p>	RPS	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p> <p>This has been partly implemented through notification of the Proposed Regional Policy Statement (RPS) Change 1 in August 2022. The Proposed RPS requires regional and district plans to achieve the same outcomes for freshwater and coastal water.</p>	<p>Submissions on Proposed RPS Change 1 have been received and hearings are underway.</p>
44	<p>PCC and WCC align their policies on the licencing, monitoring and enforcement of trade waste discharges into the wastewater network.</p>	Fully implemented	<p>Porirua City Council has a revised bylaw which corresponds with the Wellington City Council bylaw. Have also changed monitoring and licencing and now requires greater monitoring from specific contaminants.</p>	No current update
45	<p>PCC, WCC and Wellington Water work together to identify sub-catchments within the Whaitua that have the most widespread issues with private laterals and cross connections, and prioritise these sub-catchments for improvement.</p>	Fully implemented	<p>Porirua City Council have introduced a new bylaw and have two teams doing tests for leaks and getting these fixed through the Infiltration and Inflow (I&I) programme. Porirua City Council are aware that Wellington Water have also funded the I&I programme.</p>	No current update

46	<p>PCC, WCC and Wellington Water initiate a comprehensive work programme to identify and address issues with the private wastewater network within the Whaitua, including:</p> <ul style="list-style-type: none"> education and guidance for home and business-owners in relation to leaking laterals, cross-connections and the consequences of non-compliance promotion of redevelopment as an opportunity to address existing cross-connections and leaking laterals financial mechanisms and incentives, such as rates relief or targeted rates in priority sub-catchments, to assist property owners to get their pipes checked and fixed investigation and implementation of the best regulatory methods to address cross connections, e.g. through a by-law that requires the pipes to be checked and certified at the time of sale or through a warrant of fitness scheme. 	Fully implemented	<p>Fully implemented already by Porirua City Council, through:</p> <ul style="list-style-type: none"> Know Your Pipes education programme (how to check cross connections, inflows, etc). Redevelopment – building and assurance team look for cross connections etc at time of building permit. Re: financial mechanisms, PCC have met with DIA with the intention of enabling targeted rates – this was rejected and has been exhausted as an option, but further work will progressed if possible. Improved bylaw for laterals and made enforceable. 	No current update
47	<p>Greater Wellington, PCC, WCC and Wellington Water target redevelopment and regeneration projects, such as those led by Housing New Zealand, as an opportunity to address existing wastewater and stormwater network issues through education, advocacy and regulation.</p>	Fully implemented	<p>Regulatory side of this recommendation is largely in place now. Stormwater consents for over 3000m².</p> <p>Eastern Porirua Development – conversations have taken place between Greater Wellington and Kāinga Ora about resource consents in relation to this. There is also a proposal for a community stormwater system at Cannons Creek, as well as replacing the wastewater pipe which goes along Kenepuru Stream – both of which will improve the water quality.</p> <p>Overtaken by current NRP plan change process.</p>	No current update
48	<p>PCC and WCC building compliance officers undertake proactive, consistent compliance monitoring of connections in new builds and renovations to ensure there are no cross connections, including a system for recording which properties have been checked and assessed and when issues have been resolved.</p>	Currently being implemented	<p>Porirua City Council and Wellington City Council led.</p> <p>Porirua City Council and Wellington City Council building compliance officers undertake proactive, consistent compliance monitoring of connections in new builds and renovations to ensure there are no cross connections, including a system for recording which properties have been checked and assessed and when issues have been resolved.</p>	No current update
49	<p>Greater Wellington amends the policy and rule framework in the Proposed Natural Resources Plan (PNRP) to set discharge standards for earthwork activities that require consent in order to achieve the sediment targets and limits in the WIP.</p>	NRP Plan Change by 2024	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p>	Addressed by PC1, notified 30 October 2023.
50	<p>WCC and PCC have consistent bylaws and guidance for silt and sediment control within the Whaitua. Consideration must be given to the effects of climate change to ensure control measures</p>	Currently being implemented	<p>Porirua City Council and Wellington City Council led</p> <p>Porirua City Council have implemented a new bylaw and increased enforcement, which includes adaptation for</p>	No current update

	are designed to meet increasing intensity and duration of rainfall events.		Climate Change as much as possible. Liaising with Wellington City Council who would implement similar steps. Nb requires discussion with Wellington City Council.	
51	Greater Wellington reviews and updates publications, including Small earthworks – Erosion and sediment control for small sites (2006), and Erosion and sediment control guidelines (2000), to ensure the methods and principles they set out reflect current good practice. Amendments may include increasing the design standards to deal with more significant but less frequent rainfall events.	Fully implemented	The named guidelines were updated in 2021.	No current update
52	Greater Wellington, WCC and PCC develop a compliance programme to ensure good practice in relation to silt and sediment control is followed for all earthworks, particularly in relation to permitted activities. This should also include a required frequency of cleanout and monitoring of retention basins to reduce the risks of retention basins being overwhelmed.	Fully implemented	Intent was clarified – the recommendation is about co-ordination between district councils and Greater Wellington around small-scale sites to ensure integration and consistency. Greater Wellington has good practice guidelines for small sites for sediment and erosion control. Greater Wellington doesn't do proactive compliance on permitted activities as often we don't know about these sites. Greater Wellington has a compliance programme in relation to larger, consented earthworks sites. Porirua City Council has implemented a new bylaw and increased enforcement on earthworks sites. Porirua City Council has introduced a silt and sediment education programme. Porirua City Council is doing compliance on small scale permitted sites.	No current update
53	Greater Wellington, in conjunction with WCC and PCC, develops an education programme to ensure that good practice for silt and sediment control is understood by those carrying out earthworks.	Fully implemented	Porirua City Council led Silt and Sediment education programme is in place.	No current update
54	Greater Wellington works with the forestry sector to identify potential barriers and risks to good practice in reducing sediment from forestry operations and works with the industry to overcome the risks and barriers.	Currently being implemented	Greater Wellington led New compliance roles are being established which will increase GW's capacity and resourcing to perform this.	GW has commenced a Forestry Sector Engagement and Behaviour Change Plan, as detailed in the catchment highlights section
55	Upon receiving notice under the NESPF of earthworks, forestry quarrying or harvesting in the Te Awarua-o-Porirua Whaitua, Greater Wellington requests a copy of the Forestry Earthworks Management Plan and Harvest Plan or Quarry Erosion and Sediment Management Plan and actively monitors compliance to ensure sediment discharges to waterbodies are minimised.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	PC1 requires a Controlled activity resource consent for commercial forestry, with certified erosion and sediment management plans. Commercial forestry will be prohibited beyond the current crop on highest erosion risk land identified on plan maps.

56	Greater Wellington provides sufficient resources to deliver consistent advice on forestry good practice and compliance, both within the Whaitua and across the region.	Currently being implemented	Greater Wellington led. New compliance roles that are planned will achieve this recommendation.	GW has commenced a Forestry Sector Engagement and Behaviour Change Plan, as detailed in the catchment highlights section
57	Greater Wellington develops a charging policy under the NESPF for the monitoring of permitted activities.	To be commissioned by deliverables	New deliverable name: Policy for NES-PF charging for monitoring of permitted activities. Greater Wellington led. An addition to Greater Wellington fees and charging policy (Currently valid for 2021-24 – to be incorporated in next review). Consultation with the forestry sector will be needed in the development.	No current update
58	Greater Wellington undertakes further work to determine priority areas for reducing sediment in the Whaitua’s streams and harbour. Once priority areas have been identified, Greater Wellington should work with landowners to develop environment plans that set out how sediment losses will be reduced at a farm/property scale.	NRP Plan Change by 2024	NRP Plan Change 1 will introduce provisions to reduce sediment loads in rivers and the harbour. The plan change work includes identifying priority areas for sediment reduction actions, including through regulatory farm plans for all farms >20ha of pasture, and action plans.	Addressed in PC1, notified 30 October 2023. Noting that PC1 identifies highest erosion risk land for pasture, woody vegetation and plantation forestry and high erosion risk land for pasture within each whaitua. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. GW will assist landowners to support revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land. Commercial forestry will be prohibited beyond the current crop on highest erosion risk land identified on plan maps. The Pouewe Project phase 1 completed to identify highly erodible land. Yet to commence Phase 2 – co-designing action plans with Ngāti Toa and PCC.
59	Greater Wellington develops a regulatory framework in the Proposed Natural Resources Plan (PNRP) to: <ul style="list-style-type: none"> undertake farm/property-scale mapping to identify erosion-prone land in priority areas identified in Recommendation 58 require land owners to develop an environment plan setting out how sediment losses will be reduced where erosion-prone land is identified above a certain threshold (e.g. more than specified number of hectares) require that, where identified erosion-prone land is vegetated in scrub, shrubs and/or non-plantation forestry, that vegetation should not be cleared for uses that are likely to increase sediment loss. 	NRP Plan Change by 2024	NRP Plan Change 1 will introduce provisions to reduce sediment loads in rivers and the harbour. The plan change work includes identifying priority areas for sediment reduction actions, including through regulatory farm plans for all farms >20ha of pasture, and action plans. It also includes controls on vegetation removal.	Addressed in PC1, notified 30 October 2023. See response to Recommendation 58.

60	Greater Wellington aligns its programmes, planning, funding and support of sediment mitigation activities, including both riparian restoration and reductions in hill-slope and landslide erosion, within the identified priority areas.	Currently being implemented	Greater Wellington already doing although could be improved further through catchment plans. Funding not currently fully aligned. Porirua City Council have already implemented riparian restoration. NRP Plan Change 1 will also introduce provisions to reduce sediment loads in rivers and the harbour. The plan change work includes identifying priority areas for sediment reduction actions, including through regulatory farm plans for all farms >20ha of pasture, and action plans to address erosion and land restoration.	Supported by PC1, notified 30 October 2023. See response to Recommendation 58.
61	Greater Wellington provides sufficient resources in the Whaitua to deliver land management advice, provide expert input into environment plans and to deliver on the work programmes identified.	Currently being implemented	Greater Wellington led. New compliance roles are being established which will increase GW's capacity and resourcing around forestry. Porirua City Council have resources in place doing a similar role.	Supported by PC1, notified 30 October 2023. See response to Recommendation 58.
62	Greater Wellington prioritises opportunities to mitigate sediment loss from erosion-prone lands in council-administered regional parks within the Whaitua.	Currently being implemented	Greater Wellington led. Ongoing before and after the WIP was completed. Being addressed through restoration plans in regional parks. NRP Plan Change 1 will identify priority areas for sediment reduction, which may include regional parks. Interventions to reduce sediment may be required by Plan provisions supported by action plans.	No current update
63	Greater Wellington amends the PNRP policy and rule framework to: <ul style="list-style-type: none"> • map low-slope land areas for livestock exclusion using finer scale land-slope criteria that also take into account the average land slope within a specified distance from a water body • require livestock exclusion from water bodies with an active bed of greater than 1m in width within the mapped low-slope areas • apply to livestock as defined in <i>Section 2 (Interpretation)</i> of the PNRP. 	Fully implemented	Implemented via the Resource Management Act Stock Exclusion Regulations.	No current update

64	Greater Wellington works with rural landowners to promote and implement good management practices, including integrated farm environment planning.	Currently being implemented	Greater Wellington led. Ongoing work is occurring. Currently doing farm plans which will increase when these become mandatory under the National Environmental Standards for Freshwater.	Supported by PC1, notified 30 October 2023. PC1 includes: Certified farm environment plans addressing nutrient discharge risk and erosion risk treatment will be required for farms >20ha. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. Farms between 4 and 20ha will register with GW, and maintain current farming intensity. GW will assist landowners to support revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land. A method that requires the development of Freshwater Action Plan(s) for Te Awarua-o-Porirua Whaitua and where required will include: <ul style="list-style-type: none"> • development and implementation of a farm environment plan programme to support riparian management and stock exclusion • a programme or programmes to actively support the revegetation of, and sediment management on, highest erosion risk land (plantation forestry), highest erosion risk land (pasture) and high erosion risk land (pasture)
65	Greater Wellington and PCC develop and implement a proactive compliance monitoring programme for on-site wastewater systems in the Whaitua to ensure they comply with the rules in the PNRP and PCC wastewater by-law.	Currently being implemented	Porirua City Council led. Porirua City Council completed inspection and compliance programme in 2021. This found all operating systems were compliant (some discharges remaining from older decommissioned/replaced systems).	Supported by PC1, notified 30 October 2023. PC1 includes a method that requires the development of Freshwater Action Plan(s) for Te Awarua-o-Porirua Whaitua and where required will include a partnered programme with territorial authorities to review and enforce on-site domestic wastewater treatment system discharges affecting sites of recreation in any significant contact recreation freshwater body.
66	PCC prioritises initial compliance monitoring efforts on unlicensed on-site wastewater systems and takes appropriate enforcement action as necessary to ensure all on-site wastewater systems in the Whaitua are licensed and compliant.	Currently being implemented	Porirua City Council led.	No current update
67	Greater Wellington and PCC provide information and raise the awareness of property owners about the importance of maintaining on-site wastewater systems and how to identify and address performance issues.	Currently being implemented	Porirua City Council led.	No current update
68	Greater Wellington amends the rule and the associated policy framework in the Proposed Natural Resources Plan (PNRP) to take water from a stream in the Te Awarua-o-Porirua Whaitua so that it incorporates the limits listed in Tables 12 and 13. Amendments to the rule and policy framework should also	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023

	ensure that no more than 30% of MALF (of the tributary) can be taken from a tributary within the WMUs listed in Tables 12 and 13.			
69	Greater Wellington removes the permitted activity rule in the PNRP that allows water to be taken from a waterbody in the Te Awarua-o-Porirua Whaitua. Note: water for reasonable domestic use and animal drinking water is authorised under section 14(3)(b) of the RMA.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023 Noting that the permitted water take rule was not removed but a new Te Awarua-o-Porirua Whaitua specific rule is proposed and is significantly more stringent.
70	Greater Wellington amends the PNRP policy and rule framework to allow for 'one off' incidental uses of water in the Te Awarua-o-Porirua Whaitua (such as for water required for farm-spraying operations). The rate of water taken must be no greater than 2.5L/s, the volume no greater than 5,000 litres per day and no more than 10,000 litres in any one calendar month. Water must not be taken when the affected waterway is below the minimum flow. Users must keep records of the amount taken.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	GW's new He Kakano – live spatial web-based viewer for Natural Resources Plan Water Allocations by Catchments Addressed in PC1, notified 30 October 2023
71	Greater Wellington defines the meaning of domestic and animal drinking water use in the PNRP, using narrative and (as appropriate) numbers (volume/day), for example: <ul style="list-style-type: none"> water for an individual's reasonable domestic needs is the amount sufficient to provide for hygiene, sanitary and domestic requirements. Consideration should be given to how vegetable garden watering could be allowed for while lawn or pasture irrigation may be beyond the scope of reasonable domestic needs water for reasonable needs of a person's animals for drinking is the amount sufficient to provide for the health and welfare of animals. 	Other – NEW <i>(was NRP Plan Change by 2024, June Report)</i>	Being managed by Greater Wellington through its regulatory programmes of work.	Not included in PC1. Will inform a future plan change.
72	Greater Wellington investigates mechanisms to incentivise or encourage the installation and use of roof-collected rainwater (tanks) for domestic and non-domestic uses.	To be commissioned by deliverables	New deliverable name: Rainwater Storage Options paper. Greater Wellington led. Policy paper capturing options as outlined in recommendation 71.	Acknowledged in PC1, notified 30 October 2023. PC1 includes a method that states Greater Wellington will partner with WWL to investigate options to reduce the hydrological impacts on freshwater bodies of stormwater capture and discharge, including through incentivising and supporting the retrofitting of rainwater tanks at property or catchment scale
73	Greater Wellington collects better information on water take and use volumes, including for takes under 14(3)(b) of the RMA, in order to provide for more accurate and transparent accounting of water use, better management of the Whaitua's waterways, and to ensure the requirements of the NPSFM are met.	To be commissioned by deliverables	New deliverable name: Whaitua Monitoring Plan encompassing each FMU. Greater Wellington led.	No current update

			See recommendation 19.1 for details.	
74	Greater Wellington amends the PNRP to ensure all takes requiring resource consent within the Te Awarua-o-Porirua Whaitua require metering to ensure accurate and reliable records of abstractions are maintained.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1, notified 30 October 2023. Noting it is not required by the rules but is required through policy.
75	Greater Wellington develops an information and education programme to ensure land owners affected by the removal of the permitted activity rule are aware of the new resource consent requirements and provided with assistance with the resource consent process.	To be commissioned by deliverables	New deliverable name: Permitted activity changes comms plan and implementation. Greater Wellington led. Communications plan and implementation of deliverables/activities specified within it. This recommendation will follow the implementation of recommendation 69 to remove the permitted activity rule.	No current update

He Tauākī - Ngāti Toa Statement – Recommendations

As kaitiaki of Te Awarua-o-Porirua and the broader whaitua, the following are a series of statements and recommendations from the Ngāti Toa Statement document that capture Ngāti Toa’s current reality and aspirations for the future. At this stage these have not been given an implementation category and further discussion and analysis of these is required with Ngāti Toa.

Stat/Rec #	Statement/Recommendation wording
1	Ngāti Toa acknowledges the important work of Te Awarua-o-Porirua Whaitua Committee and agree in principal to the values, findings, analysis encompassed by its work and the general direction of change.
2	Ngāti Toa believes that agencies must work proactively to fulfil their Tiriti obligations to Ngāti Toa, and we expect to see opportunities for the co-design of policy and processes as well as co-management of key assets.
3	The mana and mauri of all of our waterways and associated ecosystems within the Ngāti Toa Porirua rohe must be returned to a state of health, enabling our iwi to carry out its cultural responsibilities and obligations to its people, manuhiri and future generations.
4	Ngāti Toa must be able to exercise its customary practices, including the harvesting of food and water, without fear of harm.
5	Greater Wellington Regional Council must support the application of matauranga Māori methods and knowledge to monitoring undertaken by the Council to measure the health of the waters of Te Awarua-o-Porirua.
6	Ngāti Toa’s freshwater rights must be recognised by Greater Wellington Regional Council when considering the allocation of fresh water.

7	<p>Greater Wellington Regional Council, Porirua City Council, Wellington City Council and Wellington Water, alongside Ngāti Toa and the community, should collectively establish a Mai Uta Ki Tai (mountains to sea) Work Programme for implementation. The Mai Uta Ki Tai Work Programme could include:</p> <ol style="list-style-type: none"> a. an 'Eco-System Enhancement Action Plan' that identifies priority actions for change and an ongoing monitoring and reporting schedule b. a five-year 'E.coli Action Plan' to address the contamination issues with targets and ongoing monitoring regime c. a twenty-year 'Water Network Action Plan' to identify and prioritise actions to address wastewater, stormwater and freshwater issues across the rohe, including the issue of wrongly connected pipes d. amendments to the Natural Resources Plan should be made to enable more use of control levers for urban development to better manage the impacts on water quality, including of stormwater discharges and the use of building materials containing high levels of zinc and copper e. a programme to re-connect people with their water bodies. This programme should include education about pollution prevention and community programmes. <p>The work programme must include background on Ngāti Toa's historical association with Te Awarua-o-Porirua and the wider catchment and a framework for understanding ecological health and wellbeing from a Te Ao Māori perspective</p>
8	<p>Ngāti Toa would like to see the implementation of innovative practices for stormwater and wastewater management. We also expect urgent measures to be taken to prevent flooding and stormwater/wastewater overflows affecting our kāinga at Takapuwahia and Hongōka.</p>
9	<p>We support and encourage alternative forms of transport in and around our waterways to minimise degradation. We encourage whānau to walk and cycle and to enjoy recreational activities with limited environmental impacts, such as fishing and waka ama.</p>
10	<p>More collaboration across the councils, Wellington Water, and central government agencies such as New Zealand Transport Agency and Housing New Zealand is necessary and will provide better coherency across Mai Uta Ki Tai projects, enabling Ngāti Toa to better prioritise projects and capabilities from across the iwi to contribute to this important work</p>

Whaitua te Whanganui-a-Tara Whaitua Implementation Programme Progress Report November 2023

This report provides an update on progress with implementing the recommendations in the Te Whanganui-a-Tara Whaitua Implementation Programme (WIP) and Te Mahere Wai o te Kāhui Taiao.

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Te Whanganui-a-Tara Catchment Highlights

Native forest restoration in Regional Parks

There are multiple strands of work in our regional parks that indirectly contribute to improving waterway health and restoring Te Mana o te Wai as sought by the Whaitua programme. These include pest plant and animal management, riparian plantings, wetland restoration, removing grazing stock, supporting mana whenua and community conservation work, and enhanced monitoring.

The Recloaking Papatūānuku (Parks Restoration Programme), is focused on restoring the formerly grazed areas of our regional parks which are in the poorest states of health from the grazing legacy. Recloaking Papatūānuku includes wetland and forest restoration plantings within Te Whanganui-a-Tara at Kaitoke and Baring Head/Ōrua-pouanui (East Harbour Regional Park).

Kaitoke Regional Park

A key focus at Kaitoke Regional Park is to retire grazing land and establish early successional native trees. Availability of seed source near-by is likely to see establishment of older growth forest more quickly than might happen in other parks.

More than 60,000 native trees have been planted in the 2023 winter which will support the improvement of biodiversity and water quality in the upper catchment.



Figure 1. Kaitoke Park

Baring Head

Attachment 3 to Report 23.569

At Baring Head, the focus is on rare species and vegetation communities of the coastal platform and escarpment. An integrated catchment management approach is being applied to protect and enhance the health of the lakes and their surrounding wetlands and future forests.

Mana whenua (through the Hem of Remutaka programme) and the community are engaged in growing plants and planting across the area where contractors planted 15,000 native trees in the winter of 2023. There is an ongoing priority to support the actions of mana whenua and the community as kaitiaki in protecting and restoring this area and increasing the level and rate of restoration planting.

This restoration mahi will support the improvement of biodiversity and water quality alongside the delivery of broader outcomes for mana whenua and community.

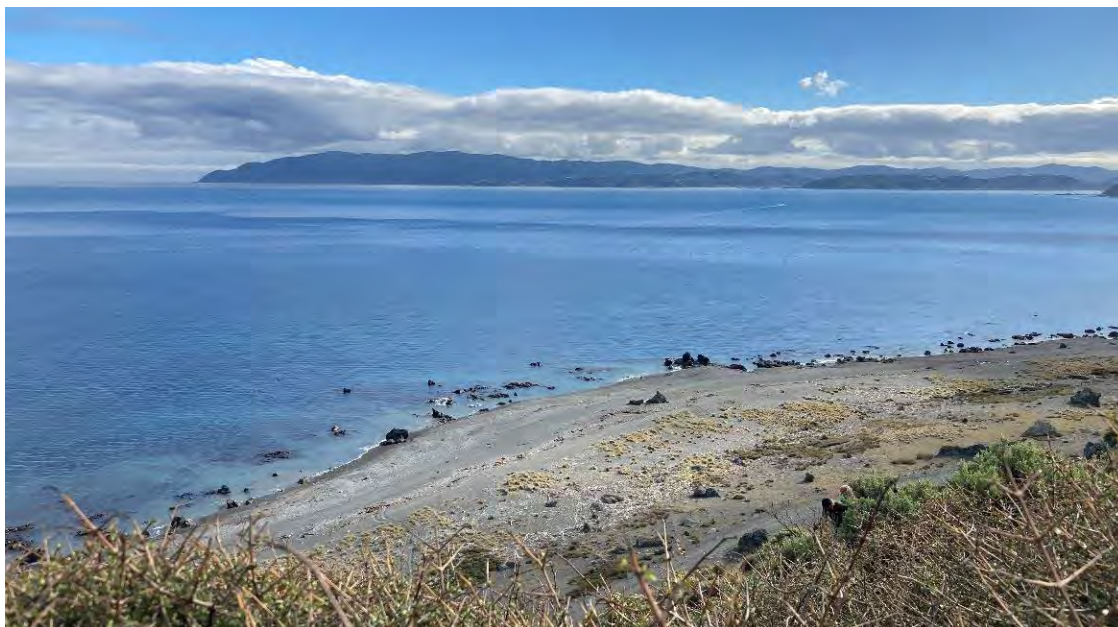


Figure 2. Baring Head

Poets Park

A key opportunity for improving the health of waterways in Te Whanganui-a-Tara is through the treatment of stormwater before it reaches waterways. The WIP and Te Mahere Wai contain recommendations to filter run-off wherever there is the opportunity to do so, and to encourage more developments like the recent work done at Poets Park along Te Awa Kairangi.

Although the primary driver for the development at Poets Park was to improve a recreational area close to two popular swimming holes, there are clear benefits to water quality through the introduction of wetted areas (Figure x) which reduce contaminants from SH2 reaching Te Awa Kairangi.

Attachment 3 to Report 23.569

Prior to the development, six stormwater drains discharged contaminated water over grass into Te Awa Kairangi¹. This area has been developed into an ephemeral wetland to intercept and ‘treat’ through stripping out contaminants from the water before it reaches the river.



Figure 3. Before development of Poets Park



Figure 4. After development of Poets Park – plantings and wetted areas in foreground strip contaminants from urban, industrial areas and SH2 before reaching Te Awa Kairangi.

Regulatory implementation

Plan Change 1 to the Natural Resources Plan

¹ There are over 100 stormwater outlets between Te Marua and the mouth of the Te Awa Kairangi.

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Plan Change 1 to the Natural Resources Plan (Greater Wellington’s regional plan), notified on 30 October 2023, implements a number of the recommendations in the WIP (and Te Awarua-o-Porirua WIP) and Te Mahere Wai.

Plan Change 1 includes objectives and policies, rules and other methods to manage activities such as earthworks, stormwater discharges including from new urban development, wastewater discharges, and rural land use to achieve water quality and ecological health objectives within Whaitua Te Whanganui-a-Tara and Te Awarua-o-Porirua Whaitua.



Collaboration and partnerships

Since receiving the WIP and Te Mahere Wai in 2021, GW’s implementation has focused on regulatory changes, where most collaboration with partners has been on the Regional Policy Statement and Plan Change 1 to the Natural Resources Plan. Engagement on PC1 with Ngāti Toa Rangatira, for example, has been ongoing since August 2022, beginning with an overview of the whole plan change. At that time, Ngāti Toa Rangatira identified their priorities and provided input into the drafting of the wastewater and stormwater provisions. Ngāti Toa Rangatira were also directly involved in the drafting of the objectives (environmental outcomes) for the Te Awarua-o-Porirua Whaitua chapter.

Councillors and officers at the three city councils in Te Whanganui-a-Tara (Upper Hutt, Lower Hutt, Wellington) were active members of the whaitua process. Wellington Water was the key advisor on many topics, particularly the condition of and options for improving three waters infrastructure – drinking water, wastewater and stormwater – and how this would help achieve environmental objectives. Much of the opportunity to improve water quality in our urban centres relies on improvements to three waters management, which is funded by the cities. The costs are significant, meaning that a transition pathway is required – and this is recognised and provided in the WIP.

GW councillors and officers continue to connect with our partner agencies through a range of channels where our work regularly overlaps.

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Water Shortage Summit

On 11 September 2023, Wellington Water hosted a Summit attended by Mayors, Councillors and mana whenua from Wellington, the Hutt, Porirua and Kāpiti to discuss increasing risks of water shortages in the future, including this summer.

The primary concern raised at the summit was the amount of water drawn from the Te Awakairangi freshwater system lost through leaks in the water supply network (up to 44%).

The Whaitua Te Whanganui-a-Tara Committee's recommendations for addressing water supply issues were provided to the Summit attendees.

On the day, three key actions were recommended by Wellington Water:

- Continue with increased investment into finding and fixing leaks, managing water loss, and replacing old infrastructure.
- Investment in universal smart water meters across the metropolitan Wellington region.
- Build another storage lake.

These actions were also recommended in the Te Whanganui-a-Tara WIP.

On 24 September 2023, all of the Wellington region was placed on Water Restriction Level 1, where use of sprinklers and irrigation systems is only allowed on alternate days between 6-8am and 7-9pm. Upper Hutt is at Level 1 all year round.

Whaitua Te Whanganui-a-Tara Reference Group

As a result of the Whaitua Te Whanganui-a-Tara process, a reference group of former Committee members was established in August 2023. The focus this year (until June 2024) is to provide continuity with the Committee's earlier mahi, ensure the interpretation of the WIP recommendations is correct, and track progress with WIP implementation.

As noted, Plan Change 1 to the Natural Resources Plan implemented many of the Whaitua Committee's recommendations, so that has been the focus of their discussions to date. The Reference Group received the limited notification of PC1 and feedback from members was provided to GW prior to notification.

There is interest in the Reference Group evolving into a broader community-led structure to better enable catchment groups and other community initiatives to get involved in improvements to the region's waterways.

WIP and Te Mahere Wai reporting

In Te Whanganui-a-Tara, a higher proportion of the recommendations need work to be commissioned compared to other WIPs. This is because it was completed more recently, and the recent focus has been on regulatory implementation. There has also not been a subsequent Long-Term Plan process for funding to be allocated to implementation of recommendations as part of GW's business-as-usual work.

Where significant progress has been made since receiving the WIP and Te Mahere Wai is in the regulatory implementation of the recommendations. These are noted in the "Progress by Individual Recommendation" tables as "Addressed by PC1" or "Supported by PC1".

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Recommendations that are the responsibility of territorial authorities and Wellington Water are being addressed through District Plan Changes, Long Term Plans, and Wellington Water’s consents. This is reflected in the number of ‘Other’ recommendations that require assessment with these agencies. Hutt City Council have provided their response to the WIP recommendations, and we expect to include responses from Wellington City Council, Upper Hutt City Council and Wellington Water in future reports.

WIP recommendations

The table and pie chart below show progress towards implementation of the WIP. Many of the WIP recommendations require multiple agencies to work together, particularly to implement the urban water recommendations.

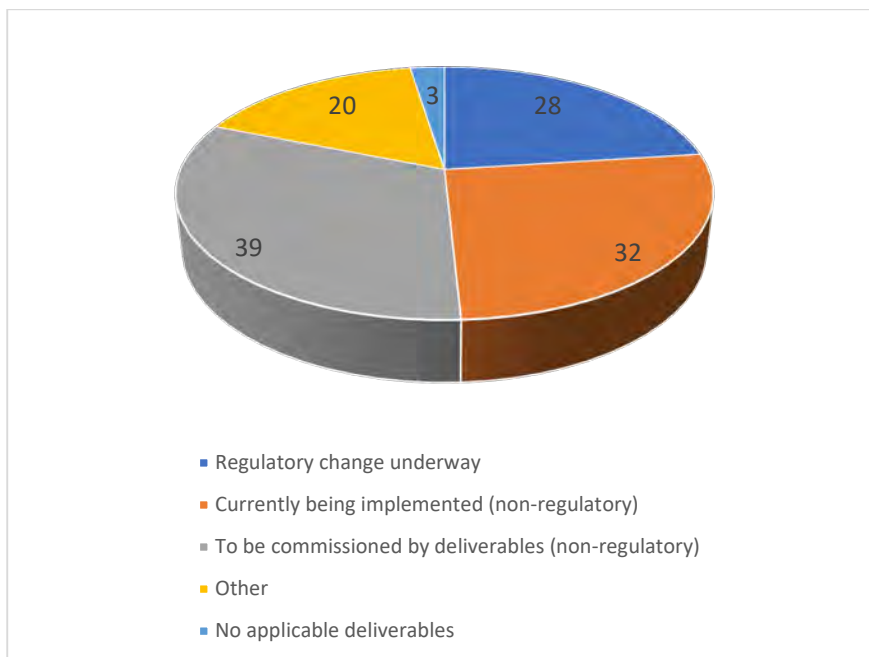
Changes in category since the June 2023 report:

- The “net” change to recommendation categories is in the table below; the detailed description of the changes is in the “progress by individual recommendation” table.
- Some recommendations which were previously labelled “To be commissioned” have been picked up in PC1 so have been re-categorised “Regulatory change underway”.
- Others that were “To be commissioned” or “Other” are now “Currently being implemented”.
- Other recommendations previously categorised “Regulatory change underway” will now be delivered through other mechanisms.

Implementation Category	Number of recommendations (number in brackets indicates change since June 2023)
Fully implemented	0
Regulatory change underway	28 (+4)
Currently being implemented (non-regulatory)	32 (+4)
To be commissioned by deliverables (non-regulatory)	39 (-7)
Other	20 (-1)
No applicable deliverables	3
Total	122

Note: The numbers in the table exceed the number of recommendations in the WIP as some recommendations have multiple sub-recommendations to be implemented through different mechanisms.

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Accessing the WIP

This report needs to read in conjunction with WIP and Te Mahere Wai which can be accessed here: [Greater Wellington Regional Council — Whaitua te Whanganui-a-Tara \(gw.govt.nz\)](https://www.gw.govt.nz/whaitua). These documents provide context to each recommendation.

Whaitua Te Whanganui-a-Tara - Progress by Individual Recommendation

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
1	Greater Wellington adds all 'first steps' attribute states (short term and generational) identified in the catchment chapters of the WIP into the PRNP as part of the 2022 and 2024 plan changes.	Natural Resources Plan (NRP), Plan Change by 2024	Being managed by Greater Wellington (GW) through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023
2	Greater Wellington works with Mana Whenua to complete Te Oranga Wai attributes for freshwater and coastal receiving environments for inclusion in the PNRP as part of the 2022 and 2024 plan changes.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Not addressed in PC1. Other - New deliverable to be commissioned.
3	Greater Wellington proactively communicates the WIP and Te Mahere Wai with stakeholders, community groups and partners through a variety of channels to ensure there is adequate awareness in our whaitua to support ongoing dialogue and accountability for implementation.	Currently being implemented	<p>GW led. Many activities have been undertaken:</p> <ul style="list-style-type: none"> • Launch event in November 2021 and recording made available on whaitua website. • Newsletter sent to online mailing list advising on completion of Whaitua Implementation Programme (WIP) and Te Mahere Wai (TMW). • Interactive catchment tool developed and made available on the whaitua webpage. • Marketing campaign promoted WIP, TMW and catchment tool from April-August 2022 through google ads, social media, radio, and newspapers. • Updates to meetings are being provided to other organisations as requested e.g., Sanctuary to Sea. <p>Further communications activities are planned, including activities related to the sharing of this progress report.</p>	<ul style="list-style-type: none"> • The WIP and TMW are highlighted by GW in submissions on other council plans as key guiding documents for planning decisions • GW liaises with other councils and Wellington Water on implementation progress • Summary of WIP recommendations on drinking water management and supply provided to Water Shortage Summit
4	Greater Wellington establishes a community-led reference group tasked with monitoring progress on the implementation of WIP for Whaitua Te Whanganui-a-Tara and ensures that the council is reporting on progress to the wider community in meaningful ways.	Currently being implemented	Greater Wellington is in the process of establishing the group. Discussions have been held with the former Whaitua Committee's Co-chairs. Terms of reference have been developed and Council approval is currently being sought for this.	<p>Reference group established August 2023</p> <ul style="list-style-type: none"> • Two meetings held to date with focus on PC1 • Limited notification of PC1 provided to group
5	Greater Wellington, Mana Whenua and territorial authorities work with communities located around piped and above-ground streams to share those streams' stories through visual images, signs, sculptures, temporary artworks or other interactive ways that the communities design.	<p>Currently being implemented – NEW</p> <p><i>(was To be commissioned by deliverables)</i></p>	<p>New deliverable name: Streams stories visibility community package.</p> <p>GW led.</p> <p>Intended to include signs and other visual indicators of streams which show that a stream exists there in a way that connects people to piped streams and open streams.</p>	<p>Currently being implemented – NEW</p> <p>In October 2023, blue niho taniwha markings were added to cycleways and footpaths to show the route of the Waitangi Awa which flows through pipes below Adelaide Road, and Kent and Cambridge Terraces, then through the recreated wetland in Waitangi Park to the harbour. This work was led by Taranaki Whānui, supported by WCC and informed by GW's urban monitoring which identified threatened freshwater species in Wellington's urban streams.</p>
6	Greater Wellington works with Mana Whenua to name unnamed streams, including those currently piped underground, starting with large streams and then smaller streams within the whaitua (by 2026).	To be commissioned by deliverables	<p>New deliverable name: Stream naming assessment and implementation.</p> <p>GW to facilitate with Ngāti Toa and Taranaki Whānui.</p>	No current update

Recom mendati on	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
			<p>Proposed to include the following:</p> <ul style="list-style-type: none"> • Desktop exercise to identify unnamed streams to prioritise (GW led). • Unnamed streams prioritised for naming and re-named (Ngāti Toa and Taranaki Whānui). • Names determined by mana whenua (Ngāti Toa and Taranaki Whānui). • Geographic Board submission/approved (GW led). • GIS update (GW led). 	
7	<p>Greater Wellington and territorial authorities add information to property Land Information Memorandum (LIM) reports about wetlands and streams that a property drains to and its pathway to the sea; the source of the property's water supply; and the treatment of its wastewater.</p>	<p>To be commissioned by deliverables</p>	<p>New deliverable name: Adding water information to LIMs.</p> <p>WCC, UHCC and HCC led.</p> <p>Work programme to develop a process to identify information to be applied to LIMs – the recommendation is for wetlands, streams the property drains to, it's pathway to the sea, the source of the properties water supply and the treatment of wastewater.</p> <p>Then implement and notify the changes.</p>	<p>HCC comment</p> <p>HCC has recently implemented a number of improvements in the way that LIMs help inform landowners and other stakeholders about the three water assets and water quality around specific sites. This includes access to up-to-date information regarding natural hazards such as inundation and slips, information on wastewater and stormwater drainage including records from council and Wellington Water, whether the site obtains drinking water from municipal supply or private supply (e.g. rural supply). This information goes part way towards fully implementing this recommendation, which will be further improved in FY24-25 subject to additional council funding approvals.</p> <p>For properties in residential zones that are connected to the Council network, the following information is already placed on LIMs confirming that:</p> <ul style="list-style-type: none"> • the property is connected to council's sewerage system. • Council records show the stormwater drain discharges from the property to an approved outfall. • the property is connected to council's potable water supply. <p>For properties that are not connected to the Council network, information is already placed on LIMs confirming that:</p> <ul style="list-style-type: none"> • Council records indicate the foul water drain is connected to a septic tank. • the property is not connected to council's potable water supply. Any water supply system on the property is the responsibility of the owner. Council cannot confirm the water quality present.

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
				<ul style="list-style-type: none"> Council has not received any plans of the exact position of the stormwater disposal from the property.
8	Mana Whenua, community groups and Greater Wellington take advantage of opportunities to get involved in the refresh of the National Curriculum, which guides teaching and learning in schools, with a focus on how well it identifies and grows capabilities that will help realise aspirations for communities that care for wai and te taiao.	To be commissioned by deliverables	<p>New deliverable name: Assist National Curriculum Refresh.</p> <p>GW led.</p> <p>Intended to provide input to Ministry of Education National Curriculum Refresh, format determined by Ministry of Education.</p>	No current update
9	Mana Whenua, community groups and Greater Wellington work with early learning centres, schools and kura to develop local resources and supports that help teachers and kaiako to provide teaching and learning that connect tamariki with their local waterways, including piped streams, and grow their understanding of the interconnectedness of the wellbeing of our communities and Whaitua Te Whanganui-a-Tara	Currently being implemented	<p>New deliverable name: Mountains to the Sea programme in Whaitua te Whanganui-a-Tara.</p> <p>GW led.</p> <p>Intended approach is a programme funded by GWRC but delivered by Mountains to Sea (would need to review their work in this whaitua to understand the need for additional work/funding first).</p> <p>GWRC currently fund this programme in Porirua and Ruamāhanga catchments.</p> <p>GWRC might have a supporting role rather than main funder.</p>	GW worked with Mountains to the Sea to help identify catchment groups to prioritise for support
10	<p>Greater Wellington, Mana Whenua and territorial authorities establish services to support new and existing catchment or community groups (by 2025), including for:</p> <ul style="list-style-type: none"> Providing access to easy-to-use data from all relevant sources, including citizen science, especially data that is relevant to each group's locations and needs Inspiring and supporting the formation of new groups Funding ongoing organisational and technical support, including lab analysis Supporting citizen-led science and monitoring with appropriate training and tools Mātauranga monitoring » Providing specialist support (such as engineering and legal support, help with navigating local government politics, and communication guidance) Supporting catchment coordinators for catchment-scale projects and help with project management, people facilitation and fundraising (it includes tapping into the wider volunteer base) Offering guidance on where to put the best efforts and take actions, consistent with the kawa and Te Mana o te Wai. 	Currently being implemented	<p>New deliverable name: Community Group Support Service.</p> <p>GW led.</p> <p>Envisaged as a service for community groups that is hosted within GW but may coordinate with Territorial Authorities (TAs). Resourcing of the service may be jointly funded with TAs and informed with Mana Whenua.</p> <p>To provide the services listed across recommendations 10, 11 and 12.</p>	<p>GW worked with Mountains to the Sea to help identify catchment groups to prioritise for support</p> <p>GW liaising with catchment groups to determine support requirements, e.g., Te Hononga ki Te Upoko – collective of community catchment groups based in Te Whanganui-a-Tara and Te Awarua-o-Porirua</p>

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
11	<p>Greater Wellington creates cross-whaitua structures and services that support a coherent and connected approach to local action knowledge-sharing. These should include:</p> <ul style="list-style-type: none"> • Spatial and catchment-level planning that helps coordinate efforts aimed at meeting Te Mana o te Wai and community goals, and makes roles and responsibilities clear • Community-to-community knowledge exchange and connecting groups • The provision of transparent and clear mechanisms for accessing and allocating funding and services, including expert knowledge • The provision of frameworks and supports that give community groups confidence that they are working in the interests of Mana Whenua • A strategic approach to the use of council support services (such as Mountains to Sea Wellington) • Providing a single contact point for questions and advice for all the agencies involved. 	Currently being implemented	<p>New deliverable name: Community Group Support Service.</p> <p>Refer to comment for Recommendation W10 as the same deliverable includes implementation of recommendations 10, 11 and 12.</p>	<p>GW worked with Mountains to the Sea to help identify catchment groups to prioritise for support</p> <p>GW liaising with catchment groups to determine support requirements, e.g., Te Hononga ki Te Upoko – collective of community catchment groups based in Te Whanganui-a-Tara and Te Awarua-o-Porirua</p>
12	<p>Greater Wellington and Mana Whenua develop resources (by 2024) that community groups can use and adapt for their own communication with local communities, to help build understanding, connections and involvement that complement messages and campaigns by councils and water agencies.</p> <p>Specific themes to include are:</p> <ul style="list-style-type: none"> • Where drinking water comes from, and the relationships between activities in the Hutt Valley and risks to the Waiwhetū aquifer • Awa as tīpuna, living entities of distinctive mana and whakapapa • Our responsibility to respect the awa and their mana, and act on this in our behaviour with water • The state of our waterways, including for different places • Action being taken, including for different places • Actions people can take, including those specific to their local areas. 	Currently being implemented	<p>New deliverable name: Community Group Support Service.</p> <p>Refer to comment for Recommendation W10 as the same deliverable includes implementation of recommendations 10, 11 and 12.</p>	<p>GW worked with Mountains to the Sea to help identify catchment groups to prioritise for support</p> <p>GW liaising with catchment groups to determine support requirements, e.g., Te Hononga ki Te Upoko – collective of community catchment groups based in Te Whanganui-a-Tara and Te Awarua-o-Porirua</p>
13	<p>Greater Wellington, Mana Whenua and territorial authorities partner with communities in developing catchment plans, co-designing their journeys and sharing the delivery process and roles required to achieve Te Mana o te Wai and local outcomes. This will help groups to know where to put their best efforts and provide clear resourcing strategies to follow through with their plans.</p>	Currently being implemented	<p>This will be delivered via catchment plans being introduced through the new Rōpū Taiao Environment Group that was stood up in May 2023.</p> <p>Note that it may be necessary to develop additional implementation at a sub-catchment level to fully implement this recommendation once the new group is stood up.</p>	Catchment planning approach being led by Catchment Function
14	<p>Greater Wellington works with Mana Whenua and catchment groups to make data easily available and accessible in a user-friendly way, including through the use of aggregated data.</p>	Currently being implemented	<p>New deliverable name: Whaitua Monitoring Plan encompassing each FMU.</p> <p>GW led.</p>	<p>The He Kākano platform is an example of where we are making data easily available and accessible in a user-friendly way. This enables us to be more transparent with</p>

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
			<p>This is a broad deliverable which will span all three WIPs received to date. Within WIPs there are numerous stand-alone monitoring and evaluation recommendations which need to be coordinated rather than implemented in an ad hoc manner, and which also need to be aligned with an even broader GW monitoring and evaluation improvement work programme.</p> <p>This deliverable ensures that the relevant recommendations across the WIPs are identified for that wider monitoring and evaluation improvement work programme.</p> <p>This is also the deliverable for W15.</p>	<p>our communities and have up to date information to make informed decisions.</p> <p>Monitoring programme being assessed by K&I; for Te Whanganui-a-Tara, FMUs largely align with current monitoring sites.</p>
15	Greater Wellington provides more specific, local information on water quality to communities – through making existing data more readily available and collecting new data, including via citizen science programmes, Greater Wellington monitoring programmes and the integration of the two (where appropriate).	Currently being implemented	<p>New deliverable name: Whaitua Monitoring Plan encompassing each FMU.</p> <p>GW led.</p> <p>See details in comment for recommendation 14.</p>	The He Kāmano platform is an example of where we are making data easily available and accessible in a user-friendly way. This enables us to be more transparent with our communities and have up to date information to make informed decisions.
16	<p>Greater Wellington, with Mana Whenua and communities, develops a toxic algal bloom action plan that includes:</p> <ul style="list-style-type: none"> • Management actions • A monitoring plan specific to toxic algae • Research priorities • Climate change adaptation • A communications approach that supports community and Mana Whenua visions and outcomes. 	To be commissioned by deliverables	<p>New deliverable name: Toxic algae action plan.</p> <p>GW led.</p> <p>Intended to be an action plan that focuses on monitoring, communications, and research specific to toxic algae (noting monitoring and communication aspects are already being implemented).</p> <p>It will need to bring together all the current work which refers to management actions (e.g., setting limits, improving river health etc. which will improve the prevalence of toxic algae).</p>	No current update
17	Greater Wellington amends regulatory documents to require the relevant three waters agency to develop a stormwater strategy (by 2023), within the global stormwater network resource consent, to contribute to achieving the relevant first steps in each of the catchment tables under the heading ‘Journey from current state to wai ora’.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023.
18	Greater Wellington amends regulatory documents to require the relevant three waters agency to develop a strategy/plan (by 2023), within the wastewater network resource consents, to contribute to achieving the relevant first steps in each of the catchment tables under the heading ‘Journey from current state to wai ora’.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed in PC1, notified 30 October 2023.
19	The relevant three waters agency increases the number of repairs and renewals in the public	Currently being implemented – NEW	Requires conversations between GW and Wellington Water regarding timeframes.	Currently being implemented - NEW; being implemented by Wellington Water but more detailed information being sought

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	<p>wastewater infrastructure (aligning with the strategy in Recommendation 18) to ensure that:</p> <ul style="list-style-type: none"> By 2033, no more than approximately 22 per cent of the wastewater pipe network will be worse than grade 3 (average condition) By 2040, no more than ~12 per cent of the wastewater pipe network will be worse than grade 3 (average condition) By 2050, no wastewater pipe assets will be below grade 3, and asset management plans will be actively identifying and replacing ageing pipes or pipes in poor condition. 	<i>(was Other deliverable)</i>		
20	<p>Territorial authorities and the relevant three waters agency prioritise the repair and replacement of public wastewater assets that lead to overflows on private or public land.</p>	Currently being implemented	<p>Wellington Water led. Greater Wellington understands Wellington Water are implementing this through their wastewater network overflow resource consent applications which they are currently in the process of lodging for different areas (mid 2023).</p>	Wellington Water are addressing this through their wastewater network overflow resource consent applications
21	<p>A target of zero wastewater overflows (by 2060) is achieved, except in infrequent situations (such as pump failures or rainfall events) with a >25-year average return period (ARI).¹⁻²</p> <p>To meet this goal, we recommend implementing six-yearly targets for reducing wastewater overflows set out in the relevant three waters agency's 2024 wastewater strategy and resource consent. These overflow reductions must align with our obligation to achieve the relevant first steps in each of the catchment tables under the heading 'Journey from current state to wai ora' and the primary contact recreation national bottom lines set by central government by 2040</p> <p>Footnotes: 1 While we appreciate flooding events can result in wastewater contamination in the environment, we should not accept this as 'normal practice' for the wastewater network. By 2060, we expect the wastewater network to be of such a standard that it does not leak wastewater and that overflows only happen under unplanned or extreme events. 2 A 25-year average return period (ARI) is a storm of a certain size and duration that could be expected to occur once in a generation, which has a four per cent probability of occurring every year. While historical records indicate this storm should occur every ~25 years, it could occur more than once over this period, but the probability would be low. Similarly, a 100-year ARI storm could occur twice in one year, but the probability would be very low.</p>	<p>Currently being implemented – NEW</p> <p><i>(was Other deliverable)</i></p>	<p>Requires conversations between GW and Wellington Water for latest information.</p>	Currently being implemented – NEW. Wellington Water are addressing this through their wastewater network overflow resource consent applications
22	<p>The relevant three waters agency investigates, and reports to, Greater Wellington and Mana Whenua (by 2022) on the feasibility of pre-treating wastewater overflows and any locations where this could be prioritised for upcoming Long Term Plan reviews.</p>	Other deliverable	<p>Requires conversations between GW and Wellington Water for latest information.</p>	Information being sought from Wellington Water.
23	<p>The relevant three waters agency increases its monitoring of wastewater overflows across the network, with the aim of identifying faults through increased data collection (by 2025). The identified faults are to be repaired in line with the timelines specified in Recommendations 19, 27 and 28</p>	Other deliverable	<p>Requires conversations between GW and Wellington Water for latest information.</p>	Information being sought from Wellington Water.
24				

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
24.1	Greater Wellington amends the relevant regulatory documents, the public/private water networks (by 2030) to identify all cross-connections (wastewater connected to stormwater) and inflow faults (stormwater connected to wastewater).	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1, notified 30 October 2023. Noting that a timeframe is not include within PC1. PC1 requires the implementation of an inflow and infiltration programme to proactively upgrade the pipe network to progressively reduce stormwater and groundwater infiltration and inflow into the wastewater network catchment.
24.2	The relevant three waters agency increases its investigations of, the public/ private water networks (by 2030) to identify all cross-connections (wastewater connected to stormwater) and inflow faults (stormwater connected to wastewater).	Other deliverable	Requires conversations between GW and Wellington Water for latest information.	Information being sought from Wellington Water.
24.3	The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.	Other deliverable	Requires conversations with Wellington Water for latest information then other TAs.	Information being sought from Wellington Water and TAs
25				
25.1	Greater Wellington amends the relevant regulatory documents on, the public/ private water networks (by 2040) to identify all groundwater infiltration (to the wastewater network) and wastewater leakage (exfiltration).	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1, notified 30 October 2023. Noting that a timeframe is not include within PC1. PC1 requires the implementation of an inflow and infiltration programme to proactively upgrade the pipe network to progressively reduce stormwater and groundwater infiltration and inflow into the wastewater network catchment.
25.2	The relevant three waters agency increases its investigations of, the public/ private water networks (by 2040) to identify all groundwater infiltration (to the wastewater network) and wastewater leakage (exfiltration).	Other deliverable	Requires conversations between GW and Wellington Water for latest information.	Information being sought from Wellington Water.
25.3	The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.	Other deliverable	Requires conversations between GW, Wellington Water, and territorial authorities for latest information.	HCC comment This is in progress. As noted above for Recommendation 7, the Council has been implementing a number of improvements to the way that LIMs provide information to landowners and stakeholders about three water assets and water quality around specific sites. The listing of known faults (for example faulty private laterals) on LIMs has not yet been progressed to completion. This work will require further advice from Wellington Water.
26	All territorial authorities provide financing mechanisms (subject to appropriate terms and conditions) no later than 2024 to assist landowners to fix faults in private laterals. These mechanisms could be deferred payments collected through rates, or territorial authorities could recover the costs when the properties are sold.	Other deliverable	Requires conversations between GW and each TA.	HCC comment This is complete. Financial mechanisms are in place, and this is being managed by Wellington Water.

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	Territorial authorities and the relevant three waters agency also provide supporting advice to private landowners on their rights and responsibilities regarding private laterals.			
27	<p>Territorial authorities apply their existing powers under the Local Government Act 1974 and Health Act 1956 to ensure landowners repair all faults related to cross-connections (wastewater to stormwater) and inflows (stormwater to wastewater) within two years of their identification.</p> <p>Cross-connection and inflow fault repairs on private land may be undertaken by the relevant three waters agency. However, the costs are to be covered by the landowners either directly or through other funding mechanisms (see Recommendation 26).</p>	Other deliverable	Requires conversations between GW and each TA.	<p>HCC comment</p> <p>HCC Trade Waste Team is involved in this work.</p>
28	<p>Territorial authorities, through the relevant three waters agency, apply their existing powers under the Local Government Act 1974 and Health Act 1956 to ensure that:</p> <ul style="list-style-type: none"> All identified leaky private wastewater laterals, including infiltration and/or exfiltration leaks, are fixed within five years of identification. Enforcement action is to be taken if the fixes are not made in this timeframe By 2045, all identified leaky private wastewater laterals have been fixed and an ongoing cycle of maintenance is in place <p>A database is developed and maintained of the conditions and ages of all private and public assets in the three waters network.</p>	Other deliverable	Requires conversations between GW, Wellington Water and TAs for latest information.	Being led by Wellington Water. More information being sought from TAs and Wellington Water
29	<p>By 2025, territorial authorities and the relevant three waters entity develop a process (such as a ‘warrant of fitness’), through which the condition of private laterals is assessed at the point of a property’s sale or when a building consent application is lodged. The costs are to be covered by the property owners.</p> <p>The condition of these laterals, and any faults revealed through the process, are to be recorded on the properties’ LIMs with the information updated as repairs are made (aligning with the timelines in Recommendations 27 and 28). Once the repairs are complete, an ongoing cycle of inspection and maintenance should be established.</p>	Other deliverable	Requires conversations between GW and Wellington Water and TAs for latest information.	<p>Information being sought from TAs and Wellington Water.</p> <p>HCC comment</p> <p>This will require legislative change to enable the Council to enforce these requirements.</p>
30	<p>By 2024, territorial authorities establish a complete set of regulatory and policy measures that:</p> <ul style="list-style-type: none"> Require landowners to repair all failed private laterals and record these failures on their LIMs until the repairs are complete <p>Provide a funding mechanism to support landowners in making these repairs (such as instalments on their rates bills or councils recovering the costs when properties are sold).³</p> <p><small>Footnote 3: Modified from WCC Mayoral Task Force Review on three waters, Recommendation 23.</small></p>	Other deliverable	<p>Requires conversations between GW and Wellington Water and TAs for latest information.</p> <p>Too detailed for RPS, etc.</p>	<p>Requires conversations between GW and Wellington Water and TAs.</p> <p>HCC comment</p> <p>Funding mechanisms are in place and implementation is being managed through/by Wellington Water. The regulatory and policy measures are not currently in place, but this is something HCC may do in the future and would require up-to-date advice from Wellington Water when a failure occurs.</p>

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
31	Relevant three waters agency investigates methods (by 2025) to significantly reduce sludge going to landfills from wastewater treatment plants.	Other deliverable	Requires conversations between GW and Wellington Water and TAs for latest information.	Information being sought from Wellington Water. HCC comment Council and Wellington Water are currently progressing these investigations.
32	Greater Wellington and territorial authorities provide good-practice information and advice to septic tank owners. They also develop a programme for regular septic tank investigations undertaken in rural/lifestyle areas in the whaitua, with the aim of improving their understanding of the impact of septic tanks on water quality, ecology and public health. Where septic tanks are identified as affecting water quality, ecology or public health, territorial authorities or Greater Wellington are to work with the relevant landowners to reduce these effects by repairing, replacing or enhancing their septic systems and having an ongoing cycle of maintenance.	Regulatory change underway – NEW. <i>(was To be commissioned by deliverables)</i>	New deliverable name: Septic tanks communication stocktake and communications package. GW led overall but see details below. Intended to include an initial stocktake to identify what initiatives are in place across GW and TAs in the whaitua to communicate septic tank requirements and gaps to be filled for landowners. Communications package would likely include information on maintenance requirements and permitted rule activity requirements and ensure that initiatives reach relevant occupiers across all TAs. GW to be initial lead for stocktake but communications may be led by individual TAs, including to recognise/build on work already underway.	Regulatory change underway – NEW. Supported by PC1, notified 30 October 2023. PC1 includes a method that requires the development of Freshwater Action Plan(s) for Whaitua Te Whanganui-a-Tara and where required will include a partnered programme with territorial authorities to review and enforce on-site domestic wastewater treatment system discharges affecting sites of recreation in any significant contact recreation freshwater body.
33	Greater Wellington provides sufficient Land Management advisory resources and funding to: Support the implementation of actions at property and catchment levels to achieve catchment plan objectives Support landowners’ implementation of national stock exclusion rules <ul style="list-style-type: none"> • Help link farmers’ action (including through their Freshwater Farm Plans) to catchment plans, and help small block owners to link their actions to catchment plans • Support the implementation of Freshwater Farm Plans to ensure quality delivery of farm planning services and effective connections to catchment plans • Promote the uptake of best management practice, and ensure open communication between landowners and Greater Wellington to keep best practices up to date • Integrate advice to landowners with other relevant objectives to achieve co-benefits (e.g., carbon sequestration, biodiversity) 	Regulatory change underway – NEW. <i>(was Currently being implemented)</i>	Led by GW. Additional Land Management roles were appointed prior to stand up of the new Rōpū Taiao Environment Group. The new Rōpū Taiao Environment Group is likely to provide more support and help to ensure these functions are included in catchment planning (but will require confirmation following implementation).	Regulatory change underway – NEW. Supported by PC1, notified 30 October 2023. PC1 includes a method that requires the development of Freshwater Action Plan(s) for Whaitua Te Whanganui-a-Tara. A main focus of the action plan(s) will be to support landowners to implement property and catchment scale actions to improve water quality and ecosystem health.
34				
34.1	Greater Wellington supports landowners to exclude livestock from waterways by: <ul style="list-style-type: none"> • Helping them to develop and implement practices that minimise stock access to streams not covered by regulations 	Currently being implemented	GW led. Being implemented via farm plans.	Being implemented via farm plans.

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
34.2	<p>Greater Wellington supports landowners to exclude livestock from waterways by:</p> <ul style="list-style-type: none"> Investigating the specific impacts of horses on water quality and considering further stock exclusion regulations if they are identified as a significant source of contaminants. 	To be commissioned by deliverables	<p>New deliverable name: Impacts of horses on water quality investigation. GW led.</p> <p>Intended to include an investigation culminating in a report which quantifies the impact of horse activities (including but not limited to grazing) on water quality in Te Whanganui-a-Tara whaitua.</p> <p>Report will include recommendations on regulatory (including stock exclusion) and non-regulatory options to mitigate any identified water quality issues.</p>	No current update
35	<p>Greater Wellington investigates alternative incentives (e.g., rates rebates) to increase landowners' uptake of revegetation projects, including projects using native plant species.</p> <p>This applies particularly to landowners with marginal and erosion-prone land (to reduce erosion and sediment loss), wetlands (for nutrient stripping, etc), and rural catchments generally (to slow flood flows further down the catchment).</p>	Regulatory change underway – NEW. <i>(was To be commissioned by deliverables)</i>	<p>New deliverable name: Alternative incentives for landowner revegetation projects options paper. GW led.</p> <p>Intended to be an options paper based on research including other council initiatives, ETS opportunities for administrative support by GW, rates rebates, etc.</p> <p>To identify current barriers to change.</p> <p>To recommend any options to be progressed and next steps for this.</p>	Regulatory change underway – NEW. Supported by PC1, notified 30 October 2023. PC1 includes a method that requires the development of Freshwater Action Plan(s) for Whaitua Te Whanganui-a-Tara. A main focus of the action plan(s) will be to promote and accelerate the revegetation of highest erosion risk land, including through investigating opportunities for rates relief or other forms of financial support.
36	Greater Wellington supports the development of property-specific information to inform Freshwater Farm Plan development, particularly for managing diffuse discharges, CSA (Critical Source Area, i.e., hotspot) management, riparian planting (to complement stream fencing regs), and management methods for those streams where stock exclusion rules do not apply	Currently being implemented	<p>GW led.</p> <p>Will be incorporated into freshwater farm plans. These things are already being undertaken currently through non-regulatory farm plans.</p>	Being incorporated in freshwater farm plans
37	<p>Greater Wellington provides enough staff and resources to:</p> <ul style="list-style-type: none"> Work with forestry groups (New Zealand Farm Forestry Association, New Zealand Forest Owners Association) and contractors to provide proactive advisory support that includes ensuring all forestry operators are aware (by 2023) of relevant regulatory requirements and good practice Ensure all forestry operators in the whaitua are monitored for compliance with the National Environmental Standard for Plantation Forestry (NES-PF) and other relevant requirements from 2023 onwards, and share this monitoring information with the community Take enforcement action on non-compliance. 	Currently being implemented	<p>New compliance roles are being established which will increase GW's capacity and resourcing to perform this. Review will be needed to ensure this is sufficient resource to fully implement this recommendation.</p>	New compliance roles are being established

Recom mendati on	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
38				
38.1	<p>Greater Wellington:</p> <ul style="list-style-type: none"> Are exemplars of good practice on all council-owned land and infrastructure, including contaminated land, farms, forestry land, wetlands and golf courses. Provide information on how good-practice decisions have been made. Report publicly on their year-on-year improvements. 	Currently being implemented	<p>GW led.</p> <p>38.1 relates to GW being named (versus 38.2 “and territorial authorities” being named)</p> <p>Currently being implemented for GW through Parks Networks Plan (10 year plan on managing parks), including reporting; Recloaking Papatūānuku Restoration Plan (retiring farm parks except Battle Hill); Forestry advisory service roles being established.</p>	Currently being implemented for GW through Parks Networks Plan including Recloaking Papatūānuku (see Catchment highlights section)
38.2	<p>and territorial authorities:</p> <ul style="list-style-type: none"> Are exemplars of good practice on all council-owned land and infrastructure, including contaminated land, farms, forestry land, wetlands and golf courses. Provide information on how good-practice decisions have been made. Report publicly on their year-on-year improvements. 	Other deliverable	Requires conversations between GW and each TA.	<p>Requires conversations between GW and each TA.</p> <p>HCC comment</p> <p>This will require work from teams across HCC including facilities, transport and parks.</p>
39				
39.1	Greater Wellington, set an example by ensuring that (from 2022), their fleet vehicles are renewed with copper-free brake pads or replaced by vehicles with these pads.	Currently being implemented	<p>This recommendation is being managed by Greater Wellington as part of a wider work programme of zinc and copper related recommendations.</p> <p>It includes liaising with the Greater Wellington fleet manager.</p>	Currently being implemented
39.2	Territorial authorities and the relevant three waters agency set an example by ensuring that (from 2022), their fleet vehicles are renewed with copper-free brake pads or replaced by vehicles with these pads.	Currently being implemented	<p>Included as a programme in the Stormwater Management Strategy being developed by Wellington Water around leading by example.</p> <p>Unknown whether WCC, HCC and UHCC are taking actions to implement this recommendation.</p>	<p>Information being sought from TAs.</p> <p>HCC comment</p> <p>HCC has a fleet vehicle replacement programme in place, and replacement vehicles are replaced based on a range of criteria, such as the need for fit-for-purpose vehicles, cost-effectiveness (Total Cost of Ownership), and in line with HCC’s EV-first requirement. Note that due to the regen-capability of EVs, the replacement of brake-pads is less frequent, and hence the environmental impact associated with brake-pad residue is reduced.</p> <p>Information on whether suppliers’ vehicles have copper free brake-pads is not easily available, as manufacturers do not provide this information unless requested.</p>
40	<p>Territorial authorities review and strengthen their plumbing consent and code compliance processes (by 2024), to ensure there are clear accountabilities and consequences for compliance transgressions and ultimately a low risk of future illegal cross-connections.⁴</p> <p><small>Footnote 4: Adapted from WCC Mayoral Task Force Review on three waters, Recommendation 22.</small></p>	Currently being implemented	<p>Wellington Water led.</p> <p>GW understands that Wellington Water have implemented a number of changes to implement this recommendation via updating regional Standards for Water Services which took effect in December 2021. For example, colour coding of pipes. Sign-off procedures have been updated.</p>	Information being sought from Wellington Water

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
41	<p>Greater Wellington and the relevant three waters agency engage with and express the importance of environmental consequences to the Plumbers, Gasfitters and Drainlayers Board, relevant professional regulatory bodies and industry organisations. These organisations shall:</p> <ul style="list-style-type: none"> • Together improve their systems of communication and reporting for disciplinary complaints • Become active and consistent in reporting discovered evidence of sub-standard tradesperson work, especially for instances of illegal wastewater to stormwater connections • Apply disciplinary action as set out under the defined offences in section 89 of the Plumbers, Gasfitters, and Drainlayers Act 2006. 	To be commissioned by deliverables	<p>New deliverable name: Letter to Plumbers, Gasfitters and Drainlayers Board GW led. Letter from GW at GM or higher level to CE of Chair of the Board.</p>	No current update
42	<p>The relevant three waters agency works with industry organisations to reinforce or improve standards, communication and training for best industry practice. Priority should be given to industries where there is high interaction with the stormwater and wastewater network (e.g., painters and cleaners).</p>	Other deliverable	Requires conversations between GW and Wellington Water for latest information.	Requires conversations between GW and Wellington Water
43	<p>Greater Wellington investigates and considers adopting new mechanisms to improve compliance (such as restorative processes and requiring bonds for earthworks and forest harvesting).</p>	To be commissioned by deliverables	<p>New deliverable name: Options paper for New Compliance Mechanisms. GW led. Paper which notes options for meeting the description in recommendation 43. To include recommendations on which options should be implemented and which are not feasible. To include, but not necessarily, be limited to examples listed in recommendation 43. Could include non-regulatory recommendations. May include permitted activities.</p>	No current update
44	<p>Greater Wellington and Mana Whenua work with territorial authorities to ensure that all large green spaces (e.g., parks, school grounds, golf courses) are managed to reduce the infiltration of fertiliser into groundwater and waterways, with plans in place (by 2023) that include public reporting.</p>	To be commissioned by deliverables	<p>New deliverable name: Stocktake and mitigation of fertiliser leeching in green spaces. GW led. 1. Intended as a workshop on current fertiliser application, including GW, Wellington Water, WCC, HCC, UHCC. To include: <ul style="list-style-type: none"> a. assessing awareness of and compliance with current PNRP rules b. current information available on fertiliser use and potential leeching risk c. area of land fertiliser is being applied to/mapping 2. To include TA managed land and privately owned green spaces such as golf courses</p>	No current update

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
			3. Workshop to provide written findings and recommend any next steps for mitigation and how these will be followed up.	
45	<p>With input from the relevant three waters agency (by 2026), Greater Wellington and territorial authorities develop or amend regulatory instruments to help reduce the risk of contaminants entering the stormwater system.⁵ These could include:</p> <ul style="list-style-type: none"> • Painting and/or replacing old roofs to reduce the prevalence of heavy metals • Washing paint brushes or cars • Treating runoff from carparks and roads. <p><small>Footnote 5: Modified from WCC Mayoral Task Force Review on three waters, Recommendation 12.</small></p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	<p>Addressed by PC1, notified 30 October 2023.</p> <p>PC1 includes a rule that prohibits the point source discharge of a list of common urban pollutants including vehicle cleaning products and paint.</p> <p>PC1 includes stormwater rules for impervious surfaces including carparks and roads.</p> <p>HCC comment</p> <p>This is being progressed to an extent through the District Plan Review. The draft District Plan (currently open for consultation during November/December 2023) includes a new Three Waters chapter that would have a range of provisions to address contaminants entering stormwater, including rules relating to:</p> <ul style="list-style-type: none"> • Compliance with the Wellington Water Regional Standard for Water Services December 2021, • Use of Copper and Zinc Building Materials, and • Water sensitive urban design. <p>Other provisions of this chapter relate more to stormwater quantity (hydraulic neutrality, rainwater storage tanks, greywater systems) but may have some impact on contaminants entering the stormwater system.</p>
46	Greater Wellington and territorial authorities develop a scheme to support the painting or replacing of large-scale high zinc-yielding roofs, which could include education, advice and incentives.	To be commissioned by deliverables	<p>Two new deliverables, names:</p> <ul style="list-style-type: none"> • Promoting good practice by community and industry. • Reinstate Take Charge Programme. <p><i>Promoting good practice by community and industry</i></p> <p>Note: Promoting good practice by community and industry has been discussed between GW and PCC as the deliverable is also applicable for Te Awarua-o-Porirua WIP. This has identified that clarification with the former Whaitua Committee for Te Awarua-o-Porirua would be useful to define the good management practice intended in that WIP. This may result in a revision of the deliverable and potentially a different deliverable may need to be applied for just Te Whanganui-a-Tara.</p> <p><i>Reinstate Take Charge Programme</i></p> <p>GW led</p> <p>Take charge is the name of a previous education programme.</p> <p>The deliverable recognises that a number of education focussed activities could sit with this programme if</p>	<p>HCC comment</p> <p>This is being progressed to an extent through the District Plan Review. The draft District Plan (currently open for consultation during November/December 2023) includes a new Three Waters chapter that would have a range of provisions to address contaminants entering stormwater, including rules relating to:</p> <ul style="list-style-type: none"> • Compliance with the Wellington Water Regional Standard for Water Services December 2021, • Use of Copper and Zinc Building Materials, and • Water sensitive urban design. <p>Other provisions of this chapter relate more to stormwater quantity (hydraulic neutrality, rainwater storage tanks, greywater systems) but may have some impact on contaminants entering the stormwater system.</p>

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
			reinstated. However, it would not necessarily need to be delivered via the former Take Charge programme exactly as it was, so this description should be considered a starting point rather than the final deliverable to be commissioned.	
47	Greater Wellington and territorial authorities develop a scheme to reduce the impacts on waterways from the washing of cars.	To be commissioned by deliverables	New deliverable name: Car Washing Scheme GW led (to facilitate with TAs, Taranaki Whānui and Ngāti Toa) Intended to initially be a workshop with next steps to be identified and documented.	HCC comment HCC to seek advice from Wellington Water on this matter.
48	Greater Wellington and territorial authorities investigate options to minimise the impacts of agrichemical sprays on waterways and report on options (by 2025).	To be commissioned by deliverables	New deliverable name: Report on Sprays Impact on Waterways GW led. Intended to be a report which includes a stocktake of current information on use of agrichemical sprays in waterways in the whaitua. Could include discussion with spraying contractors, possibly non-commercial users. To identify current state (including regulatory measures) and options for minimising impacts. To focus on non-regulatory options and to make recommendations on options to be implemented. This deliverable spans both W48 and W49.	HCC comment This work needs to be commissioned by GW and engagement undertaken with Wellington Water and the HCC Parks team as a stakeholder.
49	Greater Wellington, territorial authorities, the relevant three waters agency and relevant industry groups develop and implement a pollution prevention programme. This will be outlined, delivered and monitored through various mechanisms. The programme must: » Raise the awareness of the public about what they can do to reduce their impacts on harbour and stream health » Promote and incentivise industry good management practice, targeting high-risk land-use activities that contribute relatively high levels of contamination » Identify and target priority areas for contaminant reduction based on the identification of catchments that contribute to localised hotspot areas » Investigate opportunities to enable change by streamlining regulatory processes and removing barriers to businesses and industries initiating change » Work with specific industries/suppliers to increase understanding around risks from exterior chemical cleaning products, with an aim to reduce usage through point-of-sale warnings and changes in product care advice.	Regulatory change underway – NEW. <i>(was To be commissioned by deliverables)</i>	New deliverable name: Report on Sprays Impact on Waterways GW led See details in comments for W48.	Regulatory change underway – NEW. Supported by PC1, notified 30 October 2023. PC1 includes a method that requires Greater Wellington to develop and deliver a pollution prevention programmes. HCC comment This work needs to be commissioned by GW and engagement undertaken with Wellington Water and the HCC Parks team as a stakeholder.

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
50	Territorial authorities and the relevant three waters agency work together in high-risk areas to increase and prioritise regular street sweeping and sump clearance. They also need to investigate other opportunities to capture and clear contaminants from stormwater drains, including those to increase awareness and education with residents and businesses about how they can reduce contaminants (e.g., litter ending up in waterways).	Currently being implemented	Wellington Water has an education programme as part of the Stormwater Management Strategy. Looking to create memorandums of understanding to undertake street sweeping for water quality purposes.	Currently being implemented HCC comment Wellington Water to lead on this work with input from HCC as a road controlling authority.
51	Greater Wellington works with territorial authorities, Mana Whenua and landowners to identify and document (by 2026) the locations of potentially contaminated land, including landfills, and the risks to water quality and aquatic ecosystems.	To be commissioned by deliverables	New deliverable name: Contaminated Site Investigation and Remediation Plans Project. GW led. The first part of this is likely already being implemented via the SLUR database (including the HAIL database within this) but the component “and the risks to water quality and aquatic ecosystems” may not be implemented via this. To be discussed further within GW. Landfills - Identified 7 high priority closed landfill sites based on risk to water quality. Undertaking desktop assessment using risk assessment tool to assess climate change risk (which relates to water quality). This deliverable has been identified as requiring further assessment within GW. This deliverable spans W51 and W52.	Partly implemented through SLUR database. HCC comment HCC actively monitors its open, and all closed landfill sites. This includes monthly/quarterly water quality testing at Silverstream landfill, and the closed Wainuiomata (Stage 3) landfill. For all closed sites, HCC also commissions an annual site audit and report, to proactively manage maintenance requirements.
52	Greater Wellington, territorial authorities and Mana Whenua work with owners of land with contaminated sites to further investigate, monitor, develop and implement remediation plans for those that pose medium-to-high risks to water quality and aquatic ecosystems. These plans are to be developed within five years of the identification of these sites, and those posing high risks to water quality are to be prioritised for remediation.	To be commissioned by deliverables	New deliverable name: Contaminated Site Investigation and Remediation Plans Project. GW led. See comments in W51 for details.	No current update
53	Agencies involved in the remediation of contaminated land affecting water quality and aquatic ecosystems include Mana Whenua in decision making and involve, consider and contain the visions and ideas of community groups in the planning and implementation, including as part of developing catchment plans (see Recommendation 13).	Currently being implemented	Will be included in the development of catchment plans. If a consent is involved, which it will be if affecting water quality and aquatic ecosystems, Mana Whenua will be involved via the regulatory process.	No current update
54	Greater Wellington, Mana Whenua, Hutt City Council, Upper Hutt City Council, the relevant three waters agency and the community actively work together to better protect the current and future sources (surface water and groundwater) of human drinking-water from emerging threats. They do this by investigating the risks associated with water quality and quantity and managing activities that may adversely affect this (such as land use and contaminant discharges). This may include developing district and regional plan provisions and other methods.	To be commissioned by deliverables	Being managed by GW through its regulatory programmes of work	HCC comment The HCC District Plan currently does not play a role in protecting drinking-water sources. The extent that the District Plan should regulate land use and development for the purpose of protecting drinking-water sources is being looked at through the ongoing review of the District Plan. However, a key aspect of this work is looking at what role the District Plan should play given the respective functions of HCC and GW, and the existing protections provided through the NRP.

Recom mendati on	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
55				
55.1	The relevant three waters agency's (currently Wellington Water) Regional Standard for Water Services should incorporate WSUD stormwater and water conservation interventions. ⁽⁶⁾ (6) Modified from WCC Mayoral Task Force Review on three waters, Recommendation 7.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work. Relates to first paragraph of the recommendation.	Addressed by PC1, notified 30 October 2023.
55.2	Also, territorial authorities' codes of practice and district plans should be amended to refer to the Regional Standard for Water Services (where applicable) by 2025, and should be mandatory for all developments (greenfield, infill/brownfield and re-development, including infrastructure). It should be supported through education programmes for contractors, community groups, and the design and engineering community.	To be commissioned by deliverables	New deliverable name: WSUD Education Programme Relates to second paragraph of the recommendation. GW led.	HCC comment This is being progressed through the District Plan Review. The draft District Plan includes provisions that refer to the Regional Standard for Water Services December 2021.
56	By 2022, Greater Wellington convenes a WSUD working group with Mana Whenua, territorial authorities, the relevant three waters agency and Waka Kotahi. The group will need to be funded to cover its wide-ranging work, which will aim to: » Resolve barriers to WSUD in the Wellington Region » Identify opportunities to retrofit WSUD and green infrastructure into the existing urban environments, incorporating communities and catchment-level planning » Identify opportunities to 'daylight' piped streams and restore existing streams to promote community connection, habitat restoration and flood mitigation » Lead by example in promoting new WSUD initiatives. The working group should be part of Greater Wellington's newly established regional stormwater forum. It should also collaborate with key stakeholders (such as developers and commercial, industrial and residential community groups), and help provide education and training material/ programmes for contractors.	Currently being implemented – NEW (was To be commissioned by deliverables)	GW led. Regional Stormwater Forum/Working Group set up – made up of GW, mana whenua, TAs, Waka Kotahi and Wellington Water .	Currently being implemented – NEW Regional Stormwater Forum/Working Group set up in part servicing this recommendation
57	By 2025, Greater Wellington, Mana Whenua and territorial authorities amend the relevant planning documents to retain, restore and enhance the natural drainage system – so that they require hydraulic neutrality and water-quality treatment in urban catchments through WSUD.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1, notified 30 October 2023. HCC comment This is being progressed through the District Plan Review. The draft District Plan includes provisions that require hydraulic neutrality and water sensitive urban design (WSUD), although these provisions would not apply to some smaller developments, such as residential developments of 3 units or less.
58				
58.1	Greater Wellington and Mana Whenua, together with territorial authorities and the relevant three waters agency, develop (by 2025) a comprehensive suite of regulatory and non-regulatory interventions for	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1, notified 30 October 2023. HCC comment

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	new property developments and infrastructure, to be implemented through WSUD via a catchment-management approach.		Covers regulatory aspects of this recommendation, versus non-regulatory is W58.2.	Requirements for WSUD are being progressed through the District Plan Review. The draft District Plan includes provisions that require WSUD but these may not apply to all development. However, it is unclear whether what is being progressed through the District Plan Review would be a 'catchment-management approach', or how that would be progressed through a District Plan, which only influences land use on a site-by site or development-by-development basis.
58.2	These interventions would include water impact assessments, rainwater/stormwater harvesting, rain gardens, constructed wetlands, green roofs, improved sump maintenance, strategic street sweeping and permeable pavements to reduce water-quality impacts and reduce peak wet weather flows. (7). Existing properties and infrastructure should be retrofitted using this WSUD approach whenever opportunities arise (e.g., at the end of an asset's life). (7) Modified from WCC Mayoral Task Force Review on the three waters, Recommendation 6.	To be commissioned by deliverables	New deliverable name: Expanded Wellington Water's Water Sensitive Design Guidelines 2019. Wellington Water led (but subject to discussion/confirmation with them). Proposed that the existing guidelines be updated if Wellington Water agree.	HCC comment This is being progressed to an extent through the District Plan Review. The draft District Plan includes a new Three Waters chapter that would include provisions on: <ul style="list-style-type: none"> • Water sensitive urban design, • Hydraulic neutrality, • Rainwater storage tanks, and • Greywater systems.
59	The relevant three waters agency: » Develops a standardised tool (by 2025) that can be used to assess a development's potential contributions of contaminants and hydrological impacts » Recommends potential options to mitigate these effects using site-appropriate WSUD green infrastructure. This supports the global stormwater strategy (Recommendation 56) and Recommendation 58.	Currently being implemented	GW understands that this work is already underway at Wellington Water regarding this.	Information being sought from Wellington Water
60	By 2025, Greater Wellington and territorial authorities amend the relevant planning documents so that all resource consents for property developments and infrastructure upgrades/repairs require the minimisation of stormwater effects and achieve hydraulic neutrality on-site. Where this is not possible or practical on development sites, a formal stormwater offsetting programme could be adopted to fund more efficient centralised systems in the public realm. (8) (8) Modified from WCC Mayoral Task Force Review on three waters, Recommendation 8.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1, notified 30 October 2023. HCC comment This is being progressed through the ongoing District Plan Review, which includes provisions that require hydraulic neutrality.
61	Territorial authorities amend regulatory documents, while working with the relevant three waters agency, to (by 2035) reduce the effects of stormwater flooding on public health, safety and property by further integrating the use of roads and open spaces (such as parks and sports grounds) to act as overland flow paths and flood storage. (9) (9) Modified from WCC Mayoral Task Force Review on three waters, Recommendation 14.	To be commissioned by deliverables	New deliverable name: District Plan Flood Hazard Mapping and Rules UHCC, HCC, WCC led (subject to GW confirming this with them). GW anticipates that this recommendation will be implemented by updates to District Plans. GW has ongoing work providing up to date flood hazard mapping to all TAs for the Flood Protection Scheme areas. This deliverable spans W61 and W65.	Information being sought from TAs. HCC comment New provisions were added to the District Plan to address natural hazard risk associated with stormwater flooding through Plan Change 56 (which became operative in October 2023). However, as the scope of that plan change was limited by the RMA, this risk will need to be addressed further through the ongoing District Plan Review.

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
62	By 2024, territorial authorities work with the relevant three waters agency to develop an approach to the ownership and management of green infrastructure for property developments, and ensure this infrastructure meets appropriate standards when being vested to council ownership. ⁽¹⁰⁾ ⁽¹⁰⁾ Modified from WCC Mayoral Task Force Review on three waters, Recommendation 10.	Other deliverable	Requires conversations between GW and Wellington Water for latest information.	Requires conversations with Wellington Water and TAs
63	Territorial authorities ensure that (by 2024) all green infrastructure is adequately capitalised and depreciated to provide funding for ongoing maintenance and renewals. ⁽¹¹⁾ ⁽¹¹⁾ Modified from WCC Mayoral Task Force Review on three waters, Recommendation 11.	Other deliverable	Requires conversations between GW and Wellington Water for latest information.	Requires conversations with Wellington Water and TAs
64	Greater Wellington works with Mana Whenua, community groups and territorial authorities to amend (by 2024) all relevant regulatory documents to ensure: » That river management enhances habitat restoration and stormwater treatment along the full length of developed rivers » The protection of swimming holes. Specifically, for Te Awa Kairangi/Hutt River, these objectives should be accounted for when undertaking flood protection works	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1, notified 30 October 2023. HCC comment This is predominantly the responsibility of GW, however, through the District Plan Review, HCC is progressing further controls on activities within riparian margins.
65	Territorial authorities update the relevant regulatory documents (by 2025) to ensure they incorporate up-to-date flood hazard mapping and are supported by rules that prevent property development in high-risk areas.	To be commissioned by deliverables	New deliverable name: District Plan Flood Hazard Mapping and Rules. UHCC, HCC, WCC led (subject to GW confirming this with them) This deliverable spans W61 and W65. See comments in W61 for details.	Information being sought from Wellington Water and TAs. HCC comment New provisions (including flood hazard maps) were added to the District Plan to address natural hazard risk associated with flooding through Plan Change 56. However, as the scope of that plan change was limited by the RMA, this risk will need to be further addressed through the ongoing District Plan Review.
66				
66.1	By 2024, Greater Wellington amends the relevant regulatory documents to include policies that aim to avoid unsuitable property development, with reference to setbacks from stream/river margins and hydraulic neutrality.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Addressed by PC1 and RPS
66.2	By 2025, territorial authorities incorporate rules in their district plans that: » Require WSUD, including hydraulic neutrality in any developments » Provide for buildings to be set back from river and stream margins (these setbacks are to provide for āhua and natural character) » Restrict development in known overland flow paths (in line with Recommendation 61).	To be commissioned by deliverables	New deliverable name: District Plans set backs and restrictions. UHCC, HCC, WCC led (subject to GW confirming this with them) GW anticipates that this recommendation be implemented by updates to District Plans.	Information being sought from TAs. HCC comment WSUD, setbacks from waterbodies, and restrictions on development in overland flowpaths are all being progressed through the ongoing District Plan Review, with provisions on each of these being included.

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
67	Greater Wellington amends the relevant regulatory documents by 2023, while working with Mana Whenua and territorial authorities to co-design operational guidelines for undertaking flood works on small urban streams, including those on private property. These guidelines would: » Leave room for the river, floodwater and natural processes » Establish native riparian vegetation, which also gives effect to the values in the NPS-FM 2020.	Other deliverable	GW led. GW is identifying any non-regulatory components as the recommendation is already covered under the PNRP.	No current update
68	Greater Wellington, territorial authorities, Mana Whenua and the relevant three waters agency develop plans (by 2030) for the managed retreat and adaptation of three waters infrastructure due to rising sea level.	To be commissioned by deliverables	New deliverable name: Three Waters Infrastructure Managed Retreat Plan. Wellington Water led (but subject to discussion/confirmation with them). GW anticipates that this will be a plan identifying all key infrastructure under threat and how its managed retreat (or adaptation) will be managed and funded. GW notes that this will be dependent on the Climate Change Adaptation Act and the Three Water Reforms implemented, although preliminary work could commence prior to this.	HCC comment A regional Climate Change Impact and Risk Assessment is due to be completed by March 2024. This will inform the development of a Regional Climate Change Adaptation Plan. In both projects, HCC is directly involved as a project partner and funder.
69	Greater Wellington supports and incentivises landowners wanting to restore wetlands and removes barriers for best-practice restoration of the mauri of degraded wetlands.	To be commissioned by deliverables	New deliverable name: Complex wetland restoration resource. GW led. An additional staff member at 1 FTE across the region.	No current update
70	Greater Wellington increases the resourcing available to implement and enforce the NPS-FM 2020, National Environment Standards and PNRP provisions about wetland identification, protection and restoration.	Currently being implemented	GW led. GW could support more complex wetland restoration activities if we had more inhouse expertise to support consent holders to get consent. The barrier is the information gathering and putting together the consent application. Need focus on wetland compliance (compliance monitoring for NES-F) and wetland identification. To be followed up once further prioritisation occurs within the new Rōpū Taiao Environment Group.	Currently being implemented through increased compliance resourcing
71	Greater Wellington supports positive relationships with wetland owners, including those with wetlands above the Parangārehu Lakes and at Mangaroa. It also provides assistance to protect and restore those wetlands.	Currently being implemented	GW led. Parangārehu Lakes - Parks and Land Management are engaging with the key landowner. GW is reviewing its communication and engagement and policy settings in relation to wetland owners.	Currently being implemented
72	Greater Wellington and Mana Whenua seek opportunities to develop and restore wetland habitat when managing and designing flood protection works and developing green spaces.	Currently being implemented – NEW (Was Other deliverable)	GW led. GW is identifying the extent to which this recommendation is being implemented through existing work including farm management plans and Riverlink.	Currently being implemented – NEW. Examples include Poets Park and Belmont wetland

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
73	Greater Wellington maps all natural wetlands in the whaitua, as required by the NPS-FM 2020. This is to be completed by 2024, rather than the NPS-FM deadline of 2030.	Currently being implemented	GW led. Work is underway. Mapped wet areas have been identified using aerial imagery across Kapiti Coast, Porirua and Wellington. These areas still need to be ground truthed to confirm which of the wet areas qualify as natural wetlands.	Currently being implemented
74	Greater Wellington addresses the issues raised in Te Mahere Wai on the recommendations about the Parangārehu Lakes area.	No applicable deliverables	Te Mahere Wai is being assessed and will be implemented, so there is not a separate WIP deliverable to commissioned/managed here as part of Te Whanganui-a-Tara WIP.	No current update
75	Greater Wellington identifies all fish passage barriers on public land by 2025 and private land by 2030.	Currently being implemented	GW led. This work is underway. Barriers on GWRC land have been identified.	Currently being implemented through fish passage / barrier programme
76	Greater Wellington, together with Mana Whenua, community groups and territorial authorities, works with owners of fish passage barriers to remediate the highest-risk sites by 2040 and all other sites as soon as practical, but no later than 2045. Catchments highly valued for their indigenous fish and mahinga kai species are prioritised and Greater Wellington reports publicly on the identification and remediation progress.	Currently being implemented	GW led. This work is underway. It is being implemented through the Improving fish passage in the Wellington Region programme. The programme has GWRC funding, and Ministry for the Environment funding from the Freshwater Improvement Fund until June 2026.	Currently being implemented through the improving fish passage in the Wellington Region programme
77				
77.1	Greater Wellington and Mana Whenua work with territorial authorities to identify (by 2025) the spawning habitats of indigenous fish and mahinga kai species (e.g., inanga) in their rohe.	Other - NEW <i>(was NRP Plan Change by 2024)</i>	Being managed by Greater Wellington through its regulatory programmes of work.	Not addressed by PC1. Other – NEW to be commissioned by deliverables.
77.2	Greater Wellington and Mana Whenua work with territorial authorities to restore (by 2035) the spawning habitats of indigenous fish and mahinga kai species (e.g., inanga) in their rohe.	To be commissioned by deliverables	New deliverable name: Spawning habitat restoration project GW led. A new project which will need to be scoped to meet the requirements of the recommendation.	HCC comment GW led but must engage with HCC Parks team where any habitat is within or adjacent to a park owned and managed by HCC.
78	Mana Whenua and Greater Wellington work together and with input from relevant interested parties, including the three waters agency, to design a new water allocation regulatory regime that: » Gives effect to our understanding of Te Mana o te Wai » Provides for Mana Whenua rights and interests, which may include a specific allocation for iwi » Includes mātauranga Māori in its development and monitoring	NRP Plan Change post 2024	Being managed by GW through its regulatory programmes of work	Future allocation plan change
79	Greater Wellington investigates options for iwi allocation in the current regulatory regime.	NRP Plan Change post 2024	Being managed by GW through its regulatory programmes of work	Future allocation plan change
80	Mana Whenua and Greater Wellington work together to develop a framework of how Te Mana o te Wai (for water quantity) can be achieved and demonstrated. This includes agreeing on the process, measures and indicators of success.	NRP Plan Change by post 2024	Being managed by GW through its regulatory programmes of work	No current update

Recom mendati on	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	Note: This links to wider attribute work, as the measures can't sit with water quantity alone			
81	Greater Wellington supports Mana Whenua to develop mahinga kai measures related to water quantity.	To be commissioned by deliverables	Being managed by GW through its regulatory programmes of work	No current update
82	Greater Wellington, Mana Whenua and territorial authorities (including Porirua City Council) recognise, promote and provide for the mana of the Te Awa Kairangi/Hutt, Wainuiomata and Ōrongorongo Rivers as awa tupuna for Taranaki Whānui and Ngāti Toa Rangitira. They are treasured taonga and providers of wai ora and hauora (health and wellbeing) for the whole Whaitua Te Whanganui-a-Tara community and Te Awarua-o-Porirua community.	To be commissioned by deliverables	New deliverable name: Hui with mana whenua on how to recognise and provide for the mana of Te Awa Kairangi, Wainuiomata and Ōrongorongo Rivers. GW led (to facilitate with Ngāti Toa and Taranaki Whānui). To be a hui with Ngāti Toa and Taranaki Whānui with actions agreed, documented and implemented.	HCC comment This is being progressed through the District Plan Review. This includes a review of which sites and areas of significance to Māori should be identified in the District Plan, including waterbodies.
83	Greater Wellington includes in the PNRP the following water allocation limits for the Te Awa Kairangi/ Hutt, Wainuiomata and Ōrongorongo Rivers: » Increase the minimum flows over time to 80 per cent of MALF in 50 years' time: <ul style="list-style-type: none"> • The first minimum flow increase must be included in the upcoming plan changes to be notified by 2024 and will apply from the mid-2030s, or whatever date is most appropriate, to ensure that the new minimum flow applies when the bulk water consents to take surface water in the major water supply catchments are renewed • Future increases in minimum flow must be stepped out in line with the bulk water consent renewals • We expect this pathway for increases in minimum flows to be revised as a result of further investigative work to understand the limits that would achieve Te Mana o te Wai, outlined in Recommendation 107. » Cap the amount of water available to be allocated through consents at the existing consented use.	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work	Not addressed by PC1. Will inform a future allocation plan change.
84	Greater Wellington includes in the PNRP the following water allocation limits for all streams (outside the three major water supply catchments): » 100 per cent of MALF for the minimum flow » 30 per cent of MALF for the allocation limit.	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work	Not addressed by PC1. Will inform a future allocation plan change.
85	Greater Wellington retains the current policy settings that allow the reallocation of any water that becomes available within the allocation limit to be reallocated.	No applicable deliverables	As this recommendation is to retain the status quo there are no deliverables to be commissioned to implement it.	No current update
86	Greater Wellington amends the PNRP policy and rule framework in Whaitua Te Whanganui-a-Tara so the region-wide permitted activity rule (R136) no longer applies to this whaitua. Note: Water takes for reasonable domestic use and animal drinking water are still authorised under section 14(3)(b) of the Resource Management Act. All other takes will require a resource consent.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Not addressed by PC1. Will inform a future allocation plan change.

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
87	Greater Wellington amends the PNRP through a plan change (by 2022) to ensure that all water takes requiring resource consent within Te Whanganui-a-Tara require metering. Electronic metering is required by 2027.	PNRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Not addressed by PC1. Will inform a future allocation plan change.
88	Greater Wellington reviews all existing consents in catchments outside the major water supply catchments that haven't expired within five years of the whaitua plan change, to ensure that any updated allocation limits are applied to consents.	To be commissioned by deliverables	New deliverable name: Water Take Consent Review. GW led. Per s128 of RMA. May also need to include a review/update of the GW charging policy if consent holders who were intended to be charged for the cost of the review. May require supporting hydrological model to identify MALF limits. Note that this work would ideally happen after limits have been amended in the PNRP.	To be commissioned post PC1
89	In collaboration with catchment communities, Greater Wellington develops a work programme designed for and with landowners (particularly for lifestyle block owners), to ensure they are aware of regulations on the use of water.	Currently being implemented – NEW <i>(was To be commissioned by deliverables)</i>	New deliverable name: Education Programme for rural land owners GW led. Communication/engagement based activities to include lifestyle block owners and to be per the wording of the recommendation. Should also encompass other regulations relevant to rural owners, e.g. sediment and erosion.	Currently being implemented – NEW. PC1 engagement plan underway
90	Greater Wellington undertakes assessments (e.g., through rural engagement surveys and targeted catchment investigations) to understand any potential changes in the way people are taking unconsented water (section 14(3)(b) of the Resource Management Act about takes).	To be commissioned by deliverables	New deliverable name: Unconsented Water Use Assessments. GW led. Deliverable is still to be designed and agreed within GW but will need to be sufficient to inform decision making.	No current update
91	Greater Wellington increases its flow monitoring in small streams in catchments where land use is changing significantly, or there is thought to be a relatively high potential for change (e.g., rural intensification). This is to establish whether any increase in water use is affecting flows and therefore values.	To be commissioned by deliverables	New deliverable name: Whaitua Monitoring Plan encompassing each FMU. GW led.	No current update
92	Territorial authorities and the relevant three waters agency implement universal residential metering to identify water wastage, reduce demand and enable more effective network management. To enable metering: » Territorial authorities will consult on how to fund water meters by 2025 » The relevant three waters agency will install water meters. The whaitua committee recognises that water metering enables a range of mechanisms for reducing demand. These include, for example: leak detection; information provision; the identification of potential excessive users for advice, support and/or fines; and volumetric charging.	Currently being implemented	Wellington Water are undertaking feasibility assessments and developing an indicative business case. Greater Wellington has funded the economic case. Has been added into the 30-year investment plan for the metropolitan councils. Some Councils have money in their LTPs for water meters.	Information being sought from Wellington Water

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	<p>Agreement could not be reached on whether volumetric charging should be introduced as a lever for reducing demand. However, if it is, it will be important to ensure that:</p> <ul style="list-style-type: none"> » Water assets remain in public ownership » People can access enough water to flourish » Vulnerable communities are not disadvantaged » Water is respected as the giver of life and doesn't become a commodity » It prevents exploitation and excessive use by people who can afford it. 		<p>The emphasis should be on Wellington City due to the overall amount of water use.</p>	
93	<p>The relevant three waters agency provides the community (by 2022) with information on and practical support for being more efficient with water. The information might cover:</p> <ul style="list-style-type: none"> » Technological solutions (such as the different uses of rainwater tanks) » Water-saving tips » The natural water cycle and where our water comes from. <p>The support could be provided through partnerships with catchment groups, through the Mangai Wai Ora (kaitiaki) programme (see Recommendation 101), professional associations and enterprises (e.g., a Sustainability Trust model).</p>	<p>To be commissioned by deliverables</p>	<p>New deliverable name: Additional funding to improve efficiency of water use by community. Wellington Water led.</p> <p>Will involve a request for funding through the GW LTP 2024 process.</p> <p>Note: Wellington Water are already undertaking work in this area with funding from WCC and HCC, but funding is not sufficient for full implementation.</p>	<p>Information being sought from Wellington Water</p>
94	<p>The relevant three waters agency develops a programme by 2023 that engages with commercial water users (and starts with identifying the top 100).</p> <ul style="list-style-type: none"> » The programme: Identifies how water is used » Helps users to understand how their use compares to that of similar industries nationally and globally » Supports businesses to improve water efficiency and/or lower their demand. 	<p>To be commissioned by deliverables</p>	<p>New deliverable name: Additional funding to improve the water efficiency of commercial water users. Wellington Water led.</p> <p>Will involve a request for funding through the GW LTP 2024 process.</p> <p>Note: Wellington Water are writing a strategy that will lead to pilots with the small amount of funding they have. Likely to start with top 10 water users, including customer groups e.g., schools. Not enough to fully implement this recommendation unless it is expanded.</p>	<p>Information being sought from Wellington Water</p>
95	<p>Greater Wellington and the relevant three waters agency investigate the current pricing for commercial water users (by 2023), to determine if changes in pricing mechanisms could help improve their water-use efficiency and identify the possible economic implications.</p>	<p>Other deliverable</p>	<p>Requires conversations between GW and territorial authorities for latest information. Will need to be implemented by TAs as they issue water bills to commercial users.</p>	<p>Requires conversations between GW and Wellington Water</p>
96	<p>Territorial authorities promote the use of rainwater tanks or alternative water-storage solutions for non-potable uses in new commercial and residential developments.</p> <p>Note: The majority of the committee strongly supported rainwater tanks being mandatory for new developments, but there was not consensus agreement. The committee did agree that more rainwater tanks in new developments would be beneficial and their use should be promoted.</p>	<p>To be commissioned by deliverables</p>	<p>New deliverable name: Promote use of Rainwater Tanks. GW led (to follow up with TAs).</p> <p>Will involve following up with TAs to ensure that existing RPS rainwater tanks requirements (policy 42) are incorporated into their respective District Plans or through some other mechanism.</p>	<p>Information being sought from TAs</p> <p>HCC comment</p> <p>This is being progressed through the District Plan Review. The draft District Plan includes a new Three Waters chapter that has provisions relating to rainwater storage tanks and greywater systems.</p> <p>However, the provisions in the draft District Plan would only apply to residential units and retirement villages in residential zones, and not commercial developments or activities in commercial zones.</p>

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
97	Greater Wellington, territorial authorities and the relevant three waters agency incentivise (and support with educational material) the retrofitting of rainwater tanks to reduce demand and/or attenuate stormwater, prioritising suburbs that are prone to flooding due to capacity issues in the stormwater network. Territorial authorities provide a funding mechanism for willing property owners.	Regulatory change underway – NEW. <i>(was To be commissioned by deliverables)</i>	New deliverable name: Rainwater Tank promotion and incentivisation initiatives. GW led (to initiate with TAs). Will involve WCC, HCC and UHCC to each identify a project or suite of initiatives to meet recommendation 97 within their jurisdiction. TAs could request Wellington Water to come up with a consistent suite of initiatives across the TAs.	Regulatory change underway – NEW. Acknowledged in PC1, notified 30 October 2023. PC1 includes a method that states Greater Wellington will partner with WWL to investigate options to reduce the hydrological impacts on freshwater bodies of stormwater capture and discharge, including through incentivising and supporting the retrofitting of rainwater tanks at property or catchment scale.
98	The relevant three waters agency ensures that 100 per cent of the public drinking-water network is assessed for leakage (by 2030) and a plan (publicly available with progress reporting) is developed to repair and replace assets in the Wellington drinking-water network so that: » By 2030, the network will have an Infrastructure Leakage Index (ILI) of 4.5 or lower » By 2040, the network will have an ILI of 3.5 or lower » By 2050, an ILI target of 2 or less will have been achieved and an ongoing cycle of maintenance will be in place to ensure this continues.	Currently being implemented	Wellington Water are working with Councils to take a proactive approach to leaks. Wellington Water are asking for additional funding from Councils to reduce leakage. Uncertainty around funding will impact on meeting the targets in this recommendation.	Information being sought from Wellington Water
99	The relevant three waters agency investigates additional water storage and harvesting water at high flows as soon as possible to ensure continued security of supply for municipal use.	Currently being implemented	Wellington Water led. These options are being considered as part of the water supply strategy work to be completed in 2023.	Information being sought from Wellington Water
100	The relevant three waters agency engages with the community and Mana Whenua (by 2023) on implementing community-scale, urban-water recycling for uses such as firefighting, the irrigation of parks and industrial/commercial applications. Initiatives to be considered should include: » Collecting and storing community stormwater in public spaces for non-potable purposes » Using the continuous supply of treated wastewater for non-potable purposes. Continued public education and long-term three waters strategies should also encourage a greater use of recycled urban water, and evaluate where existing networks can be optimised, replaced or retrofitted to make greater use of recycled water.	Currently being implemented	Options for urban water recycling are being considered by Wellington Water as part of their demand management programme. Investment will be requested in the future. This is currently low priority.	Information being sought from Wellington Water
101	Greater Wellington provide resourcing for a Mangai Wai Ora (kaitiaki) programme (as outlined in Te Mahere Wai), to be developed and led by Taranaki Whānui and Ngāti Toa, alongside relevant industry bodies to train a workforce of kaitiaki to support the ongoing delivery of work on freshwater projects in the whaitua. The scope of the role could include: » Freshwater and coastal monitoring using a range of scientific information, including mātauranga Māori, citizen science and community knowledge to inform the current state of water and the environment » Leadership in freshwater policy and plan development	Currently being implemented	GW led. Kaiāwhina Taiao positions were being progressed through kaupapa funding programme. Internships working with different people in the organisation. Currently under review pending Rōpū Taiao Environment Group implementation. Funding coming for specific mana whenua roles related to monitoring for 5 years. Roles could grow over time to encompass more activities. Under discussion with iwi on funding arrangements.	Currently being implemented

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	<ul style="list-style-type: none"> » Providing for cultural relationships with freshwater and coastal environments » Monitoring of mahinga kai and Māori customary use » Checking wastewater and stormwater infrastructure on private and public land, in support of three waters agency roving crews » Providing advice and support for industries on their potential impacts on water quality and mitigations » Supporting education on local streams, water quality and water usage in schools and the community » Clearing waterways of rubbish, riparian planting and reporting pollution. 		This recommendation references Te Mahere Wai which is being assessed and implemented so may move to there to track implementation.	
102	Mana Whenua, Greater Wellington and territorial authorities engage with relevant Workforce Development Councils (WDCs) to identify how the WDCs can best contribute, through their leadership roles in vocational education and training, to growing the workforce needed to take care of water.	To be commissioned by deliverables	<p>New deliverable name: Workforce Development Councils workshop. GW led.</p> <p>Workshop involving the parties identified in recommendation 102. Content and format to be agreed with the parties in advance and an alternative mechanism may be identified as more appropriate.</p>	GW are engaging with the HCC Head of Business and Economy.
103	Greater Wellington and territorial authorities continue to advocate and petition central government for new regulations to restrict the supply of water for water-bottling activities.	No applicable deliverables	<p>Prior to the WIP being submitted, GW and TAs have supported the need for new regulations, via Local Government NZ and submissions on central government proposals. This is expected to continue.</p> <p>As the recommendation is to continue current approaches and does not identify any additional specific work to commission or manage, it has been classified as no applicable deliverables.</p>	No current update
104	Greater Wellington advocates to central government in 2022 for the Emissions Trading Scheme to include the protection and restoration of natural wetlands, whether or not they are currently functioning wetlands.	To be commissioned by deliverables	<p>New deliverable name: Letter to Minister of Climate Change advocating for wetlands inclusion in ETS. GW led.</p> <p>Letter from Chair GWRC to Minister for Climate Change requesting inclusion of wetlands in the ETS and outlining the benefits of this.</p>	No current update
105	By 2022, Greater Wellington, Mana Whenua and territorial authorities (through the regional stormwater forum – see Recommendation 56) will advocate to central government to introduce with urgency rules that will phase out copper brake pads in vehicles by 2030 or earlier.	Regulatory change underway – NEW. <i>(was Currently being implemented)</i>	This recommendation is being managed by Greater Wellington as part of a wider work programme of zinc and copper related recommendations. It includes liaising with other Councils with similar concerns and jointly engaging with Ministry for the Environment to seek abolition of copper brake pads.	<p>Regulatory change underway – NEW. Supported by PC1, notified 30 October 2023.</p> <p>PC1 requires the development of Freshwater Action Plans. One of the necessary actions to be included in the Freshwater Action Plan(s) for Whaitua Te Whanganui-a-Tara to meet the dissolved copper and zinc attributes is to work with the Ministers of the Environment and Transport, Waka Kotahi NZ Transport Agency and the territorial authorities to promote source control for copper from vehicles.</p> <p>HCC comment</p>

Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
				GW is leading this work, but HCC is happy to support relevant engagement with Ministry for the Environment and/or the Ministry of Transport.
106	Greater Wellington partners with Mana Whenua to use mātauranga Māori in developing an understanding of water quality and quantity within the whaitua (e.g., our understanding of springs, aquifers and wetlands, and stream water-quality monitoring).	Currently being implemented	GWRC are employing three mātauranga Māori roles that will sit in Te Hunga Whiriwhiri that will work across the new Rōpū Taiao Environment Group looking at how we incorporate mātauranga Māori across our work programmes and decision making.	Currently being implemented
107	Greater Wellington partners with Mana Whenua to develop a comprehensive approach to understanding, managing and allowing for mahinga kai values throughout the whaitua. This should build on existing work by Mana Whenua and include: » Developing attributes for understanding whether the values are being provided for with Mana Whenua » Designing and implementing a comprehensive monitoring programme to provide information on current state and trends » Developing targets for mahinga kai throughout the whaitua » Determining any management methods beyond those already recommended in this WIP that are required to achieve the targets.	Other – NEW (was NRP Plan Change by 2024)	Being managed by GW through its regulatory programmes of work	Not addressed in PC1. Other – NEW to be commissioned by deliverables.
108	Greater Wellington works with Mana Whenua and communities to develop measures for community participation in and connection to their water bodies – and in doing so build on the kaupapa framework, Te Oranga Wai, being developed by Mana Whenua (as outlined in Te Mahere Wai). ‘Community connection’ is important beyond narrow in-stream measures of environmental outcomes. It spans participation, mental health, spiritual connection, identity, sense of place, story and culture, and physical health needs. Note: This recommendation should only be undertaken once the kaupapa framework, Te Oranga Wai, being developed by Mana Whenua is complete and only if there are identified gaps in meeting wider community needs	To be commissioned by deliverables	New deliverable: Community Connection Measures Workshop. Workshop with subsequent implementation actions identified, agreed and carried through. As noted in the WIP recommendation 108, this work cannot take place until the Te Oranga Wai framework is complete.	No current update
109	Greater Wellington, Mana Whenua and the relevant three waters agency undertake, or continue to undertake, investigations to determine the changes in minimum water flows and allocation required to meet the long-term whaitua vision and Te Mana o te Wai. Investigations are to begin by 2022 and to be completed by 2027. These investigations should lead to a package of actions and a timetable for implementation. Their scope should be defined in detail and include, but not be limited to: » Prioritising catchments based on information requirements, values and pressures, which includes any catchment focal points for small stream investigations beyond the main water supply catchments » Mātauranga Māori and quantifying water flows to support Mana Whenua values and outcomes for catchments of interest	NRP Plan Change post 2024	Being managed by Greater Wellington through its regulatory programmes of work.	Not addressed in PC1. Will inform a future allocation plan change.

Recom mendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	<ul style="list-style-type: none"> » Testing alternative minimum water flow and allocation regimes alongside a range of municipal water supply infrastructure options » Facilitating the implementation of any new allocation regime and detailed assessments of its implications for municipal water supply infrastructure » Assessments of the implications of climate change on stream flows » Ecosystem function modelling » A review and revision of the Waiwhetū aquifer’s management 			
110				
110.1	<p>Greater Wellington supports and invests in research (to begin by 2023) to better understand our aquifers. This includes investigations of the:</p> <ul style="list-style-type: none"> » The hydrogeology of aquifers (such as groundwater sources and flow paths, and water availability) » Indicators of aquifer ecosystem health, such as stygofauna » Stressors on aquifer ecosystem health, such as contamination from E. coli and land uses » Risks to the sources of human drinking water, including from emerging contaminants. <p>Note: Ecosystem health encompasses the five elements of the NPS-FM 2020 – water quality, water quantity, habitat, aquatic life and ecological processes.</p>	Currently being implemented	<p>Wellington Water led.</p> <p>We understand that Wellington Water is implementing the first bullet point. Undertook a drilling campaign across the aquifer to understand more about the hydrology and hydrogeology. Results captured in updated Hutt Aquifer Model (HAM5). It’s being used by Wellington Water for optimising use of the resource and enhancing infrastructure and supply resilience.</p> <p>Wellington Water has developed a GIS catchment risk tool that includes sites (e.g., HAIL sites, closed landfills) to understand the risks to the sources of drinking water across the aquifer.</p> <p>We understand Wellington Water is implementing the fourth bullet point. Wellington Water has lodged a source water risk management plan with Taumata Arowai around the risks to the sources of human drinking water.</p> <p>GW sampled for emerging contaminants after the Kaikoura earthquake (2017 & 2018). We may sample again in the future for the state of the environment reporting.</p>	Currently being implemented
110.2	To support this research, Greater Wellington develops a monitoring network for aquifer ecosystem health by 2023.	To be commissioned by deliverables	<p>New deliverable name: Aquifer ecosystem health monitoring (e.g. stygofauna).</p> <p>GW led.</p> <p>To have three stages:</p> <ol style="list-style-type: none"> 1) Set up monitoring bores to sample what’s in the groundwater (set up bores suitable for this – can’t use current bores). 2) Research work to input into overall national conversation to develop indicators for groundwater. 3) Research work to follow on to identify the stressors to the indicators on groundwater dependent ecosystems. 	No current update
111	Greater Wellington initiates (by 2025) and carries out more investigations into the nutrient sources of Te Awa Kairangi/Hutt River, to help in	To be commissioned by deliverables	New deliverable name: Nutrient sources of Te Awa Kairangi/Hutt River Investigation.	No current update

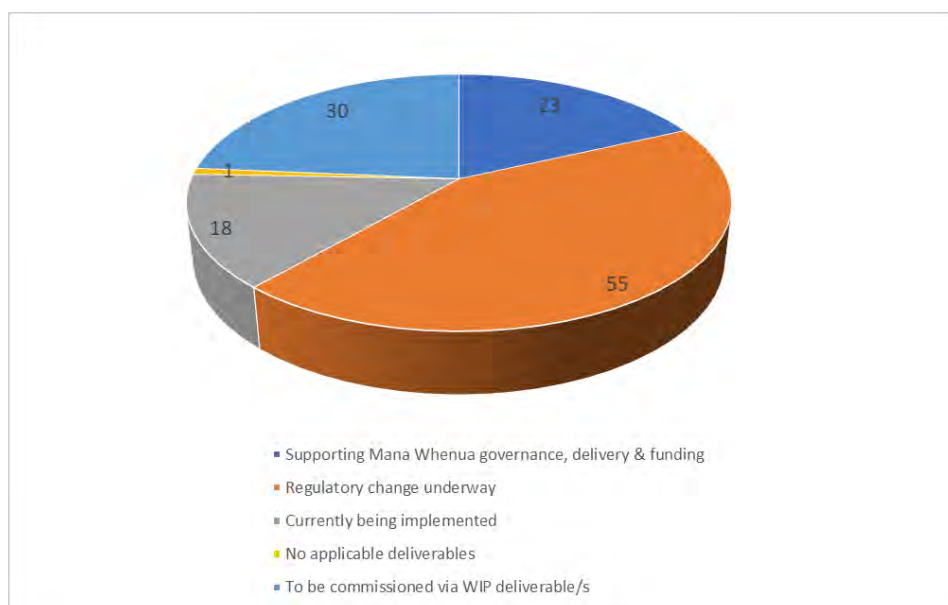
Recommendation	Recommendation wording	Implementation category	Comment (June 2023)	Comment (November 2023)
	developing the actions needed in future to manage toxic algae. These investigations may include: <ul style="list-style-type: none"> » Nitrogen coming from tributaries and groundwater in the Pakuratahi and Mangaroa River catchments » Nitrogen entering the shallow, unconfined Upper Hutt aquifer » The contribution of sediment-bound phosphorus » Identifying the sources of fine sediment and its role in toxic algal bloom formation. 		GW led. Will likely need to include substantial field work, collecting data and a spatial map of nutrient loads, etc. To culminate in a report. Could potentially be a PhD thesis.	

Te Mahere Wai Recommendations

The implementation categories in Te Mahere Wai differ slightly to those for the WIPs. This is because there are a number of recommendations that will require working with mana whenua to deliver. Also, where recommendations in Te Mahere Wai match recommendations in the WIP, these are categorised “to be commissioned via WIP deliverable/s”.

Implementation Category	Number of recommendations
Fully implemented	0
Supporting Mana Whenua governance, delivery & funding	23
Regulatory change underway	55
Currently being implemented	18
No applicable deliverables	1
To be commissioned via WIP deliverable/s	30
Total	127

Note: The numbers in the table exceed the number of recommendations in Te Mahere Wai as some recommendations have multiple sub-recommendations to be implemented through different mechanisms.



Recommendation	Recommendation wording	Implementation category	Comment November 2023
Rights and interests			
1	The rights and interests of Taranaki Whānui and Ngāti Toa Rangitira in freshwater are acknowledged by Greater Wellington.	Supporting Mana Whenua governance, delivery & funding Currently being implemented	To be progressed with Mana Whenua.
Ngā whanaketanga mō ngā wā kei mua mā ngā huringa ki te mahere (future developments through plan changes)			
2	Mana Whenua are resourced to help complete the National Objectives Framework (NOF) process set out in section 3.7 of the NPSFM 2020 for Te Whanganui-a-Tara that includes:	Currently being implemented	To be progressed with Mana Whenua. Recommended approach is being applied in the Kāpiti Whaitua process as advocated for by Ngāti Toa during Whaitua Te Whanganui-a-Tara process.
2.1	Articulating additional attributes for Mana Whenua values,	Currently being implemented	Being applied in Kāpiti Whaitua process.
2.2	Identifying baseline states for attributes,	Currently being implemented	Being applied in Kāpiti Whaitua process.
2.3	Setting additional target attribute states for the different Wāhi Wai Māori Freshwater Management Units (FMUs),	Plan change by 2024	Being applied in Kāpiti Whaitua process.
2.4	Setting environmental flows, levels and limits for the major rivers, small streams and aquifers,	Plan change by 2024	Not addressed by PC1. Will inform a future allocation plan change.
2.5	Articulating limits, management methods and mātauranga Māori monitoring measures,	Currently being by	Being applied in Kāpiti Whaitua process.
2.6	Agreeing a new quantum for permitted water takes,	Plan change by 2024	Addressed by PC1
2.7	Addressing non-municipal water supply, and	Currently being implemented	Requires further discussion with Wellington Water
2.8	Completing the Te Oranga Wai attributes for freshwater and coastal receiving environments for inclusion in the Proposed Natural Resources Plan (PNRP) as part of the 2022 and 2024 plan changes.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
Wai ora (water that sustains life)			
3	Identify and restore wai ora in all freshwater and coastal receiving environments in Te Whanganui-a-Tara by 2071.	Plan change by 2024	Addressed by PC1, notified 30 October 2023. Noting that the timeframe included in PC1 is 2100 which was informed by both Te Mahere Wai (2071) and the Whaitua Te Whanganui-a-Tara WIP (2123).
4	Develop a wai ora measure that identifies the baseline state of wai ora from the mātāpuna (headwaters) through to takutai moana (the sea).	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
Mahinga kai (food gathering places)			
5	Mana Whenua are resourced to develop and implement a measurement framework for mahinga kai as a compulsory value in the NPSFM 2020 by 2025. The framework will be central to Greater Wellington monitoring and will provide ongoing mahinga kai measurement for both water quality and quantity across eight spatial areas identified in Te Mahere Wai. The measurement framework will identify baseline states, attributes and target states for: taonga species, mahinga kai areas, and mahinga kai activities.	Plan change by 2024	Not addressed by PC1. Will inform a future plan change.
6	Develop a whaitua-scale (catchment-scale) Mana Whenua monitoring and reporting framework for mahinga kai.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
7	The mainstream Whaitua Implementation Programme relies on Te Mahere Wai and ongoing Mana Whenua implementation to provide the assessment of compulsory mahinga kai values required in the NPSFM 2020. It	Plan change by 2024 No applicable deliverables	Not addressed by PC1. Will inform a future plan change.

Recommendation	Recommendation wording	Implementation category	Comment November 2023
	is recommended that Greater Wellington implement all mahinga kai recommendations to give effect to national policy directives.		
Ngā awa tupua (streams with a spiritual nature)			
8	Te Korokoro o te Mana (Korokoro Stream), Te Manga o Kaiwharawhara (including Te Māhanga and Korimako Streams) and Wainuiomata are prioritised for protection and restoration.	Plan change by 2024 To be commissioned via WIP deliverable/s	Supported by PC1
9	The Korokoro and Kaiwharawhara Streams, and the entire length of the Wainuiomata Awa are designated as outstanding waterbodies in Schedule A: Outstanding Water Bodies of the Proposed Natural Resources Plan (PNRP).	Plan change by 2024	Not addressed by PC1. Will inform a future plan change.
10	Te Awa Kairangi, Akatārawa, Pākuratahi, Whakatīkei, Wainuiomata, Te Awa o Ōrongorongo and the Parangārehu Lakes are classified as areas that have outstanding natural character in the PNRP.	Plan change by 2024	Not addressed by PC1. Will inform a future plan change.
11	The Korokoro and Kaiwharawhara Streams and the entire length of the Wainuiomata Awa, are taonga and should be protected and restored by conferring a legal personhood on each.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
12	Greater Wellington work in partnership with Mana Whenua, Lower Hutt City Council, KiwiRail and Waka Kotahi to reinstate mai uta ki tai (from the inland to sea) pedestrian access between Honiana Te Puni reserve and Korokoro Stream.	To be commissioned via WIP deliverable/s	To be progressed with Mana Whenua
Ko te Mana whenua hei Kaiwhakatau (Mana Whenua as decision-makers)			
13	Mana Whenua are resourced to implement Te Mahere Wai and are active and have an integral presence as Ngā Mangai Waiora (ambassadors for water) in whaitua monitoring and management of their freshwater taonga.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
14	Greater Wellington enter into a partnered management agreement with Mana Whenua so that they are actively involved in all freshwater management decision-making processes in Te Whanganui-a-Tara. This includes giving effect to Te Mana o te Wai at a local level and developing, monitoring and implementing the Whaitua Te Whanganui-a-Tara Whaitua Implementation Programme (WIP).	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
15	Greater Wellington resources iwi management plans and joint management agreements under section 36B of the RMA where appropriate.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
16	Greater Wellington delegates its powers under section 33 of the RMA to Mana Whenua (where agreed) to make decisions around freshwater management that includes (but is not limited to) monitoring of awa, and enforcement of resource consent conditions.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
17	Greater Wellington establishes a permanent Mana Whenua decision-making rōpū (group) to help develop and implement the Whaitua Implementation Programme and Te Mahere Wai.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
18	Greater Wellington and Mana Whenua agree the rating resource to be allocated and managed by Mana Whenua for the management of Ngā Awa Tupua within Te Whanganui-a-Tara.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
19	Greater Wellington supports the establishment of, and provides operational funding for, a Mana Whenua kaitiaki monitoring and management programme like Ngā Mangai Waiora (ambassadors for water).	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
20	Greater Wellington will support the implementation of Te Mahere Wai and the Whaitua Implementation Programme through the establishment of mātauranga Māori expertise within the organisation.	Currently being implemented	GW's Mātauranga Māori capability being enhanced
21	Mana Whenua are resourced to undertake a review of traditional Māori-names across Te Whanganui-a-Tara water bodies in order to promote their correct usage and retention and, where possible, restore traditional names that have been lost.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua

Recommendation	Recommendation wording	Implementation category	Comment November 2023
Te kounga o te wai (water quality)			
22	Activities affecting water quality will ensure that the water quality standards set in the PNRP, or the A band attribute state in the NPSFM 2020, whatever is more stringent, are achieved.	Plan change by 2024	Addressed in PC1, notified 30 October 2023. Noting that PC1 manages activities to achieve the 2040 target attribute states set in the Whaitua Te Whanganui-a-Tara WIP.
23	Greater Wellington will prioritise removing the discharge of human effluent and waste to freshwater and coastal waterbodies.	To be commissioned via WIP deliverable/s	Water quality limits in PC1 (e.g., <i>E.coli</i> and ammonia) will drive removal of human effluent and waste to receiving environments
24	All waterbodies and wetlands in Te Whanganui-a-Tara have planted riparian margins.	Plan change by 2024 To be commissioned via WIP deliverable/s	Supported by PC1, notified 30 October 2023. PC1 includes a requirement for Freshwater Action Plans in Whaitua Te Whanganui-a-Tara. Where applicable the Freshwater Action Plan(s) will include the planning and delivery of a riparian restoration programme.
25	The steep rural land within the Southwest Coast Wāhi Wai Māori (FMU) is retired to allow native forest regeneration.	To be commissioned via WIP deliverable/s	Supported by PC1, notified 30 October 2023. PC1 identifies highest erosion risk land for pasture, woody vegetation and plantation forestry and high erosion risk land for pasture within each whaitua. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. GW will assist landowners to support revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land.
Ngā tukunga wai paruparu, wai rerenga waipuke hoki (wastewater and stormwater discharges)			
26	There are no discharges (point source or non-point source) that impact on water quality standards that are set.	Plan change by 2024	Addressed by PC1, notified 30 October 2023
27	Greater Wellington along with partners, including Mana Whenua and district councils, develop a plan to remove all direct wastewater discharges to freshwater within a generation (20 years).	To be commissioned via WIP deliverable/s	Consistent with WIP
28	Greater Wellington immediately:		
28.1	Reviews all consented direct point discharges to freshwater, particularly the Silverstream discharge to Te Awa Kairangi, and discharges to the Karori and Waiwhetū Streams,	Currently being implemented	Currently being implemented
28.2	Review all non-consented direct point discharges that includes monitoring and remediation.	Currently being implemented	Currently being implemented
29	Kaiwharawhara, Korokoro, Wainuiomata and Black Creek are prioritised for an audit of cross connections.	No recommendation category selected	Requires discussion with Wellington Water and TAs
30	Sanitation systems like septic tanks are audited for a number of parameters including system design, age, structural integrity, soil type and maintenance issues.	No recommendation category selected	Requires discussion with Wellington Water and TAs
31	Septic tanks are required to undergo a warrant of fitness (WOF) check where an onsite servicing specialist undertakes a regular WOF service and performance check.	No recommendation category selected	Requires discussion with Wellington Water and TAs
32	Stormwater is captured and treated and, where possible, utilised as a resource. Where released to streams, it is released in a manner aligned with natural flow regimes.	Plan change by 2024	Addressed by PC1, notified 30 October 2023

Recommendation	Recommendation wording	Implementation category	Comment November 2023
Ngā tukunga Takutai moana (coastal discharges)			
33	Greater Wellington along with partners, including Mana Whenua and district councils works to remove all untreated wastewater discharges to takutai moana (the sea), within a generation (20 years).	Plan change by 2024	Partially addressed in PC1, notified 30 October 2023. Noting that PC1 requires that wastewater network catchment discharges are required to significantly reduce the frequency and/or volume of wet weather overflows and dry weather discharges (i.e untreated wastewater). Completely removal is not required within the first 20 years giving the scale of the issue
34	Greater Wellington will immediately:		
34.1	Identify the impacts of wastewater discharges on public health,	To be commissioned by deliverables	To be commissioned by deliverables
34.2	Identify the impacts of wastewater discharges on mahinga kai, customary use, and Mana Whenua sites of significance through viral and faecal coliforms flesh testing of taonga species, and	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
34.3	Resource science and mātauranga Māori capacity and capability to ensure that coastal discharges are monitored by Mana Whenua, managed and remediated.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua
35	Greater Wellington develop a wastewater management innovation programme that includes incentivising alternate waste disposal, such as:	To be commissioned via WIP deliverable/s	Consistent with WIP
35.1	Establishing incentivised compost toilet programmes including a rates rebate for those who disconnect their black water,	To be commissioned via WIP deliverable/s	Consistent with WIP
35.2	Decoupling trade waste from domestic waste that includes onsite trade waste management innovation programmes; reviews and enhances pre-treatment requirements for trade waste and stormwater from industrial/commercial sites; and penalises non-compliance.	To be commissioned via WIP deliverable/s	Consistent with WIP
Te nui o te wai (water quantity)			
36	Water takes are managed in a way that allows all rivers and streams to be healthy and flourishing. Natural flow variability is protected, long periods of low flow are avoided, and the natural movement of water and sediment through the awa is maintained.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
37	Greater Wellington and Mana Whenua establishes a decision-making framework for identifying environmental flows and levels, cultural flows and flow variability for all water bodies in Te Whanganui-a-Tara by 2024.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
38	Cultural flows must be accounted for, before setting allocation limits.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
39	Greater Wellington and Mana Whenua are resourced to monitor and collect data that will inform water allocation and the setting of limits to achieve Te Mana o te Wai for every waterbody in Te Whanganui-a-Tara by 2024. The limits must be expressed as rules in the PNRP and will need to provide for environmental flows, levels and variability of flows and must clearly articulate:	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
39.1	The amount of water that can be taken,	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
39.2	The extent of flow variability,	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.

Recommendation	Recommendation wording	Implementation category	Comment November 2023
39.3	How to safeguard ecosystem health from extended low flows,	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
39.4	Life cycle needs, particularly for native diadromous fish species and their need for connectivity between the sea and land (and riverbed to banks when spawning during high-flow events),	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
39.5	Total volume and total rate, and	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
39.6	Cease and restrict limits.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
40	The limits for all streams outside the major water supply catchments are apportioned 100% Mean Annual Low Flow (MALF) for the minimum flow and 30% of MALF for the allocation amount.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
41	The new minimum flow of 100% of MALF is to be implemented for small streams in the upcoming regional plan change and applied when existing consents are reviewed or new applications are received.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
42	Water quantity management must achieve 90% of MALF across all main-stem waterbodies by 2071.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
43	The minimum flow levels for Te Awa Kairangi are lifted to achieve 80% of MALF by 2050.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
44	All existing water take consents are reviewed to ensure the new limits are applied to existing consents.	To be commissioned via WIP deliverable/s	Consistent with WIP
45	Place minimum flow limits on the 25 or so consented takes in Te Awa Kairangi that have no minimum flow and monitor and meter each.	To be commissioned by deliverables	To be commissioned by deliverables
46	All water takes in the region are metered, including takes below 5 litres per second.	To be commissioned via WIP deliverable/s	Consistent with WIP
47	All consented takes have electronic meters by 2027 .	To be commissioned via WIP deliverable/s	Consistent with WIP
48	The permitted take rule in the PNRP is removed so that takes above those allowed in section 14(3)(b) of the RMA will require resource consent.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
49	Greater Wellington works with Mana Whenua to clarify the meaning of “reasonable domestic use” and “stock drinking water” takes outlined in the RMA.	To be commissioned by deliverables	To be progressed with Mana Whenua.
50	All small streams are monitored for flow.	To be commissioned by deliverables	To be commissioned by deliverables
51	Te Awa Kairangi, Ōrongorongo and Wainuiomata are publicly acknowledged for supplying all the potable water utilised by the communities of Te Awarua o Porirua Whaitua. This is 12% of all water taken from these rivers.	To be commissioned by deliverables	To be commissioned by deliverables
52	A new water allocation model will include a specific iwi allocation.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
53	There is a rāhui (moratorium) on all future water takes, reducing the limit to existing consented amounts.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
54	The transfer of water consents and takes is prohibited.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
55	A “sinking lid” approach is applied to clawback allocation, where lapsed consents have their apportioned take returned to the awa or iwi as a right of first refusal.	Plan change by 2024	Supporting Mana Whenua governance, delivery & funding Not addressed in PC1. Will inform a future plan change.
56	Greater Wellington provides resourcing to strengthen compliance and enforcement of water takes, particularly those from or adjoining small streams.	To be commissioned by deliverables	To be commissioned by deliverables

Recommendation	Recommendation wording	Implementation category	Comment November 2023
57	Domestic water supply is prioritised over commercial use as articulated in the NPSFM 2020 hierarchy of obligations.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
58	Commercial users must explore ways to use water more efficiently to reduce their water take.	To be commissioned via WIP deliverable/s	Consistent with WIP
59	Commercial takes reduce and cease during times of low flow.	Plan change by 2024	Not addressed in PC1. Will inform a future allocation plan change.
Te tiaki i te awa katoa i raro i Te Mahere Wai (Te Mahere Wai holistic river care)			
60	A partnered management approach is adopted so that Mana Whenua have a meaningful role in developing, applying, monitoring and enforcing best practice holistic care for rivers.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua.
61	Greater Wellington works with Mana Whenua to review the design channel, buffer zones and optimum bed levels in the relevant floodplain management plans for Te Awa Kairangi and Wainuiomata Awa.	Currently being implemented	To be progressed with Mana Whenua.
62	Greater Wellington works with Mana Whenua to incorporate managed retreat and positive engineering options into the floodplain management plans for Te Awa Kairangi and Wainuiomata Awa.	To be commissioned by deliverables	To be progressed with Mana Whenua.
63	Greater Wellington resources managed-retreat expertise in each level of decision-making.	To be commissioned by deliverables	To be commissioned by deliverables
64	The existing global flood protection consent is reviewed so that it gives effect to Te Mana o te Wai, by putting the needs of the river first.	To be commissioned via WIP deliverable/s	Consistent with WIP
Āku waiheke (smaller streams)			
65	Small streams are the “forgotten streams” in rural and urban areas that are extensive, steep and very vulnerable to stock. Under the existing regime, they are unmanaged and this is an anomaly. Because the streams are small, they are vulnerable to access by cattle and horses even at low stocking rates. The topography means that they are not required to be fenced because of the steep slope. We recommend stock exclusion is addressed through the farm plan process on a case-by-case basis.	To be commissioned by deliverables	Consistent with WIP
66	Greater Wellington will work with Mana Whenua to:		
66.1	Exclude cattle and horses through farm plan processes,	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua.
66.2	Establish environmental flows and limits for āku waiheke (small streams),	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua.
66.3	Determine the health of mahinga kai species,	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua.
66.4	Investigate unconsented takes, and	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua.
66.5	Require resource consents for any new domestic take where the impact cannot be assessed.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua.
67	Marginal land on the southwest coast is retired to protect āku waiheke and te mātapuna and the receiving coastal environment.	To be commissioned via WIP deliverable/s	Supported by PC1, notified 30 October 2023. PC1 identifies highest erosion risk land for pasture, woody vegetation and plantation forestry and high erosion risk land for pasture within each whaitua. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. GW will assist landowners to support

Recommendation	Recommendation wording	Implementation category	Comment November 2023
			revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land.
68	Cattle are excluded from all small stream catchments in the southwest coast within five years.	No recommendation category selected	Partially addressed by PC1, notified 30 October 2023. Livestock access to streams less than 1m width within the Mākara Stream catchment is only permitted if the access is for a stock crossing point and the farm environment plan includes a small stream riparian programme. There is no intention to do a future plan change to fully implement this recommendation.
69	Farming cattle in vulnerable catchments is not a permitted activity in the PNRP.	To be commissioned via WIP deliverable/s	Addressed by the Natural Resources Plan and PC1. See comments on Recommendation 68.
70	Greater Wellington works with Mana Whenua to name all āku waiheke and ngā wai huna (concealed waters) that are not named, or have anglicised names, with traditional Māori names.	To be commissioned via WIP deliverable/s	Consistent with WIP
71	Greater Wellington works with Mana Whenua to identify and map āku waiheke and ngā wai huna.	To be commissioned via WIP deliverable/s	Consistent with WIP
72	Greater Wellington works with Mana Whenua to daylight ngā wai huna where appropriate.	To be commissioned via WIP deliverable/s	Consistent with WIP
73	The ecological and cultural values of ngā wai huna (concealed waters) are given the same level of protection as natural streams and waterways.	To be commissioned via WIP deliverable/s	Consistent with WIP
74	Culverts, weirs and dams must allow for native fish migration, but block trout and pest fish access to uninhabited areas.	Currently being implemented	Being progressed through fish passage programme
Te tiaki i te mātāpuna kei kino i ngā pāngā o te whanaketanga me ngā ngahere nā te tangata i whakatō (Protection of te mātāpuna (headwaters) from impacts of development and plantation forestry)			
75	Te mātāpuna are revered, protected and restored as the ultimate sources of mauri/mouri for freshwater.	Plan change by 2024	Supported by PC1, notified 30 October 2023. PC1 identifies highest erosion risk land for pasture, woody vegetation and plantation forestry and high erosion risk land for pasture within each whaitua. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. GW will assist landowners to support revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land.
76	All plantation forestry near te mātāpuna must have harvest plans in place by 2026 that:	Plan change by 2024	Partially addressed by PC1, notified 30 October 2023. Livestock access to streams less than 1m width within the Mākara Stream catchment is only permitted if the access is for a stock crossing point and the farm environment plan includes a small

Recommendation	Recommendation wording	Implementation category	Comment November 2023
			stream riparian programme. There is no intention to do a future plan change to fully implement this recommendation.
76.1	Are approved by Mana Whenua,	Plan change by 2024	Addressed by the Natural Resources Plan and PC1. See comments on Recommendation 68.
76.2	Include Mana Whenua values and environmental outcomes in Te Whanganui-a-Tara,	Plan change by 2024	Supported by PC1, notified 30 October 2023. PC1 identifies highest erosion risk land for pasture, woody vegetation and plantation forestry and high erosion risk land for pasture within each whaitua. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. GW will assist landowners to support revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land.
76.3	Meet best practice management requirements, including the use of riparian buffers,	Plan change by 2024	Partially addressed by PC1, notified 30 October 2023. Livestock access to streams less than 1m width within the Mākara Stream catchment is only permitted if the access is for a stock crossing point and the farm environment plan includes a small stream riparian programme. There is no intention to do a future plan change to fully implement this recommendation.
76.4	Prohibit the use of ecotoxic chemicals to poison vegetation,	To be commissioned via WIP deliverable/s	Addressed by the Natural Resources Plan and PC1. See comments on Recommendation 68.
76.5	Prohibit blanket spraying of vegetation,	To be commissioned via WIP deliverable/s	Supported by PC1, notified 30 October 2023. PC1 identifies highest erosion risk land for pasture, woody vegetation and plantation forestry and high erosion risk land for pasture within each whaitua. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. GW will assist landowners to support revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land.
76.6	Incorporate promote and incentivise selective felling,	Plan change by 2024	Partially addressed by PC1, notified 30 October 2023.

Recommendation	Recommendation wording	Implementation category	Comment November 2023
			Livestock access to streams less than 1m width within the Mākara Stream catchment is only permitted if the access is for a stock crossing point and the farm environment plan includes a small stream riparian programme. There is no intention to do a future plan change to fully implement this recommendation.
76.7	Promote the regeneration of native vegetation in the headwaters, and	Plan change by 2024	Addressed by the Natural Resources Plan and PC1. See comments on Recommendation 68.
76.8	Are monitored regularly for compliance by Mana Whenua and Greater Wellington.	Plan change by 2024	Supported by PC1, notified 30 October 2023. PC1 identifies highest erosion risk land for pasture, woody vegetation and plantation forestry and high erosion risk land for pasture within each whaitua. Highest erosion risk land identified on plan maps will require progressive change to permanent revegetation. GW will assist landowners to support revegetation and erosion treatments and will undertake revegetation and erosion treatment on Council-owned land.
77	This includes all Greater Wellington land that is currently in use for plantation forestry.	To be commissioned via WIP deliverable/s	Partially addressed by PC1, notified 30 October 2023. Livestock access to streams less than 1m width within the Mākara Stream catchment is only permitted if the access is for a stock crossing point and the farm environment plan includes a small stream riparian programme. There is no intention to do a future plan change to fully implement this recommendation.
78	There is no harvesting of the existing pine plantation forestry in the Korokoro Wāhi Wai Māori (FMU).	To be commissioned via WIP deliverable/s	Addressed by the Natural Resources Plan and PC1. See comments on Recommendation 68.
Ngā mātāwainuku (aquifers)			
79	Greater Wellington and Mana Whenua work together to monitor the ecological function of Te Awa Kairangi aquifers using mātauranga Māori knowledge, and the monitoring of stygofauna.	To be commissioned via WIP deliverable/s	Consistent with WIP
80	Aquifer wells in Te Whanganui-a-Tara by Matiu/Somes Island are continuously monitored.	To be commissioned via WIP deliverable/s	Consistent with WIP
Ngā momo e kia nei he taonga (taonga species)			
81	On the southwest coast, seabird taonga species such as kororā (penguins) and tītī (muttonbirds) are monitored, including for abundance and size to measure ecosystem health.	No recommendation category selected	To be commissioned via deliverables

Recommendation	Recommendation wording	Implementation category	Comment November 2023
Ngā wāhi hira (sites of significance)			
82	Greater Wellington will share decision-making with Mana Whenua so that they are actively involved in determining whether a resource consent application for an activity near or on Mana Whenua sites of significance is more than minor.	Supporting Mana Whenua governance, delivery & funding	To be progressed with Mana Whenua.
83	Greater Wellington will share decision-making with Mana Whenua so that they are actively involved in the restoration and protection of Mana Whenua sites of significance.	Currently being implemented	To be progressed with Mana Whenua.
Ngā roto o Parangārehu (Parangārehu Lakes)			
84	Rōpu (group) Tiaki Mana Whenua and their iwi boards have tino rangatiratanga for setting priorities and visions for the lakes.	Currently being implemented	Rōpu (group) Tiaki Mana Whenua lead this mahi
85	The current monitoring programme for the lakes is expanded and resourced so that it includes identifying attributes and baseline states for assessing achievement of Mana Whenua environmental outcomes.	Currently being implemented	Monitoring has increased
86	Public access to the lakes is reviewed by Mana Whenua and Greater Wellington to address Mana Whenua concerns, particularly around the introduction of invasive species. Visitors (walkers and cyclists) to the lakes area must undertake biosecurity controls when entering the area.	To be commissioned via deliverables	To be progressed with Mana Whenua.
87	The monitoring of taonga species is increased to support the long-term vision of sustainable cultural harvest of tuna and other valued species for special occasions like tangihanga.	Currently being implemented	Monitoring has increased
88	Greater Wellington continues to resource investigations to understand the ecological and water quality baseline for the lakes, including their connectivity to the sea, expected species and underlying soil characteristics by 2035.	Currently being implemented	Investigations underway
89	Pest management is addressed to accelerate the improvement and restoration of the lakes.	Currently being implemented	GW's pest management programme includes mahi at Parangārehu Lakes
90	Stock exclusion from waterways is prioritised in the area, and Greater Wellington will provide support to affected landowners in its implementation.	To be commissioned via WIP deliverable/s	Supported by PC1, notified 30 October 2023. PC1 prioritises the development of farm environment plans within the Parangārehu Lakes catchment.
91	Greater Wellington resources and supports Mana Whenua-led mātauranga Māori monitoring and care of the lakes and the whaitua/catchment.	Currently being implemented	To be progressed with Mana Whenua.
92	If the historical material (post-earthquake) suggests connectivity to the sea for Lake Kōhangapiripiri, then Greater Wellington and Mana Whenua will develop and implement a plan for reinstating the lakes' natural ability to breach out to the sea.	To be commissioned via deliverables	To be progressed with Mana Whenua.
93	That a public report card/dashboard tool is established for the lakes to clearly communicate the degree of achievement of the targets and outcomes. This could include mātauranga attributes.	To be commissioned via deliverables	To be progressed with Mana Whenua.
Ngā repo (wetlands)			
94	All-natural wetlands (including degraded wetlands) within Te Whanganui-a-Tara regardless of size are mapped and protected by Greater Wellington.	Currently being implemented	Greater Wellington has mapped natural wetlands within Whaitua Te Whanganui-a-Tara.
95	All wetland margins adjoining natural and induced wetlands with outstanding indigenous biodiversity are:		
95.1	Mapped by Greater Wellington,	To be commissioned via WIP deliverable/s	Greater Wellington has mapped natural wetlands within Whaitua Te Whanganui-a-Tara.
95.2	Restored so that they are once again a functioning part of the main wetland, and are	To be commissioned via WIP deliverable/s	Consistent with WIP

Recommendation	Recommendation wording	Implementation category	Comment November 2023
95.3	Protected by including them in Schedule A3: Wetlands with outstanding indigenous biodiversity values of the PNRP.	Plan change by 2024	Not addressed in PC1. Will inform a future plan change.
96	The area of land contiguous to any existing wetland that is scheduled as a wetland with outstanding indigenous biodiversity values, that includes (but is not limited to) the Maymorn Wetlands and Mount Cone Turfs is also captured within Schedule A3: Wetlands with outstanding indigenous biodiversity values of the PNRP.	Plan change by 2024	Not addressed in PC1. Will inform a future plan change.
97	All of the repo (wetland) in the Parangārehu Lakes area are classified as wetlands with outstanding indigenous biodiversity values in Schedule A3 of the PNRP.	Plan change by 2024	Not addressed in PC1. Will inform a future plan change.
Te whakahoki o ngā whakaaetanga o tēnei wā (recall of existing consents)			
98	Greater Wellington reviews all existing consent conditions that apply to an activity within 500 metres of an awa so that they reflect allocation limits and water quality standards in the PNRP Operative Rules, and give effect to Te Mana o te Wai as required in the NPSFM 2020.	To be commissioned via deliverables	To be commissioned via deliverables
Te whakaea i ō mua hē i te Whaitua (catchment restorative justice)			
99	Greater Wellington adopts a community whaitua restorative approach that punishes polluters and makes them directly answerable to the affected water body and its community. This could include the payment of damages to restore the affected area and its values. Any fines resulting from prosecution will be spent within the affected whaitua.	To be commissioned via deliverables	To be commissioned via deliverables
100	Greater Wellington lobbies central government to remove the cap on fines so that they are able to be set at a level commensurate with the effect of the damage incurred.	To be commissioned via deliverables	To be commissioned via deliverables
Ngā mahi hautū o Te Pane Matua Taiao (Greater Wellington leadership)			
101	Greater Wellington adopts best management practice for managing its land that includes fencing waterways, retiring marginal land, addressing pine plantation forestry activities that affect water quality, and moving away from hard engineering options for flood management.	To be commissioned via WIP deliverable/s	Consistent with WIP

Environment Committee
23 November 2023
Report 23.570



For Information

WHAITUA DEVELOPMENT UPDATE

Te take mō te pūrongo

Purpose

1. To inform the Environment Committee about the progress of the Whaitua Kāpiti Committee and development of the Wairarapa Coast Whaitua approach.

Te tāhū kōrero

Background

Kāpiti

2. The Whaitua Kāpiti Committee (the Committee) was established by Council (*Establishment of the Whaitua Kāpiti Committee – Report 22.374*) in August 2022 to support Council giving effect to the National Policy Statement for Freshwater Management 2020 (NPS-FM). Appointments to the Committee were completed in February 2023.
3. The Committee is using a Tiriti House model, which proposes a Tiriti approach to decision-making providing for equal recognition of and input from each house (Mana Whenua House and Kāwanatanga House). This partnership recognises both types of authorities (rangatiratanga and kāwanatanga) functioning together.
4. The Terms of Reference provides for at least 12 committee meetings. The final committee meetings are scheduled for 6 and 13 December 2023 at which stage we plan to have a draft Whaitua Implementation Plan (WIP).

Wairarapa Coast

5. The Wairarapa Coast Whaitua was scheduled to begin in the second half of 2023 with the purpose of giving effect to the National Policy Statement for Freshwater Management 2020 (NPS-FM) by the December 2024 deadline. The timing for this is linked to staff capacity, currently under consideration.
6. The approach for the Wairarapa Coast Whaitua will be determined with mana whenua and community and this discussion has not begun in earnest yet although a number of early connections have occurred.

Te tātaritanga

Analysis

7. The Committee had a two-day intensive workshop in October 2023, and has added additional meetings to the schedule, proposed for 6 and 13 December 2023. The

Committee has a strong commitment to stay on track with their end of year timeframe for producing the draft Whaitua Implementation Programme (WIP) document. The draft WIP will be completed in 2023, and we are in discussions with the Whaitua committee regarding an additional two to three meetings in February and March 2024 for any final work required. We anticipate the WIP being presented to Council in early 2024.

8. Across these meetings the committee achieved decision outcomes on proposed Te Mana o te Wai objectives for the Regional Policy Statement (RPS), draft Freshwater Management Units (FMUs) and developing long-term Freshwater Visions across the FMUs.
9. The Committee is continuing to populate a WIP template with the decisions as they go. Draft narrative elements of the WIP will begin in the coming month with designated writers for each House capturing the committee's views.
10. Content for the Resource Management Act 1991 (RMA) section 32 report that will underpin the plan change to the Natural Resources Plan (currently scheduled for next year) is also being captured alongside the WIP document.
11. Greater Wellington Regional Council Directors Nicola Patrick and Tania Parata are continuing to engage with the taurite (co-chairs) to explore options to support the committee's request to continue having input to the section 32 report and draft plan change document in 2024. Discussion on options is ongoing.
12. Resourcing challenges that were causing frustration for both the Kāwanatanga and Mana Whenua Houses have had partial resolution through confirmation of resourcing for key personnel that is more equitable plus recent changes to honoraria payments.

Wairarapa Coast

13. For the Wairarapa Coast Whaitua, a different approach to the previous Whaitua processes is proposed. This draft approach is designed to take a whole of the catchment perspective with the intent to develop an implementation-led catchment plan that is broader in focus. It would bring together hapū and iwi values with the rural catchment community visions and outcomes to inform decisions based on sub-catchment priorities.
14. This catchment plan would encompass other related activities, eg, freshwater action plans, farm plans, community catchment action plans. Work is underway on how these examples could be woven together in an integrated plan and connected process or processes, which can then be tested against NPS-FM requirements as well as lessons from Kāpiti and other Whaitua processes.

Ngā hua ahumoni Financial implications

Kāpiti

15. Any requirements for the committee beyond the WIP production will be considered separately and are yet to be determined.

Wairarapa Coast

16. The financial and wider resourcing implications are still to be determined.

Ngā Take e hāngai ana te iwi Māori
Implications for Māori

Kāpiti

- 17. The Terms of Reference for the Whaitua Kāpiti Committee were drafted in conjunction with, and approved by, Ātiawa ki Whakarongotai Charitable Trust, Ngā Hapū o Ōtaki, Ngāti Toa Rangatira and the wider Whaitua Committee.
- 18. In upholding the Terms and our Tiriti House commitments, the Whaitua Kāpiti process is developed in conjunction with mana whenua representatives.

Wairarapa Coast

- 19. The approach for the Wairarapa Coast Whaitua will be determined with mana whenua.

Ngā tūāoma e whai ake nei

Next steps

- 20. The remaining Whaitua Kāpiti Committee meetings scheduled for 2023 will be held on the following dates:
 - a 6 December
 - b 13 December
- 21. Communications planning is underway to support the Kāpiti Whaitua programme.
- 22. Initial discussions with Wairarapa Coast mana whenua partners have begun.

Ngā kaiwaitohu

Signatories

Writers	Tash Styles – Catchment Manager, Wairarapa Coast Michele Frank – Catchment Manager, Kapiti Nicola Patrick – Director, Catchment
Approver	Lian Butcher – Group Manager, Environment

<p>He whakarāpopoto i ngā huritaonga Summary of considerations</p>
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>The Environment Committee has responsibility to oversee the development, implementation and review of Council's environmental strategies, policies, plans, programmes, initiatives and indicators to improve environmental outcomes for the Wellington Region's land, water, air, biodiversity, natural resources, parks and reserves, and coastal marine area.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>The Whaitua Programme contributes to Council's obligations to give effect to the National Policy Statement – Freshwater Management (NPS-FM) through engagement with mana whenua and the community.</p>
<p><i>Internal consultation</i></p> <p>This report was prepared by Catchment and reviewed by Te Hunga Whiriwhiri.</p>
<p><i>Risks and impacts - legal / health and safety etc</i></p> <p>There are no known specific risks and impacts related to this report beyond the constrained circumstances as outlined.</p>

Environment Committee
23 November 2023
Report 23.609



For Information

COMPLIANCE, MONITORING AND ENFORCEMENT (CME) – NATIONAL METRICS

Te take mō te pūrongo

Purpose

1. To provide a brief overview of the 2022/23 Compliance, Monitoring and Enforcement National Metrics Report produced for the regional sector.

Te horopaki

Context

2. The full report is included as [Attachment 1](#).
3. The primary aim of the National Metrics Report (metrics report) is to provide an analysis of the strengths and areas for improvements within the Compliance and Enforcement (CME) sector. This comes from the sectors commitment to uphold the principles of consistency and best practice throughout the entire sector.
4. The Resource Management Act 1991 (RMA) constitutes New Zealand’s pivotal environmental legislation, designed to ensure the sustainable management of natural and physical resources. The effectiveness of this management largely hinges on its quality of implementation. In this pursuit, regional councils, unitary authorities, and territorial local authorities shoulder the primary responsibility for RMA compliance, monitoring, and enforcement. The CME functions serve as a crucial tool in achieving the RMA’s objectives, making the monitoring and comprehension of implementation vital for understanding the country’s environmental management.
5. The report aims to collect comparable data on CME functions of the regional sector, and this particular report marks the sixth consecutive year of tracking trends in CME functions.
6. All 16 of New Zealand’s regional councils and unitary authorities, collectively referred to as the ‘regional sector,’ have participated in this effort from 2018 to 2023. The aim of this data is to enhance the national monitoring system’s adherence to compliance, monitoring, and enforcement standards. Each year, the regional sector exhibits three distinct subsets: Auckland Council, small unitary councils, and regional councils. The reports aim is to add to existing sector information and monitor and analyse its progress over time.
7. It’s important to note that some areas of data may be ‘blank’ or showing ‘no data’ this doesn’t mean it does not exist or was ignored – it just may not be held in a form that’s easily accessible for these particular reporting purposes.

Te tātaritanga Analysis

National context

8. Given that New Zealand has diverse regional context, is it difficult to give meaningful comparison. Contextually there are large differences between regions' population, growth rates, land areas and Gross Domestic Product (GDP).
9. The year 2023 has been an interesting one for CME. With the lifting of COVID – 19 restrictions, the CME sector has seen new challenges. In particular large-scale weather events, have had an impact on the regions and areas we are looking to safeguard. Concurrently, heightened community and media interest in environmental matters has underscored the importance of our work within the sector.
10. Notably, the introduction of the Natural and Built Environment Act 2023 in the later part of 2023 has empowered Local Authorities with additional tools to enhance environmental compliance, noting that the implementation of this legislation is a process that will unfold overtime. With a new government, there are uncertainties regarding the wider implications.
11. The CME sector, like many other sectors, grapples with the ongoing challenge of recruiting and retaining suitably qualified personnel. Currently there are 149 vacancies across the sector.
12. Despite these workforce challenges, there has been a 2% increase in the number of active resource consents nationally, totalling 221,422. The sector monitors an average of 84% of all active consents requiring oversight under the Resource Management Act.
13. Moreover, the sector has successfully recouped \$2.1 million in court-imposed fines, with 93 active prosecutions still before the courts.
14. Monitoring of permitted activities is an area which traditionally has reduced resource allocated to it through Council's strategic compliance programmes. Of particular note this year is that 100% of Regional and Unitary Councils now have a permitted activity monitoring program for forestry. This figure is much less for other permitted activity monitoring programs.
15. Gisborne had by far the lowest consent compliance for inspected sites (25%). This may be an implication of the woody debris taskforce employed in this area. The national average is 67% (Greater Wellington sits at 69%).

Greater Wellington Regional Council – key observations

16. The key observation for Greater Wellington is around staffing levels. Despite an increase in CME staff through the last LTP round, Greater Wellington still has the lowest full time equivalent (FTE) staffing numbers (when using population as the proxy).
17. Greater Wellington now has 0.05 FTE/1000 of population (up from 0.04), while the national average is 0.16. Since this date 3 additional staff have now also been recruited, although even with those additional 3 Greater Wellington will still be the lowest. Greater Wellington, unlike many other Regional Councils are currently fully staffed.

18. Notwithstanding this, in terms of formal actions, Greater Wellington is around the national average. We have seen less Formal Warning issued by Greater Wellington but more infringement notices.
19. We did not do any enforcement order applications during the 2022/2033 compliance year (but we have this year and in the previous year).
20. In terms of our compliance programme and incident response service, we are sitting around the national average for the number of consents monitored, incidents reported and our overall response rate.
21. The data contained within this metrics report will provide valuable insights for our CME review and CME Policy work currently underway.

Ngā Take e hāngai ana te iwi Māori Implications for Māori

22. Councils continue to strengthen relationships and commitments with iwi and hapū. They do this through both formal and informal agreements. Formal agreements between councils and iwi/hapū can take various forms, such as Memoranda of Understanding (MoUs) or other collaborative arrangements. These formal agreements outline the responsibilities, and shared goals between the local government and the Māori communities.
23. The regulatory system with regard CME aligns with Te Mana o te Wai.
24. While Greater Wellington does not have a CME specific formalised agreement with our mana whenua partners, we are working towards doing better through increased involvement and more focus at organisational level as a priority. Some examples of this includes working with mana whenua on cultural impact statements as well as inclusion, on occasion in our Enforcement Decision Groups.
25. Further we are currently working alongside Te Hunga Whiriwhiri to explore opportunities to engage with our mana whenua partners to co-design our entire compliance program, including how we undertake compliance on certain activities.

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

26. Under current climate change predictions, extreme weather events are expected to increase in frequency and magnitude. These events have the potential to result in increased non-compliance, for example wastewater discharges, or increased sediment run-off from development sites. Such impacts will put added pressure on our CME functions. We saw a glimpse of this through the recent storm events impacting the east coast, for example forestry slash management.

**Ngā āpitihanga
Attachment**

Number	Title
1	Compliance Monitoring Enforcement National Metrics Report 2023

**Ngā kaiwaitohu
Signatories**

Writer	Shaun Andrewartha – Manager, Environment Regulation
Approvers	Fathima Iftikar – Director Strategy, Policy and Regulation Lian Butcher – Group Manager, Environment

<p>He whakarāpopoto i ngā huritaonga Summary of considerations</p>
<p><i>Fit with Council’s roles or with Committee’s terms of reference</i></p> <p>This report supports the Environment Committee purpose to oversee the development, implementation, and review of Council’s Environmental strategies, policies, plans, programmes, and initiatives to address environmental issues in the region (including issues relating to water and biodiversity) and regulatory systems, processes, and tools to meet Council’s related legislative responsibilities.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>Compliance, monitoring and enforcement across the region contributes to the Long Term Plan overarching strategic priority to align with government direction. It will also contribute to achieving the following environment strategic priorities: (1) protect and restore freshwater quality and bluebelt, and (2) protect and restore indigenous biodiversity and ecosystem health.</p>
<p><i>Internal consultation</i></p> <p>There was no internal consultation.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>The Resource Management Act 1991 (RMA) constitutes New Zealand’s pivotal environmental legislation, designed to ensure the sustainable management of natural and physical resources. The effectiveness of this management largely hinges on its quality of implementation. The CME functions serve as a crucial tool in achieving the RMA’s objectives, making the monitoring and comprehension of implementation vital for understanding the country’s environmental management.</p> <p>Through Greater Wellington’s CME program we can support and regulate natural resource users to ensure good management practices are implemented and compliance with local and national regulations as well as resource consents.</p>



Regional and
Unitary Councils
Aotearoa

ANALYSIS OF THE 2022/2023 COMPLIANCE MONITORING AND ENFORCEMENT METRICS

FOR TE URU KAHIKA REGIONAL AND
UNITARY COUNCILS AOTEAROA

PREPARED BY

SPROUT

OCTOBER 2023



FOREWORD

Kia ora,

Welcome to the sixth annual CME Metrics report, a comprehensive overview of performance in the critical domains of compliance and enforcement under the Resource Management Act. This report is presented by Te Uru Kahika CME group (previously CESIG), a consortium of dedicated professionals representing regional and unitary councils across New Zealand.

The primary aim of this report is to provide a thoughtful analysis of the strengths and areas for improvement within the Compliance and Enforcement (CME) sector. Our steadfast commitment is to uphold the principles of consistency and best practice throughout the entire sector.

The year 2023 has marked a pivotal moment in our journey. With the lifting of COVID – 19 restrictions, the CME sector has confronted new and formidable challenges. New Zealand grappled with large-scale weather events, which had a profound impact on the regions and areas we are entrusted to safeguard. Concurrently, heightened community and media interest in environmental matters has underscored the paramount importance of our work within the sector.

Notably, the introduction of the Natural and Built Environment Act 2023 in the later part of 2023 has empowered Local Authorities with additional tools to enhance environmental compliance. Netherless, the implementation of this legislation is a process that will unfold overtime, and as a new government assumes power, uncertainties loom regarding the wider implications.

In the face of an increasingly competitive employment landscape, the CME sector grapples with the ongoing challenge of recruiting and retaining suitably qualified personnel. Currently there are 149 vacancies across the sector. Despite these workforce challenges, we see a 2% increase in the number of active resource consents, totalling 221,422. A testament to our commitment, the sector vigilantly monitors an average of 84% of all active consents requiring oversight under the Resource Management Act. Moreover, we have successfully recouped \$2.1 Million in court-imposed fines, with 93 active prosecutions still before the courts.

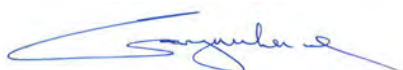
To gain a deeper understanding of our regional performance, I encourage our readers to delve into the regional scorecards found in part 3 of this report. These scorecards dissect the national findings and provide a granular view of individual results.

Te Uru Kahika CME group remains steadfast in its dedication to advancing the CME function. In 2023, we commissioned an independent analysis of the CME Metrics Report, examining five years of data and identifying notable trends. This ongoing commitment to rigorous self-assessment underscores our unwavering pursuit of excellence in our field.

As we embark on another year of challenges and opportunities, I extend my sincere appreciation to all those who have contributed to this report and, indeed to the tireless individuals working within the CME Sector. Your dedication to environmental stewardship is a beacon of hope in an ever-changing world.

Thank you for joining us on this journey of reflection and progress

Ngā mihi nui,



Gary McKenzie

Compliance Monitoring and Enforcement Manager – Gisborne District Council

SUMMARY



589 FTES
IN CME ROLES



221,422
ACTIVE RESOURCE
CONSENTS



UP 2%
FROM LAST
YEAR

84%

COUNCILS MONITORED AN AVERAGE
OF **84%** OF ALL CONSENTS THAT
REQUIRED MONITORING UNDER THE RMA

98%

OF COMPLAINTS
RESPONDED TO



414
FORMAL
WARNINGS



4,092
ABATEMENT
NOTICES



1,742
INFRINGEMENT
FINES



14

**ENFORCEMENT
ORDERS**



46

PROSECUTIONS
(87 IN PROGRESS)



**32 CORPORATES
CONVICTED**



**34 INDIVIDUALS
CONVICTED**



\$2,088,183
IN FINES



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INTRODUCTION

PART 1

This marks the sixth consecutive year of tracking trends in CME functions. The endeavour to collect and ensure the availability of comparable data on CME functions is headed by Te Uru Kahika CME group (formerly known as CESIG). This year the questions have been revisited and updated. They have been formulated as a collaborative effort with the regional sector.

All 16 of New Zealand’s regional councils and unitary authorities, collectively referred to as the ‘regional sector,’ have participated in this effort from 2018 to 2023. The aim of this data is to enhance the national monitoring system’s adherence to compliance, monitoring, and enforcement standards. Each year, the regional sector exhibits three distinct subsets: Auckland Council, small unitary councils, and regional councils. The reports aim to augment sector information and monitor its progress over time.

The Resource Management Act 1991 (RMA) constitutes New Zealand’s pivotal environmental legislation, designed to ensure the sustainable management of natural and physical resources. The effectiveness of this management largely hinges on its quality of implementation. In this pursuit, regional councils, unitary authorities, and territorial local authorities shoulder the primary responsibility for RMA compliance, monitoring, and enforcement. The CME functions serve as a crucial tool in achieving the RMA’s objectives, making the monitoring and comprehension of implementation vital for understanding the country’s environmental management.

READING THIS REPORT

Each year councils are given the questions in advance, they are then sent an online survey to enter their data into (Appendix 1). Councils were given four weeks to collect and input the data into an online platform.

This report sets out data provided for each section of the survey, as follows:

- A short analysis of the findings, at both a regional and national scale.
- The tables and graphs of the information.
- A boxed section containing the exact questions relevant to that section.
- Responses to open-ended questions have been aggregated and analysed and the theme of the response presented in this report.
- Verbatim answers are provided where responses cannot be summarised.

HOW DOES THIS REPORTING PROCESS DIFFER YEAR ON YEAR?

The main information to be collected was set out in the first year (2017/2018). Following the first year there were significant learnings and improvements to the questionnaire. The questionnaire remained the same between year two and four. In 2022 some of the recommendations by the Ministry for the Environment were adopted by all councils and had therefore served their purpose. These questions related to compliance grades, enforcement policies, conflict of interest policies and supporting education/engagement projects. This year some sections were expanded to gather more detailed information. The additional information was collected on Permitted Activities, Staffing, CME Policies and Procedures and Acting on Non-Compliance. Where possible consistency has been maintained year to year to allow us to track the successes and improvements over time.

In year one and two the report was conducted by independent consultant Dr Marie Doole. From year three onwards collection and reporting was conducted by Sprout Customer Research.

DATA LIMITATIONS

Reporting of activities in complex, reflective measures can be difficult. When reading the report keep in mind the following aspects and data:

- Not all requested information can be provided by all councils which results in gaps in the dataset.
- The project does not include any data auditing and it is therefore unknown how accurate the information provided by councils is. Each council had a representative that was responsible for sense checking the final data points in the survey.
- Throughout the report there are some instances where the way a council reports has changed or improved, making data incomparable to prior years.

CME UNDER THE RESOURCE MANAGEMENT ACT NEW ZEALAND

This report represents a collaborative effort led by the Te Uru Kahika CME group, formerly known as CESIG. Its primary objective is to enhance the quality of available information concerning CME functions. While the dataset is not flawless, it consistently offers insightful perspectives into CME operations under the framework of the Resource Management Act (RMA), with its value steadily increasing year after year. The report also highlights the observable outcomes resulting from individual councils' endeavours to enhance their CME implementation.

The implementation of CME, as well as its adoption and execution, falls within individual councils, guided by the overarching structure of the RMA. Robust implementation of CME correlates with favourable environmental results. Due to the absence of extensive national directives, councils have assumed the responsibility of tailoring their operations within the relatively broad RMA framework. This role has assumed diverse forms across various jurisdictions. Regional disparities are influenced by factors such as GDP, area size, population, and population growth rates.

As the sector matures, standardising and formalising parameters continue to develop. In 2018, the Ministry introduced Best Practice Guidelines, which have exerted an influence on the metrics reported in this sector.

KEY DEFINITIONS

Compliance: adherence to the RMA, including the rules established under regional and district plans and meeting resource consent conditions, regulations and national environmental standards.

Monitoring: the activities carried out by councils to assess compliance with the RMA. This can be proactive (e.g., resource consent or permitted activity monitoring) or reactive (e.g., investigation of suspected offenses).

Enforcement: the actions taken by councils to respond to non-compliance with the RMA. Actions can be punitive (seek to deter or punish the offender) and/or directive (e.g., direct remediation of the damage or ensure compliance with the RMA).

ANALYSIS

PART 2

REGIONAL CONTEXT

Regionally New Zealand is diverse; contextually there are large differences between regions population, growth rates, areas and Gross Domestic Product (GDP). The graph below illustrates the diversity of the regions we report on.

Auckland has the highest population; it's home to 1/3 of New Zealanders, in comparison to the West Coast, home to only 1% of all New Zealanders. Northland and Waikato are seeing the largest growth rates.

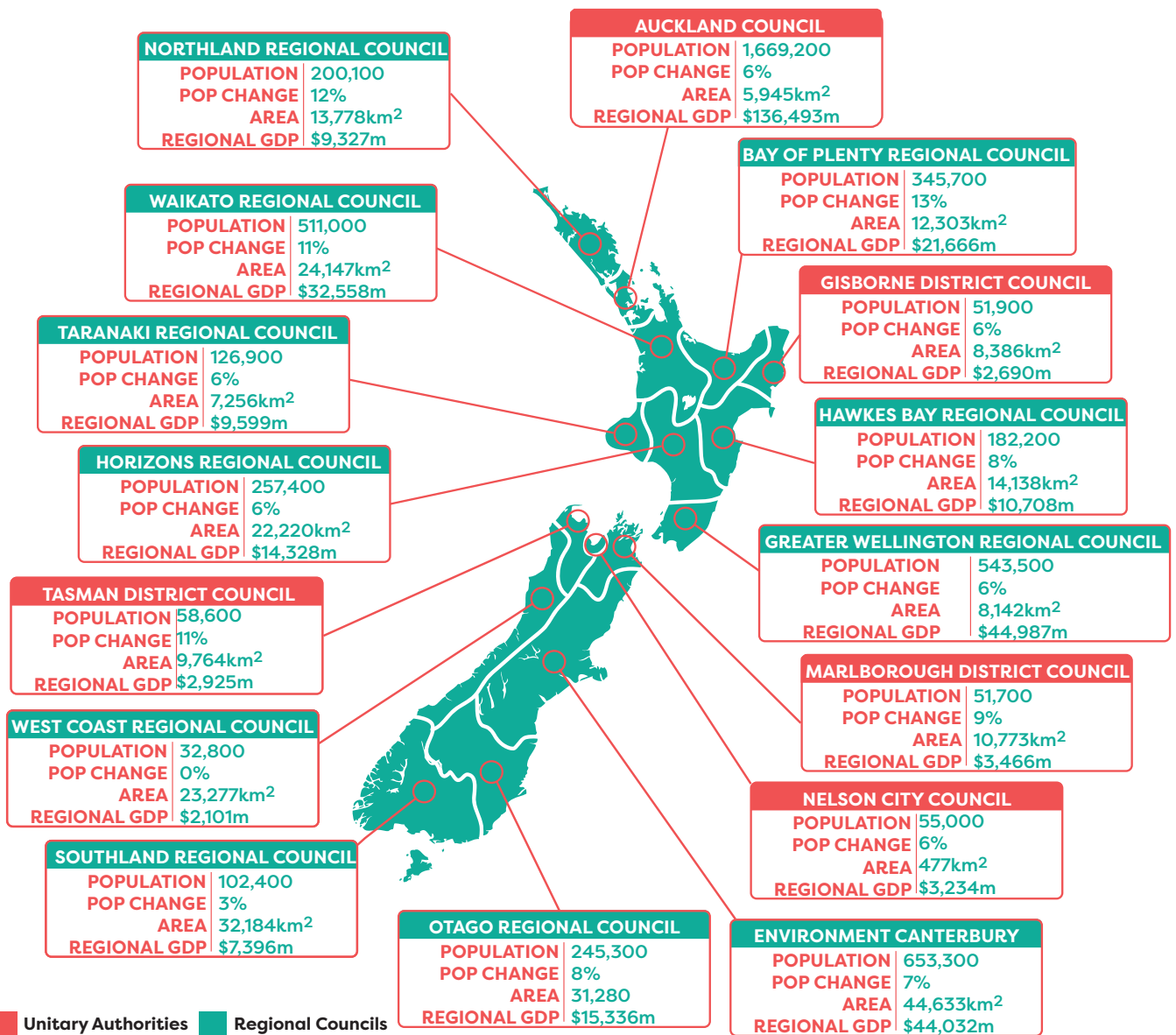


Figure 1: Regional context data
 * Population change is for 5 years



WORKING WITH IWI

Councils continue to strengthen relationships and commitments with iwi and hapū. They do this through both formal and informal agreements. Formal agreements between councils and iwi/hapū can take various forms, such as Memoranda of Understanding (MoUs) or other collaborative arrangements. These formal agreements outline the responsibilities, and shared goals between the local government and the Māori communities.

The majority of councils have formalised agreements. For those who do not have a formal arrangement in place, they are working towards doing better through increased involvement and more focus at organisational level as a priority.

Key commitments include:

- Working parties.
- Co-governance forums.
- Appointed representatives.
- Agreed processes to meet with councils to be involved in CME activities.
- Framework for Iwi and the council to discuss and agree processes for enabling co-management of planning, regulatory and other functions.
- Assistance with impact statements in enforcement proceedings and remediation.
- Memorandums of understanding, joint management agreements, co-management and co-governance arrangements.

Question 4: In no more than 300 words describe your regional key commitments to work with iwi/Māori on CME. For example, joint management agreements or other co-management agreements.

CME OPERATIONS MANAGING THE WORKLOAD

REGISTERING NOTIFICATIONS

Complaints are logged by various councils either as individual incidents or as part of larger events. These events can encompass multiple distinct complaints. Notably, individual incidents often result in higher numbers, which must be duly considered when conducting comparative analyses.

The most effective approach for the industry would involve standardised procedures. However, there remains a divergence in practices within the sector. Among the councils, seven adhere to a policy of recording a single incident for an entire event, while nine opt to register an incident for each separate complaint notification.

RECORDING CONVENTIONS FOR INCOMING COMPLAINTS

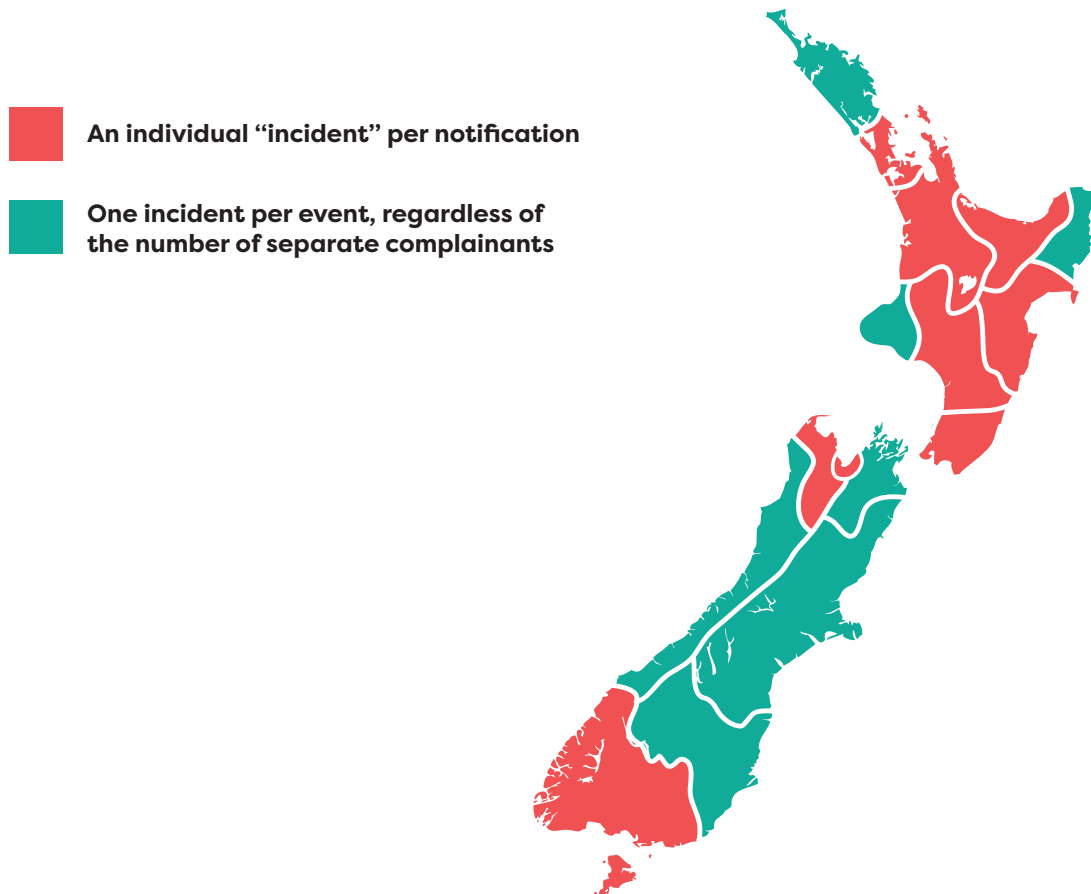
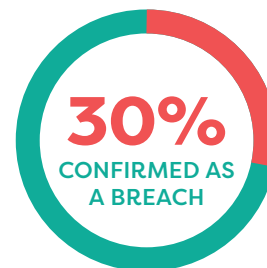
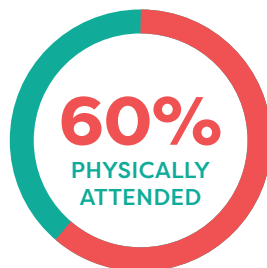


Figure 2: Recording conventions for incoming complaints across the regional sector

Question 5. Does your council register/count:

- An individual "incident" per notification?
- One incident per event, regardless of the number of separate complainants?

NATIONWIDE COMPLAINTS



COMPLAINTS RECEIVED

Complaints vary significantly each year due to regional differences, often mirroring population sizes. Higher populated areas tend to have more complaints.

This year, there was a nationwide increase of 3,235 individual complaints. This year's data included Horizons, accounting for 1,145 of these additional complaints. In 2022, Auckland Council received 9,044 complaints, whereas this year they have received 13,144 complaints.

COMPLAINTS RESPONDED TO AND ATTENDED

Nearly all councils have addressed 100% of the complaints they received. For those that did not respond to all complaints, Bay of Plenty Regional Council, Southland Regional Council, and Gisborne District Council have responded to over 95% of the complaints. On the other hand, Environment Canterbury's response rate stands at 74%.

When it comes to addressing complaints, attending to them physically is the most resource-intensive approach, but it does offer the advantage of allowing officers to directly assess the issue. This year, there has been an increase in the percentage of incidents that were physically attended to, rising from 53% to 60%. Southland Regional Council and Marlborough District Council witnessed significant increases in physical attendance. West Coast Regional Council and Northland Regional Council experienced declines.

Question 6. How many notifications (complaints) were received from members of the public (or other sources, but excluding information from council monitoring activity) relating to environmental incidents or potential breaches of environmental regulation?

This might include information from, for example, emergency services attending an incident or perhaps a council staff member observing something while on other duties but excludes information from council monitoring activity. Please note answer unknown if your council does not record the information requested.

Question 7. How many of these notifications were responded to by council?

This response may be in any form – e.g. phone call, site visit, desktop audit.

Question 8. How many of these notifications were physically attended by council staff?

If one incident had multiple visits, only count this as one.

NUMBER OF INDIVIDUAL COMPLAINTS AND INCIDENTS

2018 / 2019 2019 / 2020 2020/ 2021 2021 / 2022 2022 / 2023

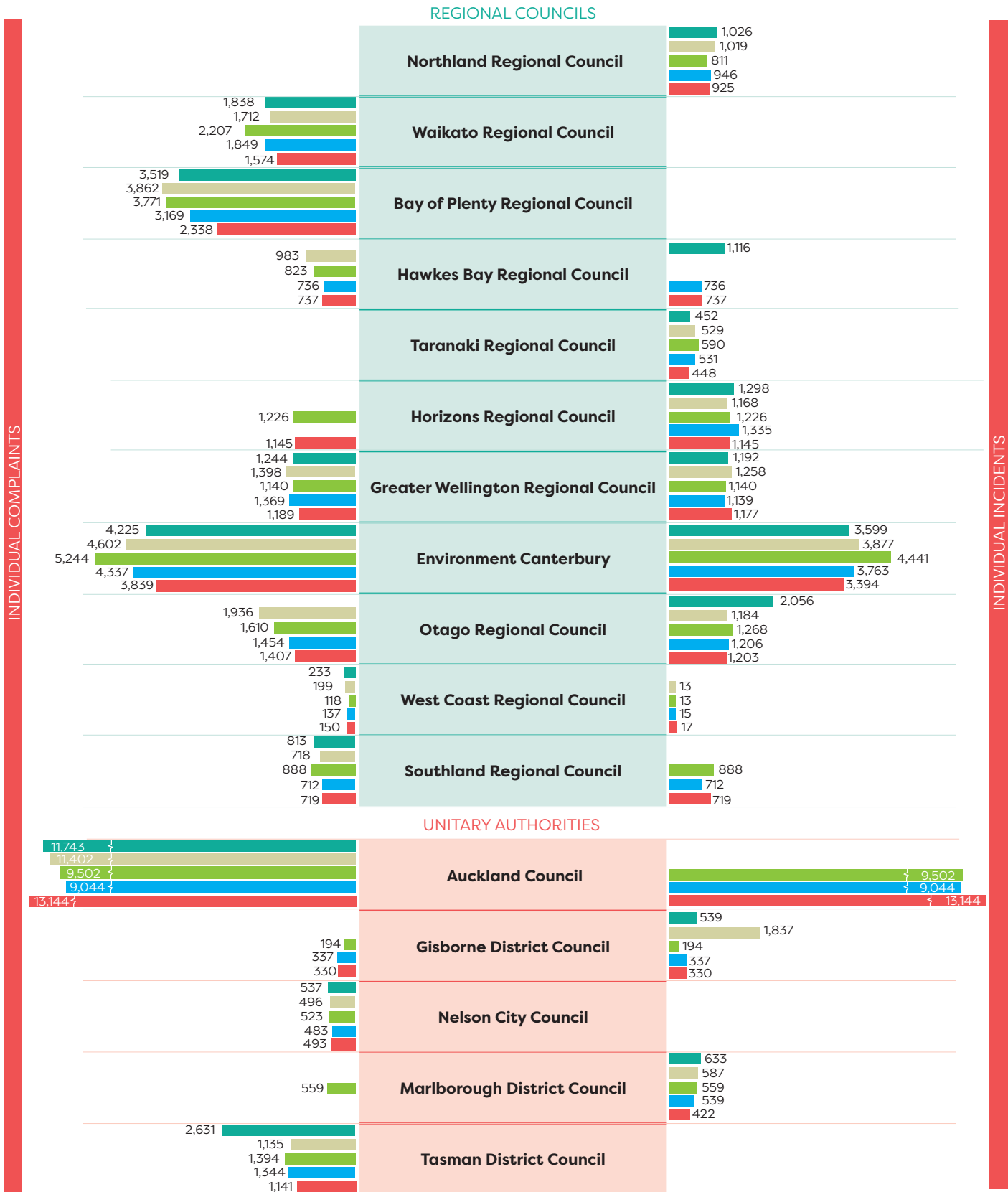


Figure 3: Number of individual complaints and incidents

NUMBER OF INDIVIDUAL COMPLAINTS RESPONDED TO AND PHYSICALLY ATTENDED Attachment 1 to Report 23.609

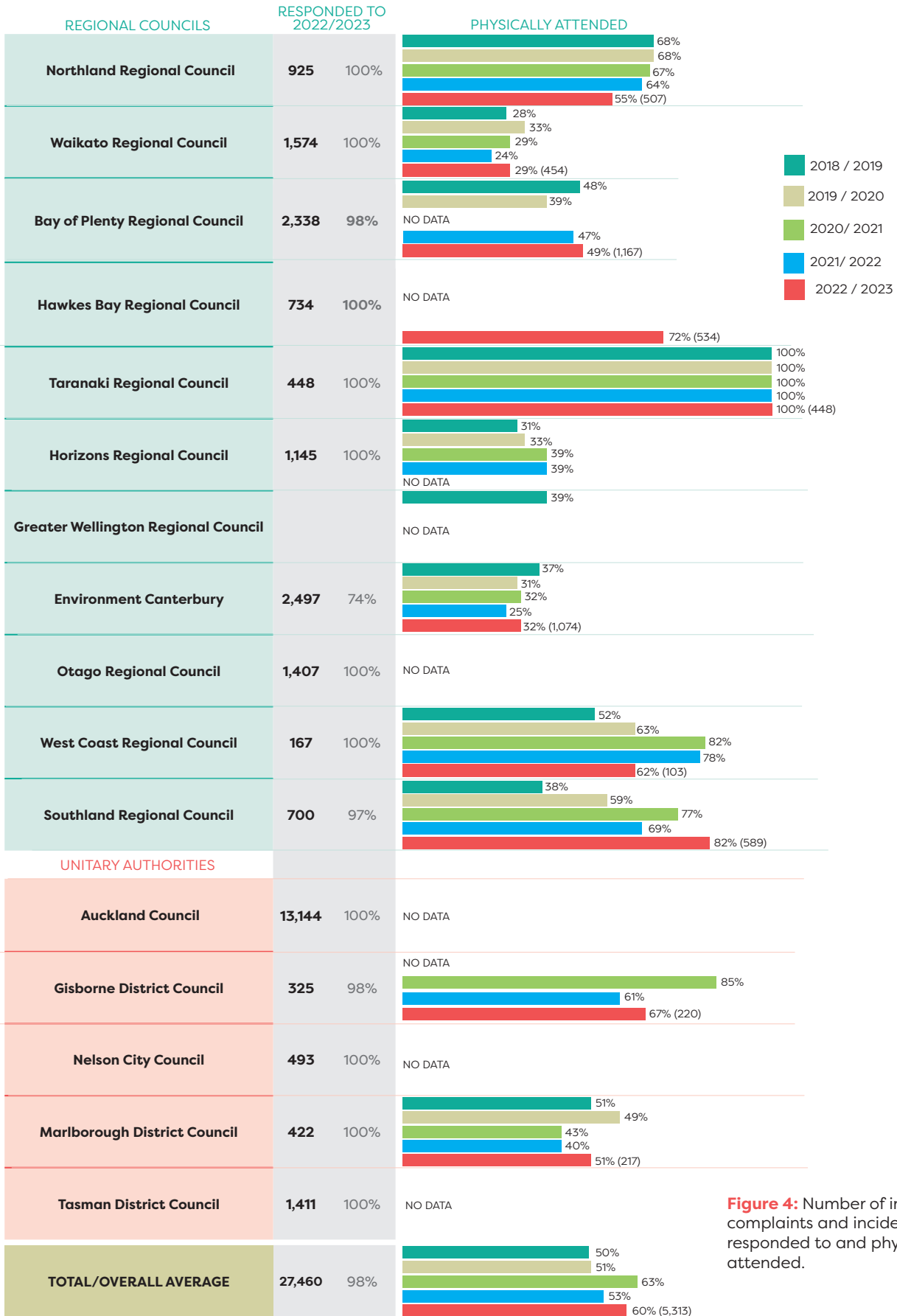


Figure 4: Number of individual complaints and incidents responded to and physically attended.



CONFIRMED BREACHES

The average number of confirmed breaches has shown a consistent trend year after year. However, at the regional level, there has been an increase in the number of confirmed breaches this year. Notably, the Hawkes Bay Regional Council holds the highest percentage of these breaches, followed by the Northland Regional Council. This indicates that while the overall breach average remains steady, certain regions, such as Hawkes Bay and Northland, have experienced more breaches of the RMA or subsidiary instruments.

PERCENTAGE OF CONFIRMED BREACHES

REGIONAL COUNCIL	2018 / 2019	2019 / 2020	2020 / 2021	2021 / 2022	2022 / 2023
Northland Regional Council	48%	42%	47%	46%	50% (463)
Waikato Regional Council	7%	26%	37%	21%	12% (193)
Bay of Plenty Regional Council	25%	20%	23%	25%	21% (512)
Hawkes Bay Regional Council					89% (653)
Taranaki Regional Council	37%	40%	39%	35%	40% (179)
Horizons Regional Council					
Greater Wellington Regional Council	15%	18%	19%	13%	16% (189)
Environment Canterbury	29%	68%	24%	19%	23% (777)
Otago Regional Council					9% (123)
West Coast Regional Council	41%	17%	21%	21%	34% (57)
Southland Regional Council	18%	29%	34%	15%	34% (247)
UNITARY AUTHORITIES					
Auckland Council	29%	22%			
Gisborne District Council			35%	39%	38% (124)
Nelson City Council					
Marlborough District Council	23%	21%	22%	20%	17% (73)
Tasman District Council					
TOTAL/AVERAGE	27%	27%	29%	27%	30% (3,590)

Table 1: Percentage of breaches

Question 9. How many of these notifications were confirmed as breaches of the RMA or subsidiary instruments?

CONFIRMED BREACHES

TYPES OF CONFIRMED BREACHES

■ Percentage breach resource consent
 ■ Percentage breach of NES
 ■ Percentage breach of permitted activity
 ■ Breach of Permitted Activity Rule and/or National Environmental Standard

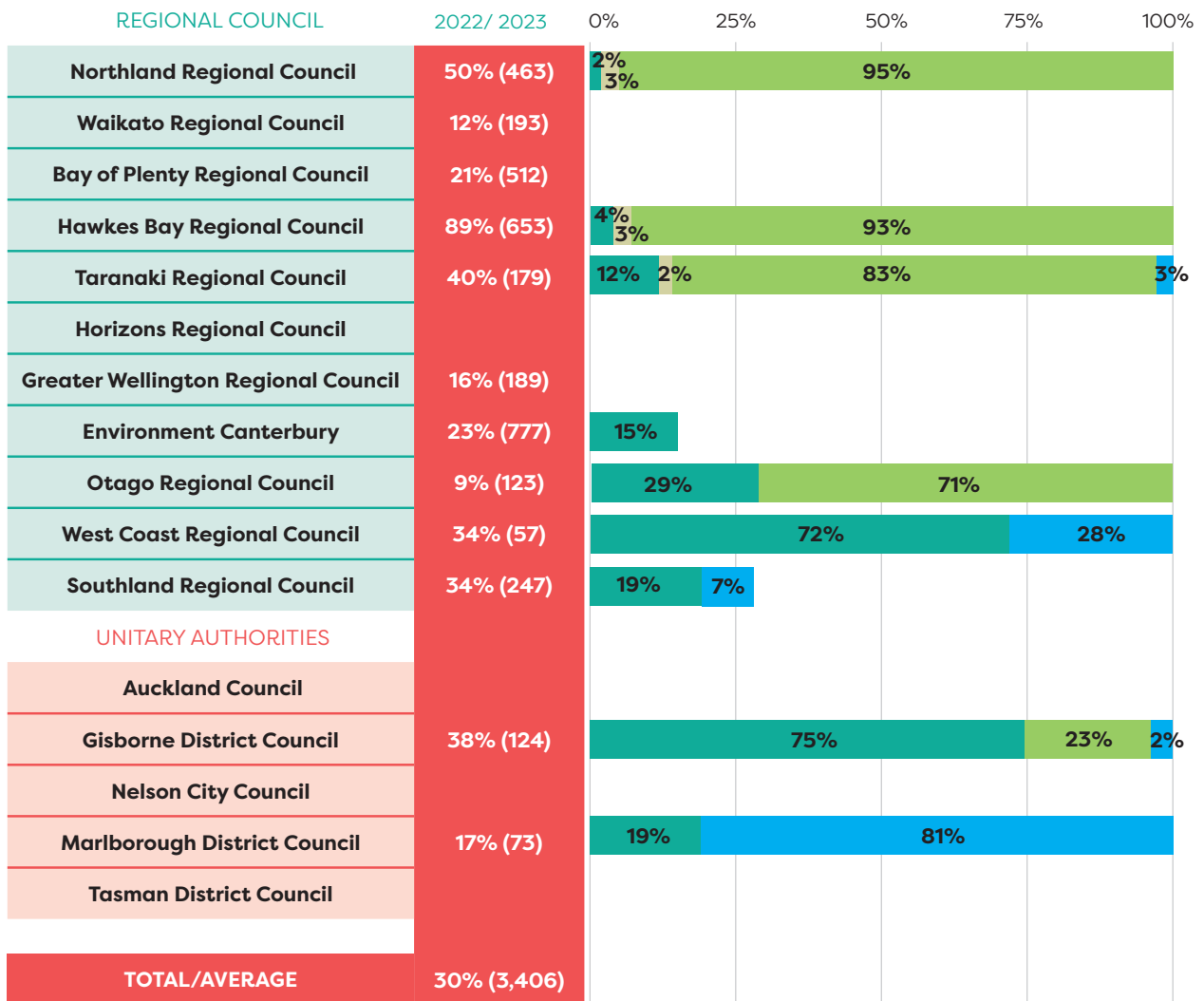


Table 2: Types of breaches

Question 10. How many of the breaches were for:
 Breach of a resource consent?
 Breach of a National Environmental Standard?
 Breach of a Permitted Activity Rule?
 Breach of a Permitted Activity Rule and/or National Environmental Standard?



NATIONWIDE COMPLIANCE INSPECTIONS

CONSENTS **221,422** / REQUIRED MONITORING **57,518** / PERCENTAGE MONITORED **84%**

MONITORING RESOURCE CONSENTS

This year, the number of active resource consents remained consistent with the previous year (slight increase of 2%). The highest concentration of these consents was observed within Auckland Council, totaling 80,483 consents. This marked a 7% rise compared to the previous year.

About a quarter of these consents (26%) necessitated monitoring. Waikato Regional Council saw a substantial surge in consents requiring monitoring, exceeding three times the quantity of the previous year. Otago Regional Council and Gisborne District Council exhibited significant decreases in consents that required monitoring.

The percentage of consents subject to monitoring was similar to the previous year, resting at 84%. Waikato Regional Council, Northland Regional Council, Horizons Regional Council and Otago Regional Council monitored more consents than required. In contrast, Auckland Council demonstrated the lowest proportion of required monitored consents at 45%.

Question 11. How many individual, active resource consents exist in your region?

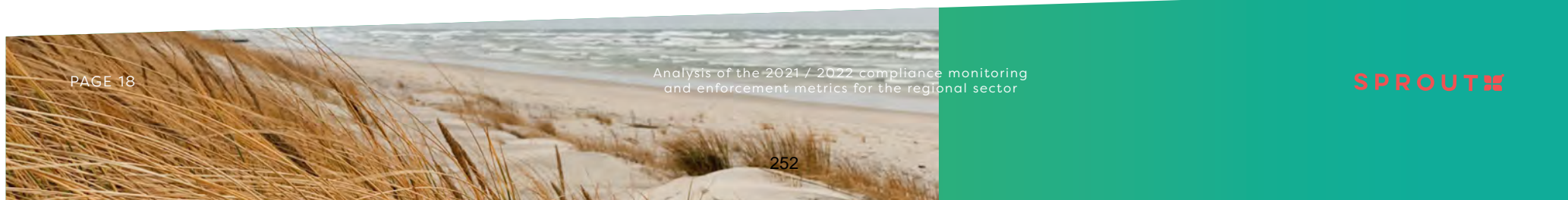
Exclude Land Use Consents where the activity is completed e.g., Land use subdivisions where the subdivision is complete, and certificates issued or land use – building where the building has been constructed.

Question 12. How many consents required monitoring during this period, in accordance with your monitoring prioritisation model/strategy?

Question 13. How many of these consents were monitored (including desktop audit) in the period?

		TOTAL CONSENTS					REQUIRED MONITORING					Attachment 1 to Report 23.609 NUMBER MONITORED					
		2018 / 2019	2019 / 2020	2020 / 2021	2021 / 2022	2022 / 2023	2018 / 2019	2019 / 2020	2020 / 2021	2021 / 2022	2022 / 2023	2018 / 2019	2019 / 2020	2020 / 2021	2021 / 2022	2022 / 2023	
REGIONAL COUNCILS	Northland Regional Council	9,738	9,910	10,164	10,779	11,312	3,847	3,731	3,505	4,153	4,275	93%	88%	86%	95%	100%+	7,152
	Waikato Regional Council	4,787	11,419	11,839	12,511	12,742	525	1,674	0	575	1,461	100%+	100%+		100%+	100%+	2,509
	Bay of Plenty Regional Council	9,057	8,458	8,407	7,608	8,442	2,380	3,316	3,324	3,398	4,439	70%	85%	86%	93%	83%	3,702
	Hawkes Bay Regional Council	5,928	8,300	8,452	8,620	8,673	3,446	3,550	3,355	3,358	3,825	93%	93%	93%	91%	81%	3,087
	Taranaki Regional Council	4,784	4,625	4,517	4,372	4,313	2,743	2,788	2,510	2,408	2,325	100%	100%	100%	100%	100%	2,325
	Horizons Regional Council	5,204	5,468	6,619	5,638	6,500	1,648	1,367	1,823	2,175	2,060	80%	81%	89%	95%	100%+	2,282
	Greater Wellington Regional Council	6,604	6,863	7,138	7,259	7,567	1,782	1,633	1,779	1,843	2,139	95%	94%	87%	88%	82%	1,757
	Environment Canterbury	18,500	22,051	22,648	23,079	23,522	4,625	4,410	1,314	882	1,004	72%	89%	96%	76%	73%	730
	Otago Regional Council	5,588	5,656	5,785	5,829	6,731	1,161	3,256	3,136	3,144	2,500	52%	64%	71%	77%	100%+	3,153
	West Coast Regional Council	3,474	3,000	5,682	5,809	5,800	868	900	1,268	1,275	1,268	100%+	87%	92%	92%	92%	1,168
	Southland Regional Council	5,590	5,824	5,995	4,916	4,966	4,586	4,127	5,920	3,752	3,765	78%	73%	72%	84%	79%	2,971
REGIONAL SUBTOTAL		79,254	91,574	97,246	96,420	100,568	27,611	30,752	27,934	26,963	29,061	85%	87%	87%	96%	90%	30,836
UNITARY AUTHORITIES	Auckland Council	108,326	115,723	130,371	75,017	80,483	11,778	13,162	0	0	19,730	60%	72%			45%	8,913
	Gisborne District Council	0	10,500	8,893	7,753	7,914	0	0	1,135	1,600	1,229	0%		60%	47%	67%	822
	Nelson City Council	784	656	675	594	0	619	656	675	594	526	100%	100%	100%	100%	100%	526
	Marlborough District Council	21,377	29,459	29,459	27,817	28,674	3,261	3,529	3,529	3,326	3,265	89%	93%	98%	85%	86%	2,807
	Tasman District Council	13,042	7,230	16,826	8,803	3,783	2,478	6,389	4,941	3,327	3,707	75%	26%	57%	73%	93%	3,449
	UNITARY SUBTOTAL		143,529	163,568	186,224	119,984	120,854	18,136	23,736	10,280	8,847	28,457	81%	73%	79%	76%	78%
TOTAL		222,783	255,142	283,470	216,404	221,422	45,747	54,488	38,214	35,810	57,518	83%	80%	83%	86%	84%	47,353

Table 3: Total consents that require monitoring



COMPLIANCE ASSESSMENT

This data reflects the compliance gradings of over 75,000 consent monitoring events. The number of consents monitored continues to grow, overall there are around 1/3 more consents monitored than 5 years ago.

This year there is variation between councils, with some monitoring more than previous years and others monitoring less. Waikato Regional Council (+63%), Bay of Plenty Regional Council (+48%) and Marlborough District Council (+48%) had the largest increases in monitored consents. Hawkes Bay Regional Council (-35%) had the largest decrease.

It must be noted that data may vary from Table 3. This is because some sites have more than one monitoring visit over the year. Figure 5 relates to the percentage of monitoring visits (not consents) within the categories.

*Numbers provided will not equate to the consents totals earlier in this report as some sites had more than one monitoring visit over the year. The tables below relate to the percentage of monitoring visits that fit within different grades.

Question 14. What grades do you apply to non-compliance? (e.g. technical non-compliance, significant non-compliance)

- Fully Compliant
- Technical/Low Non-Compliance
- Moderate Non-Compliance
- Significant Non-Compliance
- Other (please specify)

Question 15. What were the levels of compliance with consents according to the grades you use?

Note 1: Numbers provided under each grade is per monitoring event not per consent. E.g. a consent may be monitored four times in the year: on one occasion it may be Technically Non-Compliance and on three occasions it may be Fully Compliant, this would add three to the total of Fully Compliant and one to the total for Technical Non-compliance.

Note 2: The compliance grade is based on the condition with the worst compliance grade. e.g. a consent with five conditions Fully Compliant and one condition Moderate Non-Compliance has an overall compliance grade of Minor Non-Compliance.

Note 3: Daily telemetry water readings where compliance with water take limits is continuously monitored are to be excluded from compliance grade totals.

- Significant Non-Compliance
- Other (please specify)

*Consistent with previous years GWRC are unable to exclude telemetered Water Takes from these figures. Their grading of compliance is over the year not per event.

TOTAL NUMBER OF CONSENTS IN DIFFERENT CATEGORIES OF COMPLIANCE ON A PER MONITORING EVENT BASIS

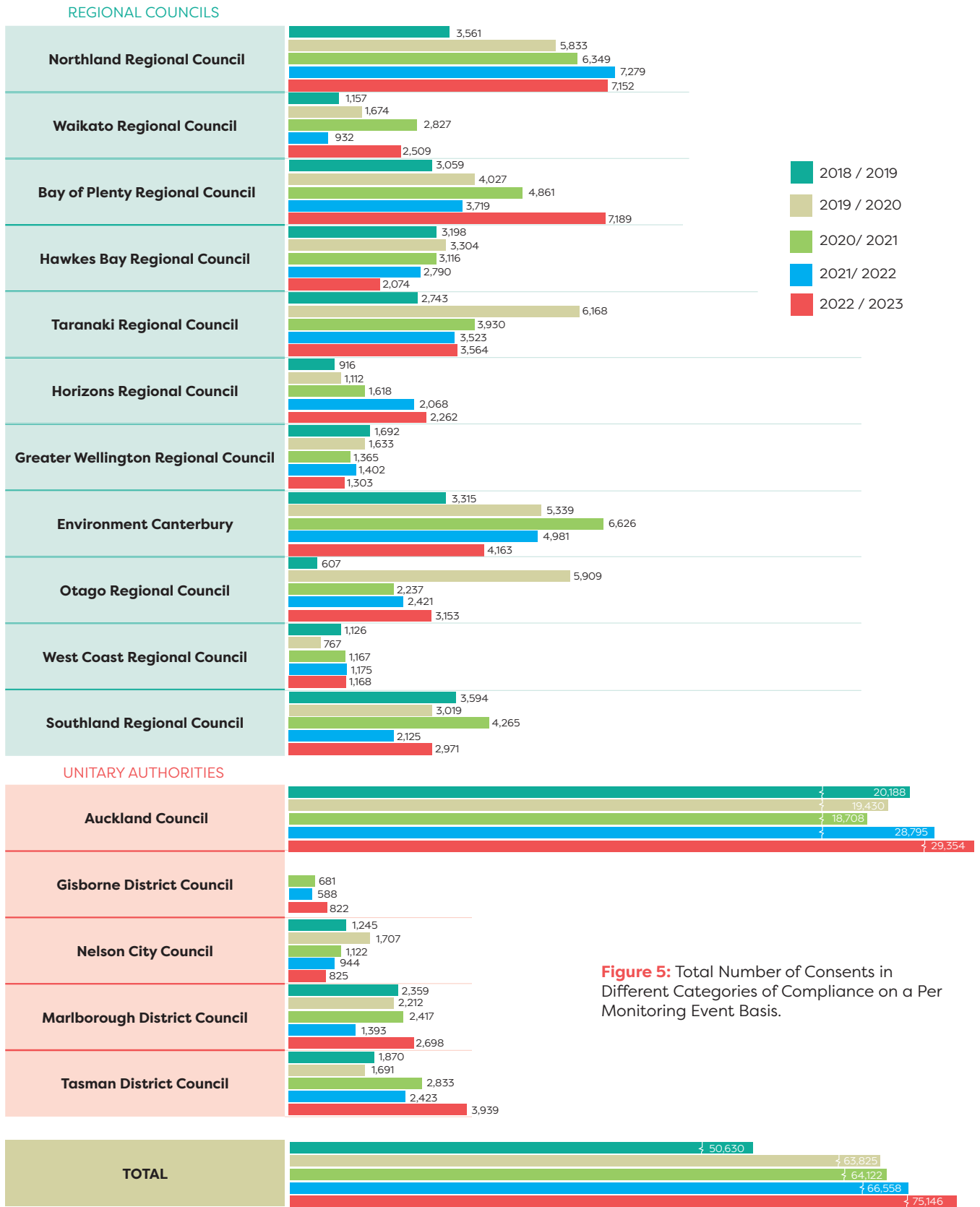
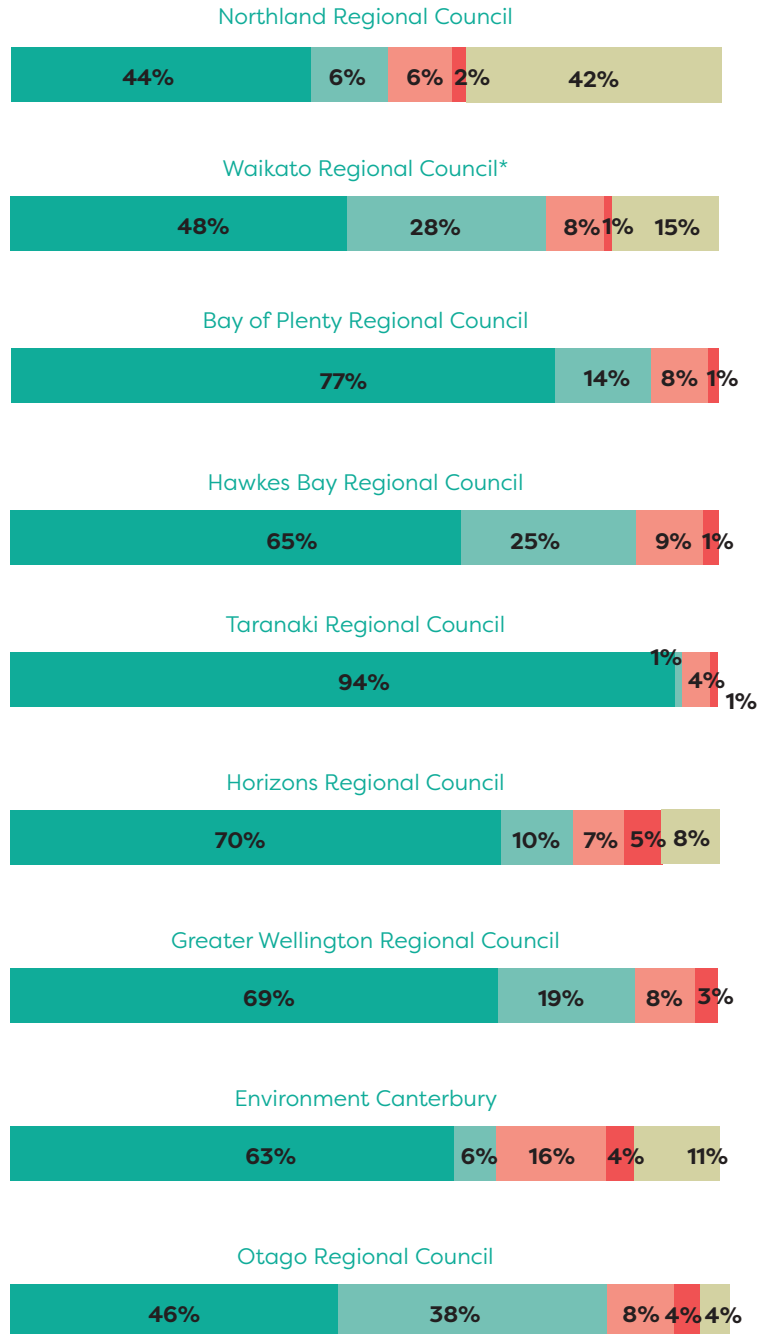


Figure 5: Total Number of Consents in Different Categories of Compliance on a Per Monitoring Event Basis.



PERCENTAGES OF CONSENTS IN FULL COMPLIANCE, LOW RISK/ TECHNICAL NON-COMPLIANCE, MODERATE NON COMPLIANCE AND SIGNIFICANT NON COMPLIANCE ON A PER MONITORING EVENT BASIS

■ FULL COMPLIANCE
 ■ LOW RISK/ TECHNICAL NON-COMPLIANCE
 ■ MODERATE NON-COMPLIANCE
 ■ SIGNIFICANT NON-COMPLIANCE
 ■ OTHER GRADING



* The non-compliance rating system used at WRC considers multiple factors, and not solely whether the non-compliance results in actual significant environmental effect. As such the data is not directly comparable to those councils that apply the MfE compliance rating system.



Attachment 1 to Report 23.609

■ FULL COMPLIANCE
 ■ LOW RISK/ TECHNICAL NON-COMPLIANCE
 ■ MODERATE NON-COMPLIANCE
 ■ SIGNIFICANT NON-COMPLIANCE
 ■ OTHER GRADING

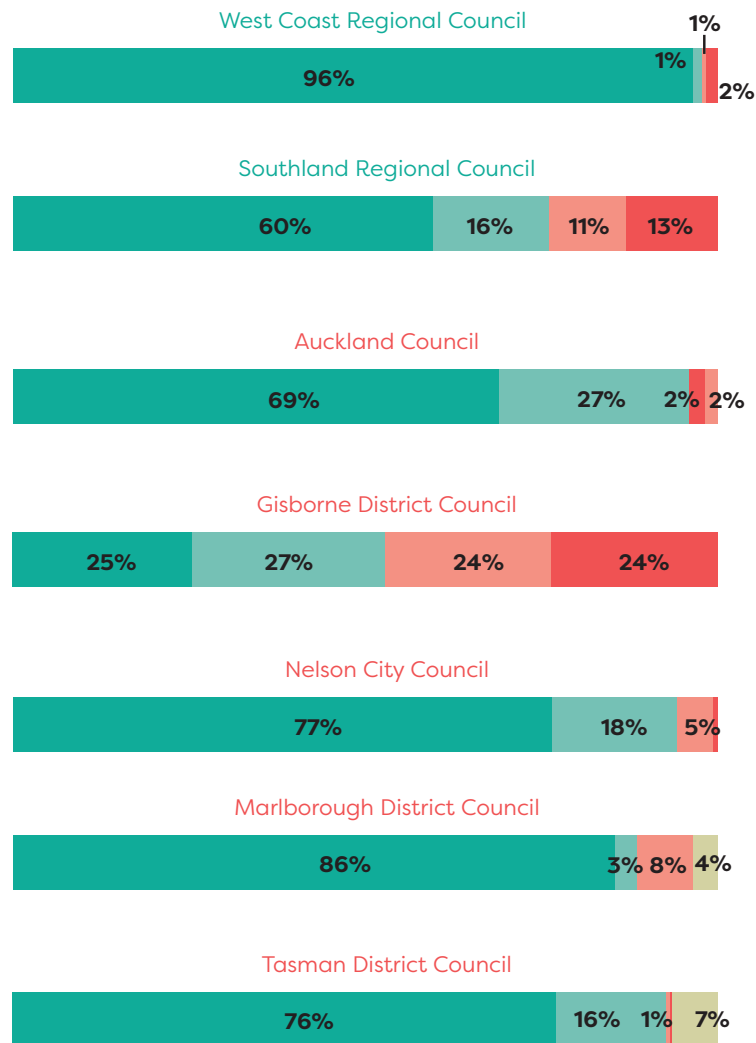


Figure 6: Percentages of consents in full compliance, low risk/ technical non-compliance, moderate non-compliance and significant non-compliance on a per monitoring event basis.



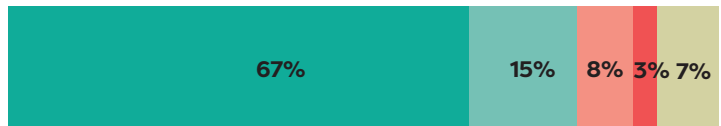
NATIONWIDE COMPLIANCE RATING OF CONSENTS MONITORED

TOTAL CONSENTS MONITORED **71,400**

NATIONWIDE COMPLIANCE RATING OF CONSENTS MONITORED

■ FULL COMPLIANCE
 ■ LOW RISK/ TECHNICAL NON-COMPLIANCE
 ■ MODERATE NON-COMPLIANCE
 ■ SIGNIFICANT NON-COMPLIANCE
 ■ OTHER GRADING

REGIONAL COUNCILS



UNITARY AUTHORITIES



Figure 7: Nation-wide percentages of consents in full compliance, low risk/ technical non-compliance, moderate non-compliance and significant non-compliance on a per monitoring event basis.



MONITORING PERMITTED ACTIVITIES

Permitted activities are similar to previous years. Forestry and dairy make up 1/3 of site visits. Forestry, dairy, winter grazing and wineries had annual monitoring other activities were as required.

PERMITTED ACTIVITY MONITORING PROGRAMMES FOR DIFFERENT INDUSTRIES

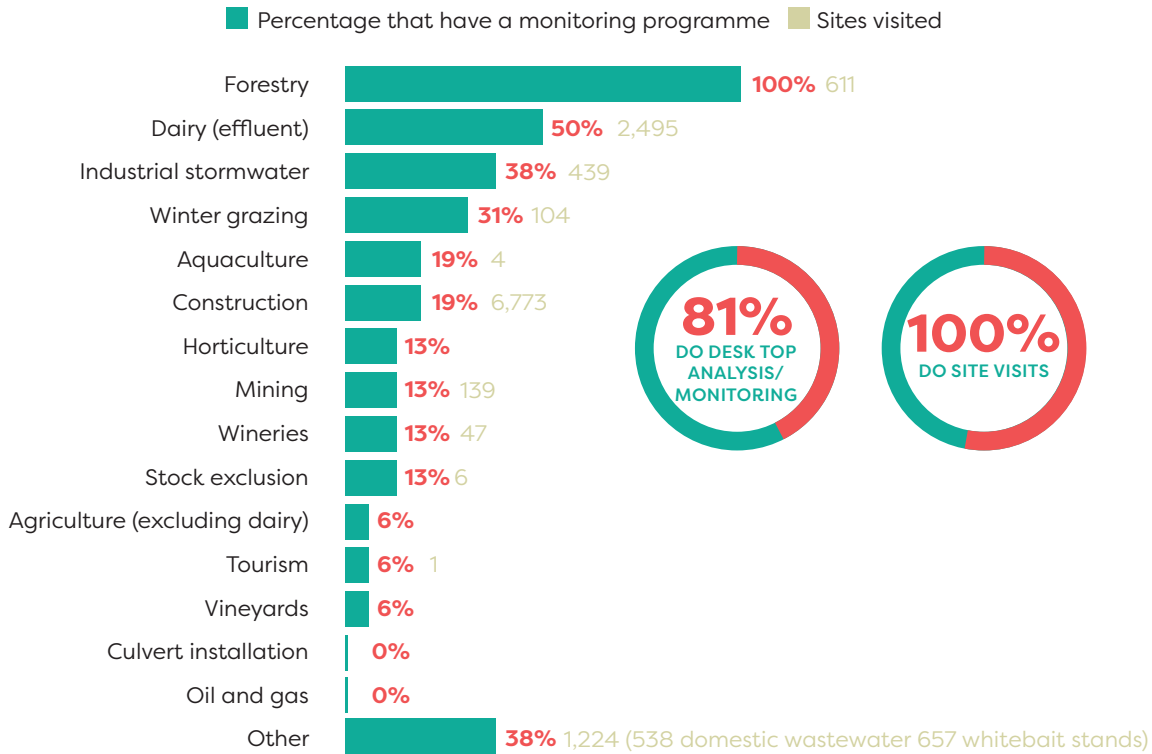


Figure 8: Proportion of permitted activity monitoring programmes for different industries

Question 16. Which permitted activities do you have a monitoring programme for?

List of activities with tick box if yes:

- Agriculture (excluding dairy)
- Aquaculture
- Construction
- Dairy
- Forestry
- Horticulture
- Mining
- Oil and gas
- Tourism
- Vineyards
- Wineries
- Wintering
- Other (please specify)

Question 17. What was the number of sites visited?

Question 18. What was the type of monitoring done?

- Desk top analysis
- Site visits
- Other

MAKING DECISIONS ON PRIORITIES

The following questions help us understand prioritisation and the way matters are addressed; it looks at the workstreams and rationale for prioritisation.

Every council has firmly established mechanisms for evaluating and prioritizing complaints, notifications, and incidents. A significant number of them employ a triage system or a coding method to establish priority. The criteria employed to ascertain the level of priority and immediacy for in-person response are as follows:

- The amount of harm/ adverse effects
- If the event is still happening
- Clean up/ mitigation
- Risk to human health
- Frequency of notifications
- Quality of complaints
- Elevated response/ escalation plans

Assessments included:

- Priority setting matrix
- Triage plans
- Risk based approach

Risk based models were commonly the basis for determining which consents are monitored and how frequently. These were based on:

- Risk based prioritisation
- Level of historical non-compliance/ likelihood of non-compliance
- Iwi
- Community interests
- Emerging issues
- Compliance history

QUESTION 22. What basis is used for determining what notifications/complaints/incidents are physically attended and with what urgency or priority?

QUESTION 23. Describe how you determine which consents are monitored and how frequently?
If there is a prioritisation model or compliance strategy, add link

QUESTION 24. Describe the basis, which was used for determining what, if any, permitted activities were monitored. *If there is a prioritisation model or compliance strategy, add link*

STAFFING LEVELS

The number of FTE's is on par with last year. Last year there were 402 FTE's this year 410 (excluding Auckland). Auckland continues to employ the most FTE's at 179, while others employ between 5 and 50. There is significant variation between councils resourcing tends to reflect GDP. Resourcing does differ in the sector given the diversity of population size, area, development type/ intensity and council funding base.

Taranaki Regional Council had the greatest decrease in resourcing this year with 26% less staff than last year, while Wellington Regional Council has 15% more staff (3 additional FTE's). Resourcing at Auckland Council remains stable.

This year environmental or incident pollution increased by 28 FTE's, combination increased by 8 FTE's, other roles decreased by 6 to 11 FTE's.

Across the sector there are 149 vacancies being carried. Auckland Council has the highest number of vacancies (42), as a percentage of FTE's Waikato Regional Council has the greatest gap with 50 FTE's and 33 vacancies carried. Fully resourced are Taranaki Regional Council, Greater Wellington Regional Council, West Coast Regional Council and Nelson City Council. Stress and remuneration have the most effect on staff retention.

Question 25. How many FTEs does your council have who carry out monitoring roles?

Question 26. How many FTEs does your council have who carry out environmental incident or pollution response roles?

Question 27. How many FTEs does your council have who carry out investigation or enforcement roles?

Question 28. How many FTEs does your council have who carry out a combination of the above roles?

Note 1: Include contractors

Note 2: Only answer this question if you have not included these staff in questions 24, 25 or 26

Question 29. How many FTEs does your council have in CME support roles?

This includes administrative roles, e.g. staff who assist with issue of notices, reminder notices, upload of unpaid infringements to Ministry of Justice.

Question 30. Across this area of council work (CME) on average for the year, how many vacancies have been carried?

Number of vacancies during the year/ average length of vacancies

Question 31. What have been the most significant factors influencing retention and recruitment of CME staff?

Question 32. At the time of answering this question what is your staff's CME experience at council?

- Less than 2 years. Number of staff
- 2-10 years. Number of staff
- Greater than 10 years. Number of staff

COUNCIL FTEs IN CME ROLES

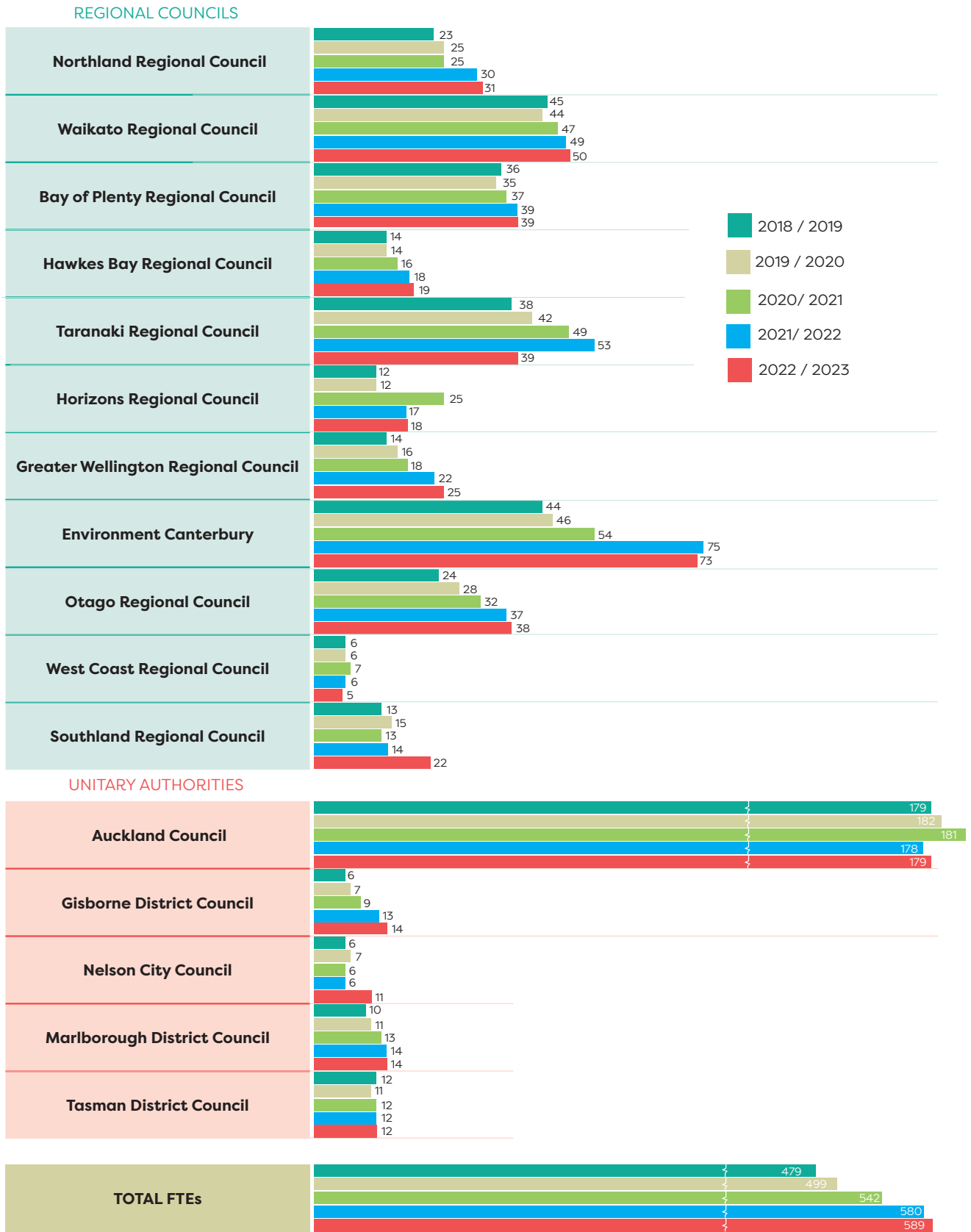


Figure 9: Council FTEs in CME roles

COUNCIL FTE'S IN SPECIFIC ROLES

	MONITORING			COMBINATION			ENVIRONMENTAL INCIDENT OR POLLUTION			INVESTIGATION OR ENFORCEMENT			SUPPORT			
	2020 / 2021	2021 / 2022	2022 / 2023	2020 / 2021	2021 / 2022	2022 / 2023	2020 / 2021	2021 / 2022	2022 / 2023	2020 / 2021	2021 / 2022	2022 / 2023	2020 / 2021	2021 / 2022	2022 / 2023	
REGIONAL COUNCILS	Northland Regional Council	0	0	0	22	26	26	0	0	0	1	1	1	2	3	4
	Waikato Regional Council	22	20	20	0	0	0	9	9	10	10	13	12	6	7	8
	Bay of Plenty Regional Council	17	20	20	0	0	0	4	4	4	4	3	3	12	12	12
	Hawkes Bay Regional Council	10	12	12	0	0	0	3	3	3	1	1	1	2	2	3
	Taranaki Regional Council	35	37	22	2	2	2	5	5	5	5	6	6	2	3	4
	Horizons Regional Council	13	0	0	0	16	14	9	0	0	1	0	3	2	1	1
	Greater Wellington Regional Council	0	0	0	17	20	23	0	0	0	0	0	0	1	2	2
	Environment Canterbury	28	42	45	0	1	8	7	6	9	4	4	4	15	22	7
	Otago Regional Council	18	20	21	2	4	5	4	4	4	3	4	4	5	5	5
	West Coast Regional Council	0	0	0	6	5	4	0	0	0	0	0	0	1	1	1
	Southland Regional Council	8	9	10	0	0	4	1	1	1	2	2	2	2	3	5
REGIONAL SUBTOTAL	151	160	149	49	73	86	42	32	36	31	34	36	50	61	52	
UNITARY AUTHORITIES	Auckland Council	69	77	72	88	20	15	0	47	70	0	18	7	24	16	15
	Gisborne District Council	0	0	0	8	11	11	0	0	0	0	0	2	1	2	1
	Nelson City Council	0	0	5	5	5	6	0	0	0	0	0	0	1	1	1
	Marlborough District Council	5	6	6	1	0	0	0	5	5	5	2	2	2	1	2
	Tasman District Council	0	0	0	10	10	10	0	0	0	0	0	0	2	2	2
	UNITARY SUBTOTAL	74	83	83	112	46	42	0	52	75	5	20	11	30	21	20
	UNITARY SUBTOTAL MINUS AUCKLAND	5	6	11	24	26	27	0	5	5	5	2	4	6	5	5
TOTAL	225	243	232	160	119	127	42	83	111	36	54	47	79	82	72	
TOTAL MINUS AUCKLAND	156	166	160	72	99	112	42	36	41	36	36	40	55	66	57	

Table 4: Council FTEs for different aspects of the CME role



**COUNCIL FTES AND FORMAL ACTIONS
BASED ON POPULATION**

		FTE/1000					FTE 2022/2023	Population Estimates 2022	Formal actions per 1000 2022/2023
		2018 / 2019	2019 / 2020	2020 / 2021	2021 / 2021	2022 / 2023			
REGIONAL COUNCILS	Northland Regional Council	.13	.13	.13	.15	.15	31	200,100	1.9
	Waikato Regional Council	.10	.09	.10	.10	.10	50	511,000	0.6
	Bay of Plenty Regional Council	.11	.11	.11	.11	.11	39	345,700	0.0
	Hawkes Bay Regional Council	.08	.08	.09	.10	.10	19	182,200	0.7
	Taranaki Regional Council	.32	.34	.40	.42	.31	39	126,900	2.1
	Horizons Regional Council	.05	.05	.10	.07	.07	18	257,400	0.4
	Greater Wellington Regional Council	.03	.03	.03	.04	.05	25	543,500	0.2
	Environment Canterbury	.07	.07	.08	.12	.11	73	653,300	0.6
	Otago Regional Council	.10	.12	.13	.15	.15	38	245,300	0.6
	West Coast Regional Council	.16	.17	.20	.17	.15	5	32,800	0.6
	Southland Regional Council	.13	.15	.12	.14	.21	22	102,400	1.3
REGIONAL AVERAGE/ TOTAL		.12	.12	.14	.14	.14	359	3,200,600	0.9
UNITARY AUTHORITIES	Auckland Council	.11	.11	.11	.10	.11	179	1,699,200	2.2
	Gisborne District Council	.13	.14	.18	.24	.27	14	51,900	2.2
	Nelson City Council	.10	.12	.10	.10	.20	11	54,500	0.7
	Marlborough District Council	.20	.21	.25	.27	.26	14	51,700	1.0
	Tasman District Council	.22	.20	.21	.21	.20	12	58,700	0.6
	UNITARY AVERAGE/ TOTAL		.15	.16	.17	.18	.21	230	1,916,000
AVERAGE		.13	.13	.15	.16	.17			

TABLE 5: Comparison of council FTEs, population and number of formal actions (excluding prosecutions but including warnings)



Below we can see the relationship between formal actions and FTE's. Higher number of FTE's results is correlated with a larger number of formal actions.

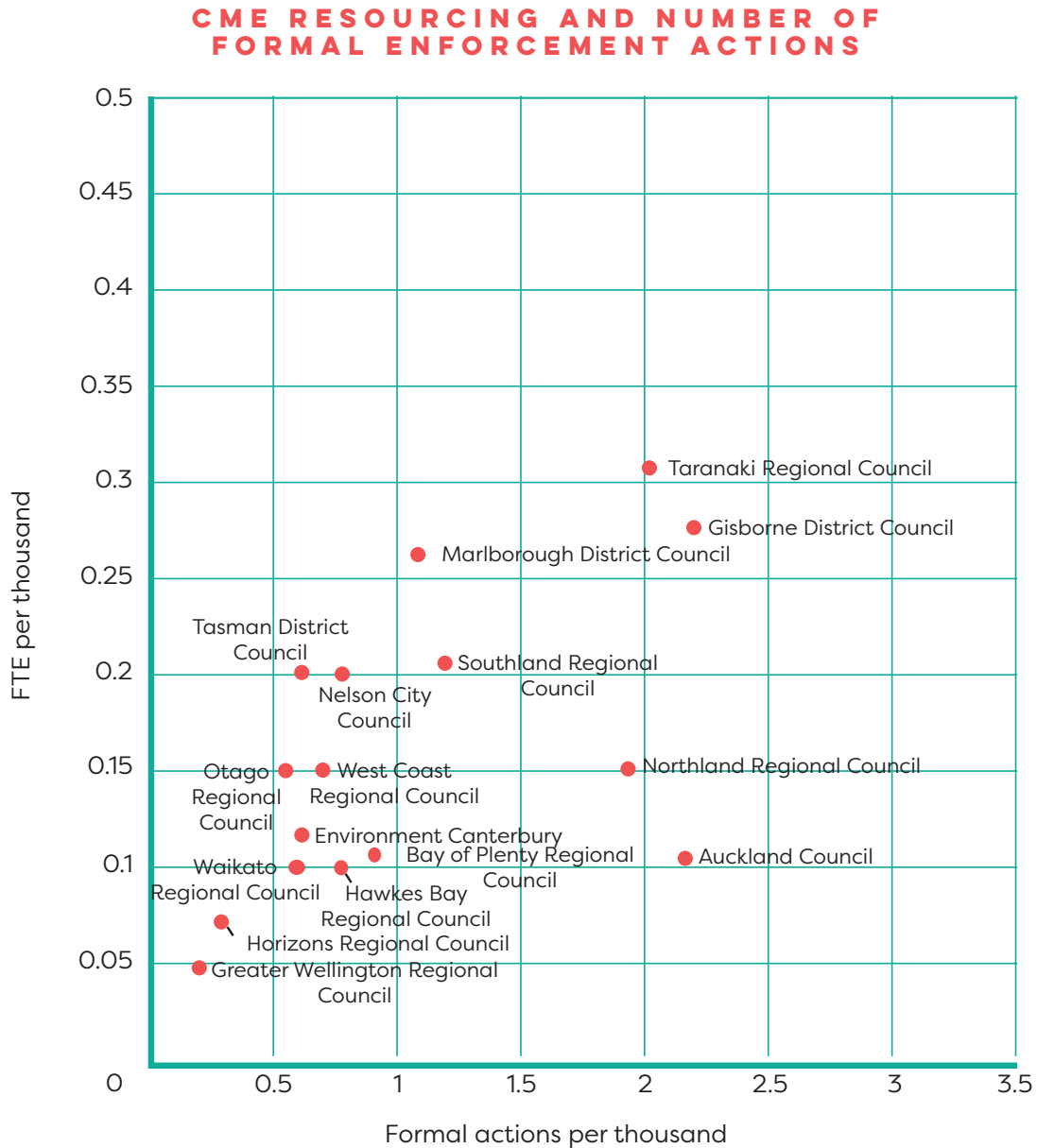


Figure 10: Comparison of CME resourcing and number of formal enforcement actions



Attachment 1 to Report 23.609

Moreover, Figure 11 illustrates how GDP influences the quantity of FTEs. Regions boasting higher GDP levels generally have more FTEs, while areas with lower GDP tend to have fewer workforce resources.

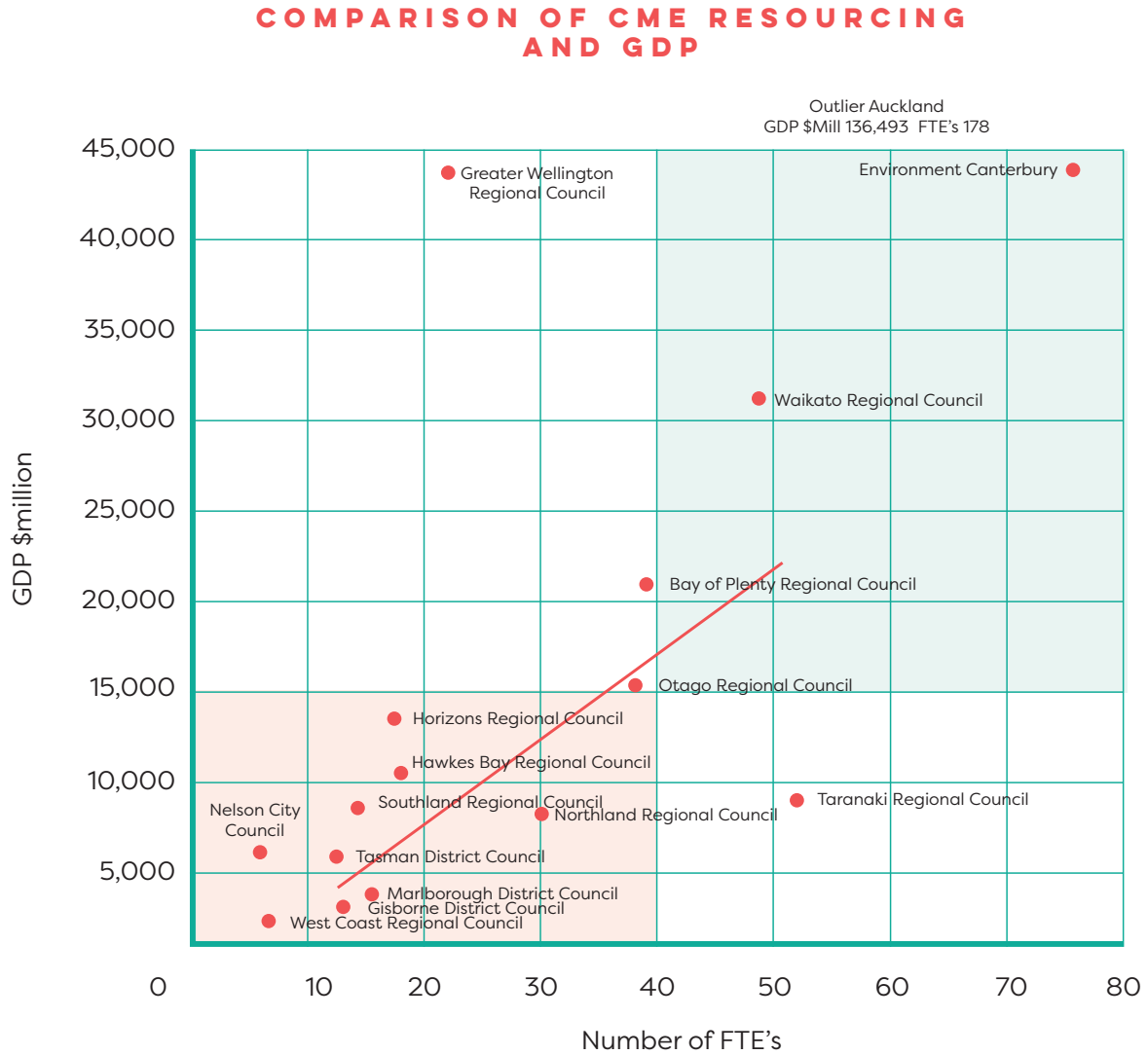


Figure 11: Comparison of CME resourcing and GDP



Across the CME area of council work nearly half (46%) of staff had less than two years' experience. Length of vacancies varied from 6 weeks to 6 months. The main factors affecting staff retention are remuneration, stress, appeal of the role and lack of opportunity for career development.

COUNCIL FTE EXPERIENCE LEVELS

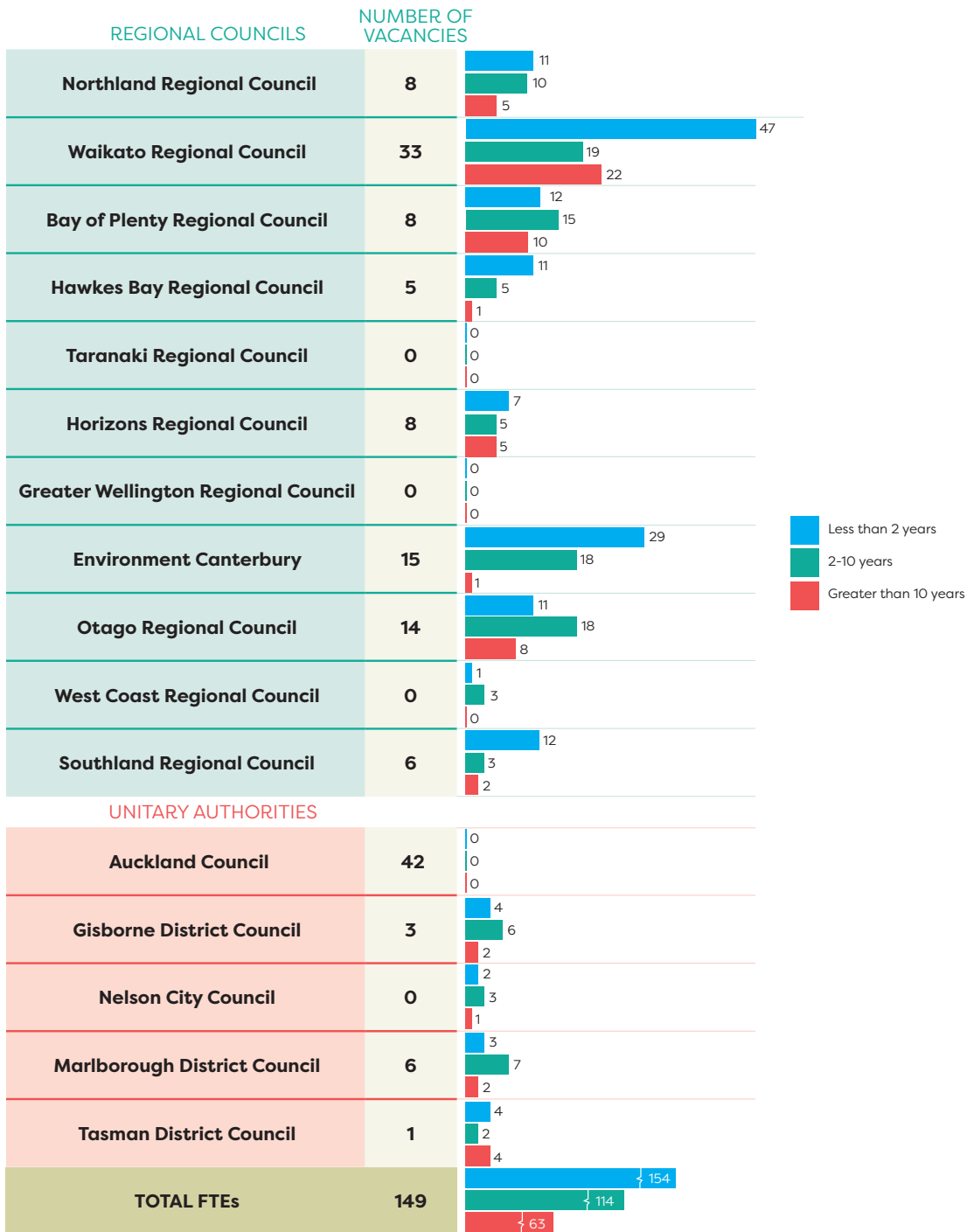


Figure 12: Council experience level and number of vacancies

QUESTION 30. Across this area of council work (CME) on average for the year, how many vacancies have been carried?

QUESTION 31. What have been the most significant factors influencing retention and recruitment of CME staff?

QUESTION 32. At the time of answering this question what is your staff's CME experience at council?

Number of staff: Less than 2 years, 2-10 years, greater than 10 years.



CME POLICIES AND PROCEDURES

Credibility and trustworthiness of regulators is sustained through having sound, transparent policies in place. All councils have both Enforcement Policies and Conflict of Interest Policies.

For all councils’ decisions on prosecutions were made by a panel including:

- Investigating Officer
- Investigating Officer’s Manager or Team Leader
- Enforcement Specialist
- Compliance Monitoring Manager
- Group Manager/ General Manager/ Director (Infringement notices and Prosecutions only)

INVOLVEMENT IN PROCESS FOR MAKING DECISIONS ABOUT WHETHER TO PROCEED WITH ENFORCEMENT ACTION

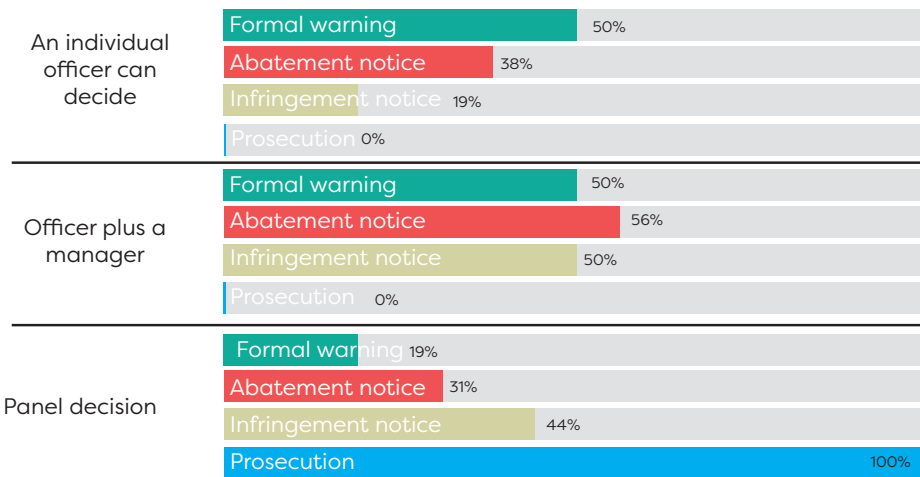


Figure 13: Enforcement action and whether to proceed (% of councils)

Question 33. Who is involved in your process for making decisions about whether to proceed with enforcement action?

- An individual officer can decide
- Officer plus a manager
- Panel decision
- Formal warning
- Abatement notice
- Infringement notice
- Prosecution

Question 34. Who are the panel members?

- Investigating officer
- Investigating officer’s manager/Team Leader
- Enforcement Specialist
- Compliance Monitoring Manager
- Group Manager/General Manager/Director
- Chief Executive
- Legal Counsel (internal)
- Legal Counsel (external)
- Other



CME POLICIES AND PROCEDURES

Making decisions to take no formal action, was done by using a matrix or step process, to guide decision making. Some officers, team leaders or managers had authority to make no formal action.

Final delegation to authorise filing of charges was with the Manager, Group Manager, a panel of compliance managers, General Manager, Chief Executive, Chief Executive Officer.

WHO MAKES THE DECISION TO TAKE NO FORMAL ENFORCEMENT ACTION WHEN A BREACH HAS BEEN IDENTIFIED

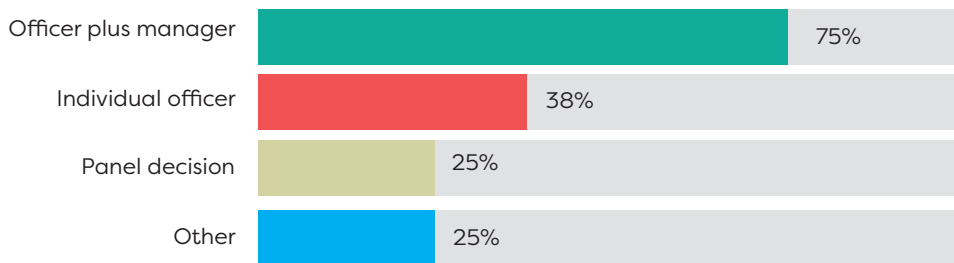


Figure 14: Percentage of councils and the decision on no formal enforcement

Question 36. What is your process for making decisions to take no formal enforcement action when a breach has been identified?

Question 37. Who makes the decision to take no formal enforcement action when a breach has been identified?

- Individual officer
- Officer plus manager
- Panel manager
- Other

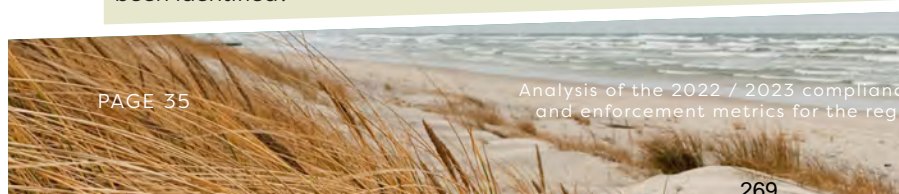
Question 38. Who has the delegation to authorise filing of charges for a prosecution at your council?

DECISIONS ON NO FORMAL ACTION

REGIONAL COUNCILS	Northland Regional Council	Officer's discretion for breaches/non-compliance for consented activities. For all incidents, officers answer a suite of questions (which are recorded in our database) to justify their decision not to take enforcement.	
	Waikato Regional Council	Team leaders or managers have the delegated authority to authorise no enforcement action or, again if complex, a panel can be called for this purpose.	
	Bay of Plenty Regional Council	The officer will consider the relevant factors including environmental effect, receiving environment, conduct of the offender, attitude of the offender and deterrence factor as well as considering the most desirable outcome sought. This is discussed with a senior member of the team to weigh up the options and noted on file.	
	Hawkes Bay Regional Council	What's the environmental effect, the seriousness of the incident, unforeseen circumstances like electrical fault, burst pipe etc.	
	Taranaki Regional Council	Officers discretion based on training and experience. Reviewed by compliance manager.	
	Horizons Regional Council	When a complaint is received and a breach of RMA is found or if a significant non-compliance against a resource consent occurs, then the Consents Monitoring Officer completes an Interim Enforcement Decisions Checklist. The recommendation can range from no action to formal investigation. IEDCS are reviewed by a panel that includes Team Leaders and/or the Regulatory Manager during a weekly meeting.	
	Greater Wellington Regional Council		
	Environment Canterbury	Specialist technical peer review.	
	Otago Regional Council	All Moderate and Significant Non-compliance audit reports are reviewed by Team Leader and discussed with the officer, if no formal enforcement action is taken. Pollution incidents where no formal enforcement action is taken is reviewed by Team Leader.	
	West Coast Regional Council	No impact from the breach has been identified which will be recommended through a report.	
	Southland Regional Council	Incident response – investigation – enforcement decision group meeting – legal opinion – CEO approval.	
	UNITARY AUTHORITIES	Auckland Council	Decision-making matrix to guide decision making.
		Gisborne District Council	Discussion with Investigators, TL and/or CME Manager. Decision documented. Will go to EDG if has a high public interest.
Nelson City Council		Through verbal discussions and/or a memo discussing the breach and value in pursuing formal enforcement action. If non taken it is usually due to the breach being de minimis in nature/little or no environmental effects or not being in the public interest to pursue.	
Marlborough District Council		QA per review panel.	
Tasman District Council		Step process. Investigating officer will write up a summary of findings and recommendations sent for review and response by team leader. Outcome is noted on records.	

Table 6: Decision making process to take no formal enforcement action when a breach has been identified

Question 36. What is your process for making decisions to take no formal enforcement action when a breach has been identified?



EDUCATING AND ENGAGING WITH THE REGULATED COMMUNITY

Giving clear direction on what is expected to the regulated community creates a robust approach. This is outlined in the 'four E approach'. The following section helps us understand the programs councils have in place.

All councils have education/ engagement projects in place and have done for several years.



DELIVERY METHODS

- Field Days
- Workshops
- ShedTalk
- Programs
- Pocket guides
- Media/ advertising campaigns
- Website sections
- Citizen science projects
- Communications
- General engagement with groups
- Best practice guideline engagement with groups
- Online training/ webinars
- Email campaigns
- Publications
- Proactive requirement comms
- Phone line for advice
- Stakeholder meetings

TOPICS

- Erosion and sediment
- Farming/ Dairy/ Dairy effluent
- Winter grazing
- NES
- Forestry
- Winery waste
- Contaminated sites
- Wastewater
- Stormwater
- Water use
- Wetlands and farming
- Harvesting
- Burning
- Agri chemical
- Earthworks
- Catchment group
- Contaminated land

Question 54. Does your council have, or support, any education or engagement projects relating to compliance with the RMA or any of its derivative regulation? For example, workshops for earthworks contractors around erosion and sediment controls. Yes/ No

If yes, briefly describe



ACTING ON NON-COMPLIANCE

Analyzing priority areas and challenges for compliance programs is crucial to ensure they are effectively addressing the most significant risks. In this section we identify priority areas, what is occupying the most resource, and what is happening to those shifts over time.

This year there were a total of 6,255 actions; this is significantly more than last year (5,499). Typically, abatement notices take up the largest proportion of formal actions; this year follows the same trend. There are more abatement notices than last year.

The section with the largest number of actions is Section 15: Discharges of contaminants. This section remains the section with the most breaches, this year it has increased.

QUESTION 39. What was the total number of actions taken during the period for:

Note: This relates to the instruments issued in relation to the different sections of the Act (listed once for brevity)

- Section 9 Use of land
- Section 12 Coastal marine area
- Section 13 Beds of lakes and rivers
- Section 14 Water
- Section 15 Discharges of contaminants
- Section 17 Duty to avoid, remedy & mitigate
- Other breach e.g. Section 22

Formal warnings issued

Abatement notices issued

Infringement notices issued

Enforcement orders applied for

Note: Previously we have summed to give totals, this allows a more accurate figure where responses fall into more than one category.



NATIONWIDE ENFORCEMENT ACTIONS AND SECTIONS BREACHED





	 FORMAL WARNINGS	 ABATEMENT NOTICES	 INFRINGEMENT ORDERS	 ENFORCEMENT ORDERS	TOTAL ACTIONS
	414	4,092	1,742	14	6,255
SECTION 9 Use of land	40	238	160	5	442
SECTION 12 Coastal marine area	21	49	11	1	82
SECTION 13 Beds of lakes and rivers	17	62	31	0	110
SECTION 14 Water	103	132	18	1	254
SECTION 15 Discharges of contaminants	229	890	944	4	2,063
SECTION 17 Duty to avoid, remedy & mitigate	0	4	0	0	4
OTHER e.g. Section 22	5	2	577	2	586
Not recorded under section		2,726			

Table 7: Total use of formal instruments against relevant section of the Act (i. e., group of possible offences).

Note: Auckland Council can only provide total Abatement Notices

TOTAL USE OF FORMAL INSTRUMENTS (EXCLUDING PROSECUTION)

2018 / 2019 2019 / 2020 2020 / 2021 2021 / 2022 2022 / 2023

REGIONAL COUNCILS

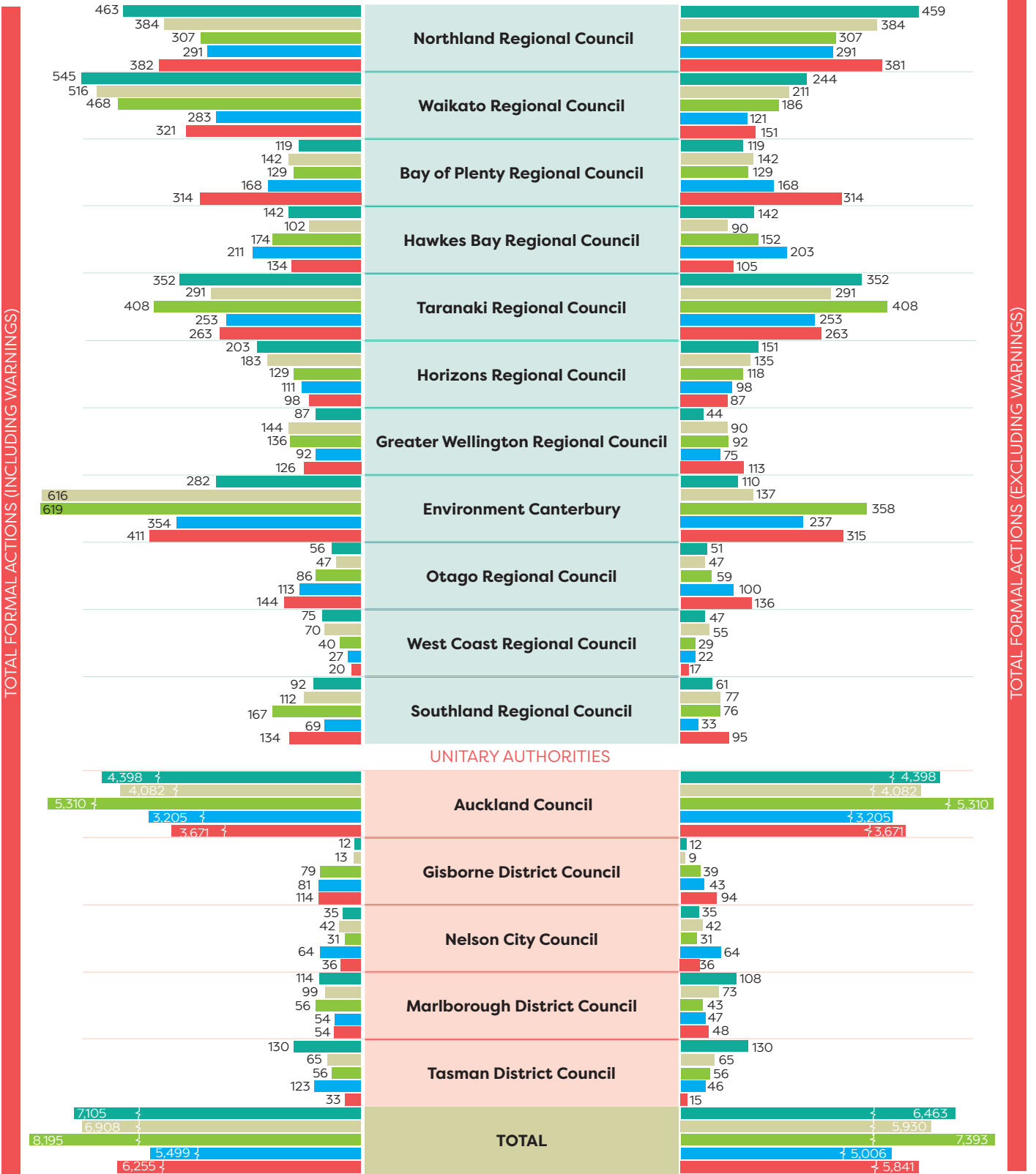


Figure 15: Total use of formal instruments (excluding prosecution)



TOTAL FORMAL WARNINGS AND ABATEMENT NOTICES

2018 / 2019 2019 / 2020 2020 / 2021 2021 / 2022 2022 / 2023

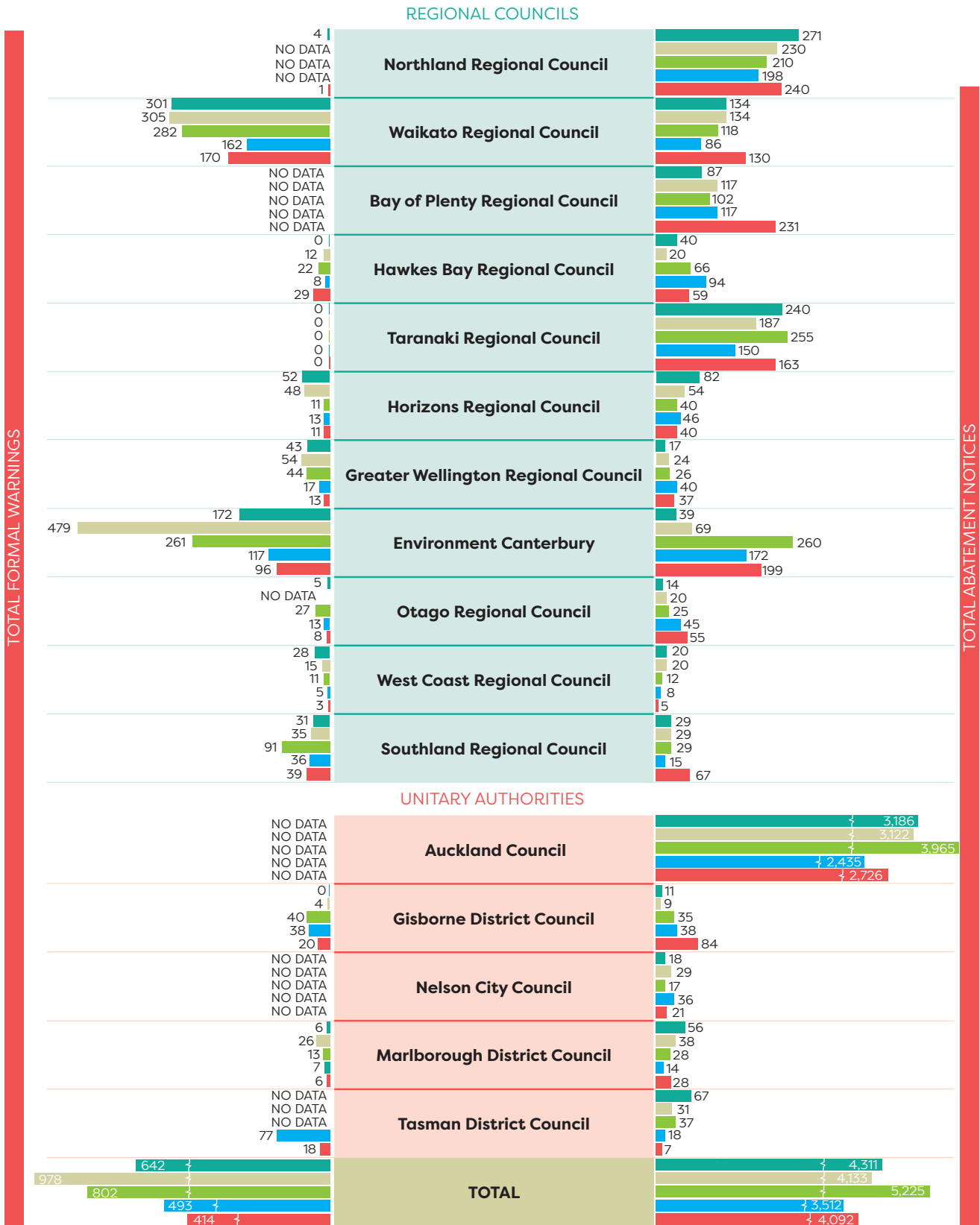


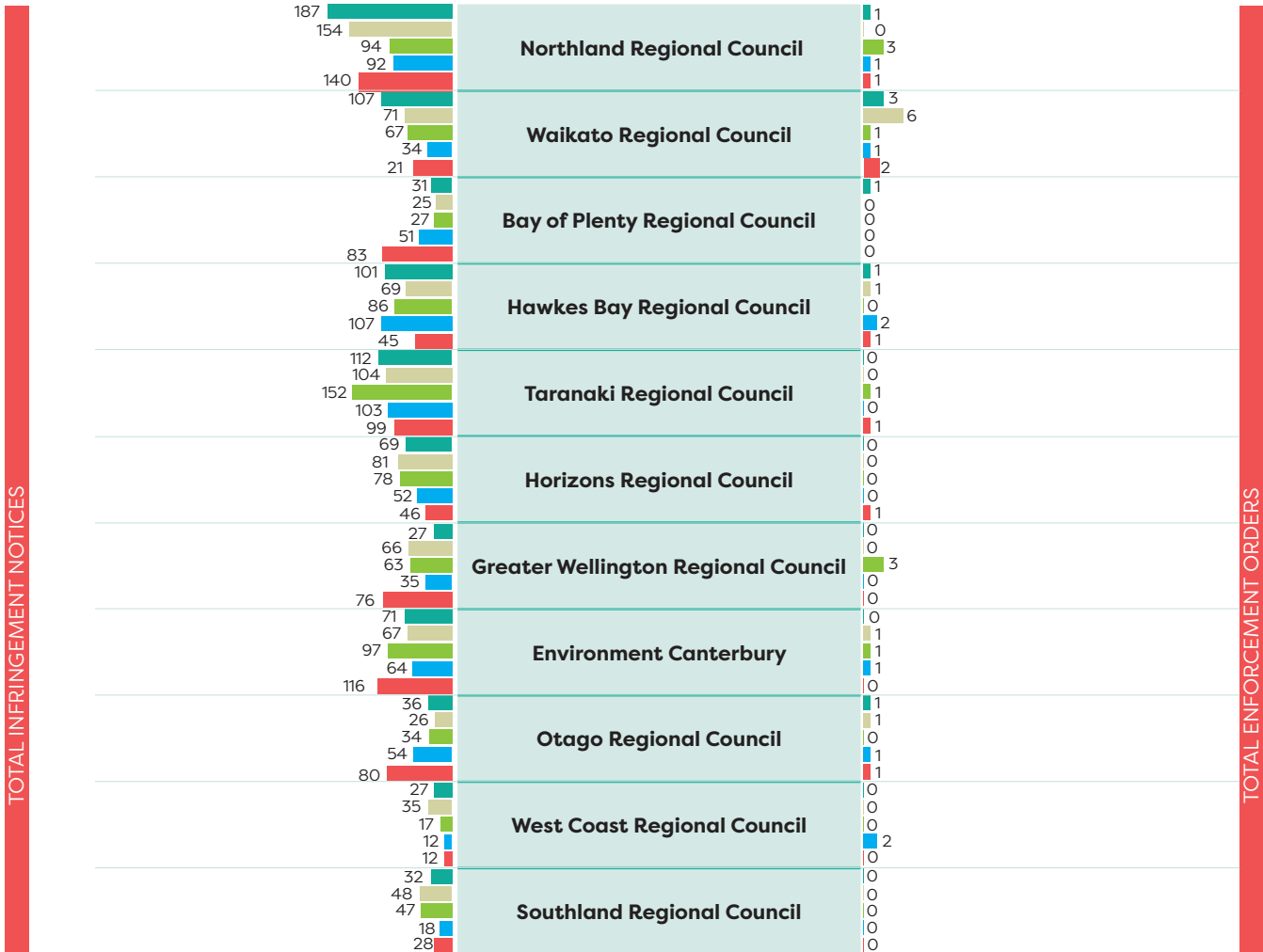
Figure 16: Total formal warnings and abatement notices



TOTAL INFRINGEMENT NOTICES AND ENFORCEMENT ORDERS

2018 / 2019 2019 / 2020 2020 / 2021 2021 / 2022 2022 / 2023

REGIONAL COUNCILS



UNITARY AUTHORITIES

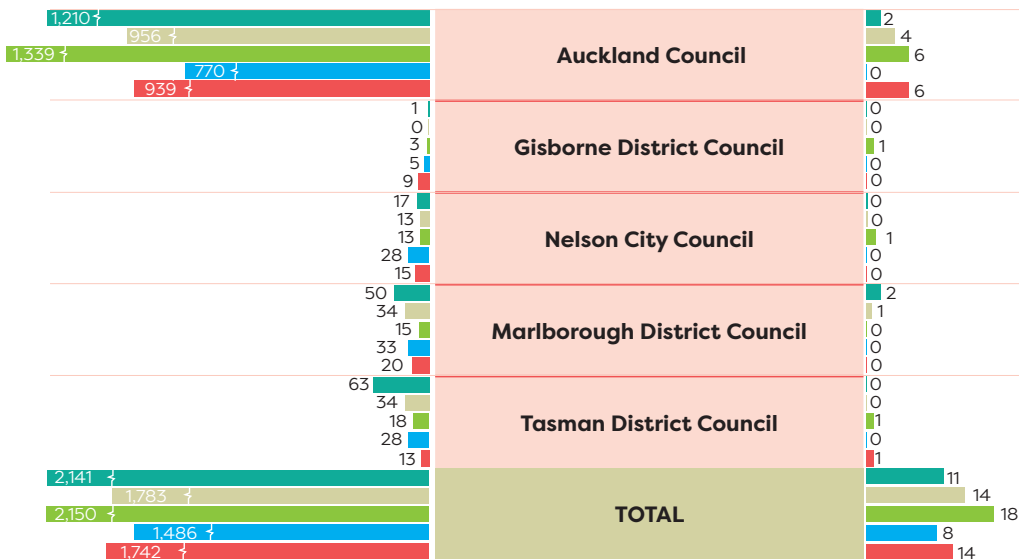


Figure 17: Total infringement notices and enforcement orders





PROSECUTIONS

The following questions address prosecutions, defendants, and convictions. Use of these tools where appropriate encourages compliance and behavior change by deterring offenders.

The extent to which legal proceedings are initiated reflects the agencies' readiness to employ more severe measures. In cases where councils are unlikely to pursue legal action, it might be perceived that violations are less likely to lead to repercussions.

This year the total number (both in progress and concluded) is the same as last year (133) There are 9 more individuals convicted and 11 more corporates convicted.

QUESTION 42. How many RMA prosecutions were:

Note: For this question please consider an entire case (regardless of number of charges and defendants) as one prosecution.

Concluded in the period?

Still in progress in the period?

QUESTION 43. What is the total number of individual (person) defendants convicted as a result of RMA prosecutions concluded in this period?

QUESTION 44. For all of these (person) defendants what is the total number of convictions entered against them? For example, there may be a total of 27 separate convictions entered against a total of nine 'individual' defendants.

QUESTION 45. What is the total number of corporate (e.g. Crown, company, body corporate etc.) defendants convicted as a result of RMA prosecutions concluded in this period?

QUESTION 46. For all of these (corporate) defendants what is the total number of convictions entered against them? For example, there may be a total of 30 separate convictions entered against a total of 12 corporate defendants.

QUESTION 47. Total number of convictions against an individual [see categories for sections of the Act as above]
 Total fine potential (Total x \$300,000)

Total number of convictions against a corporate entity [see categories for sections of the Act as above] Total fine potential (Total x \$600,000)



NATIONWIDE PROSECUTIONS ACROSS THE REGIONAL SECTOR

■ 2018 / 2019
 ■ 2019 / 2020
 ■ 2020 / 2021
 ■ 2021 / 2022
 ■ 2022 / 2023

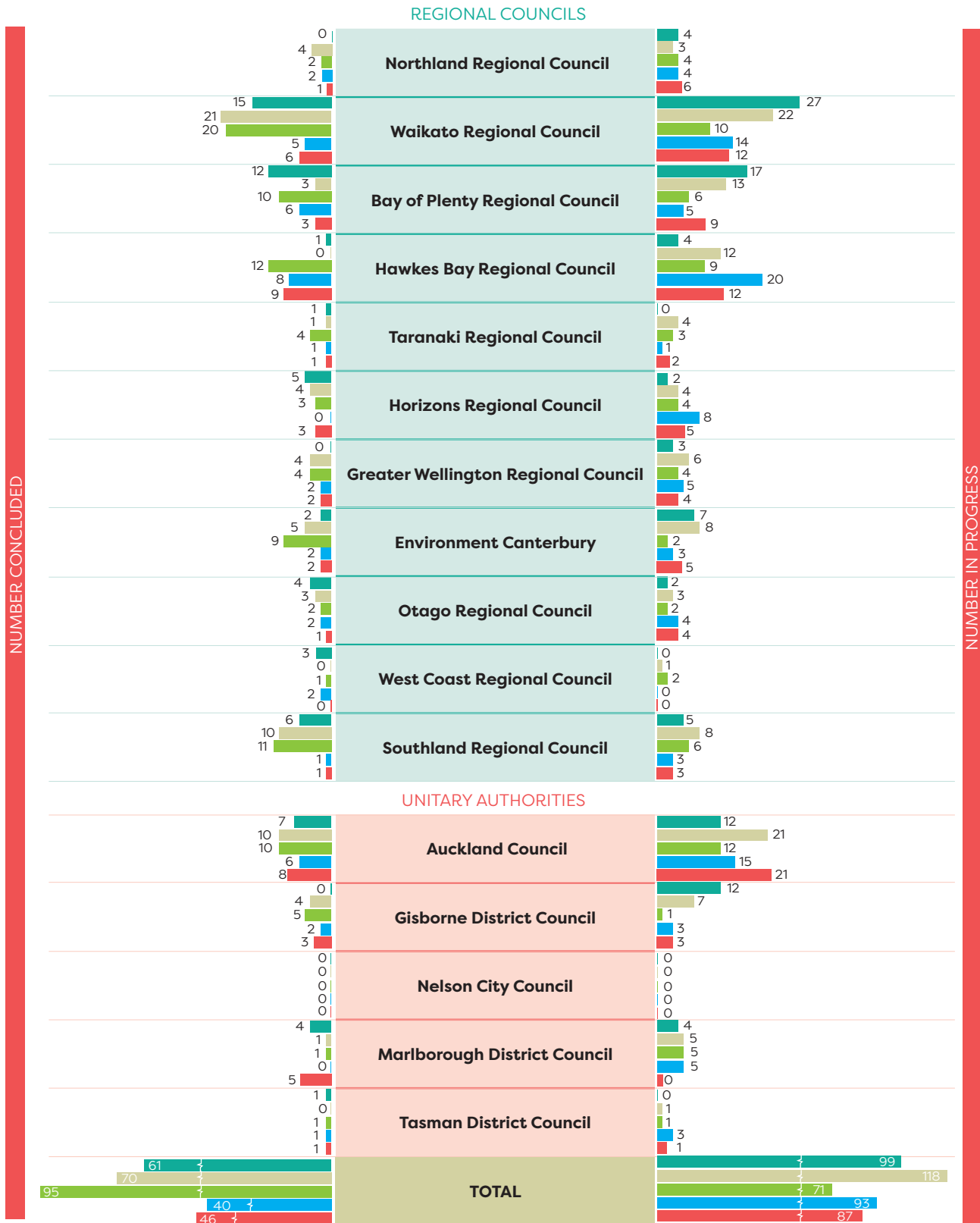


Figure 18: Prosecutions across the regional sector



INDIVIDUALS CONVICTED ACROSS THE REGIONAL SECTOR

2018 / 2019 2019 / 2020 2020 / 2021 2021 / 2022 2022 / 2023

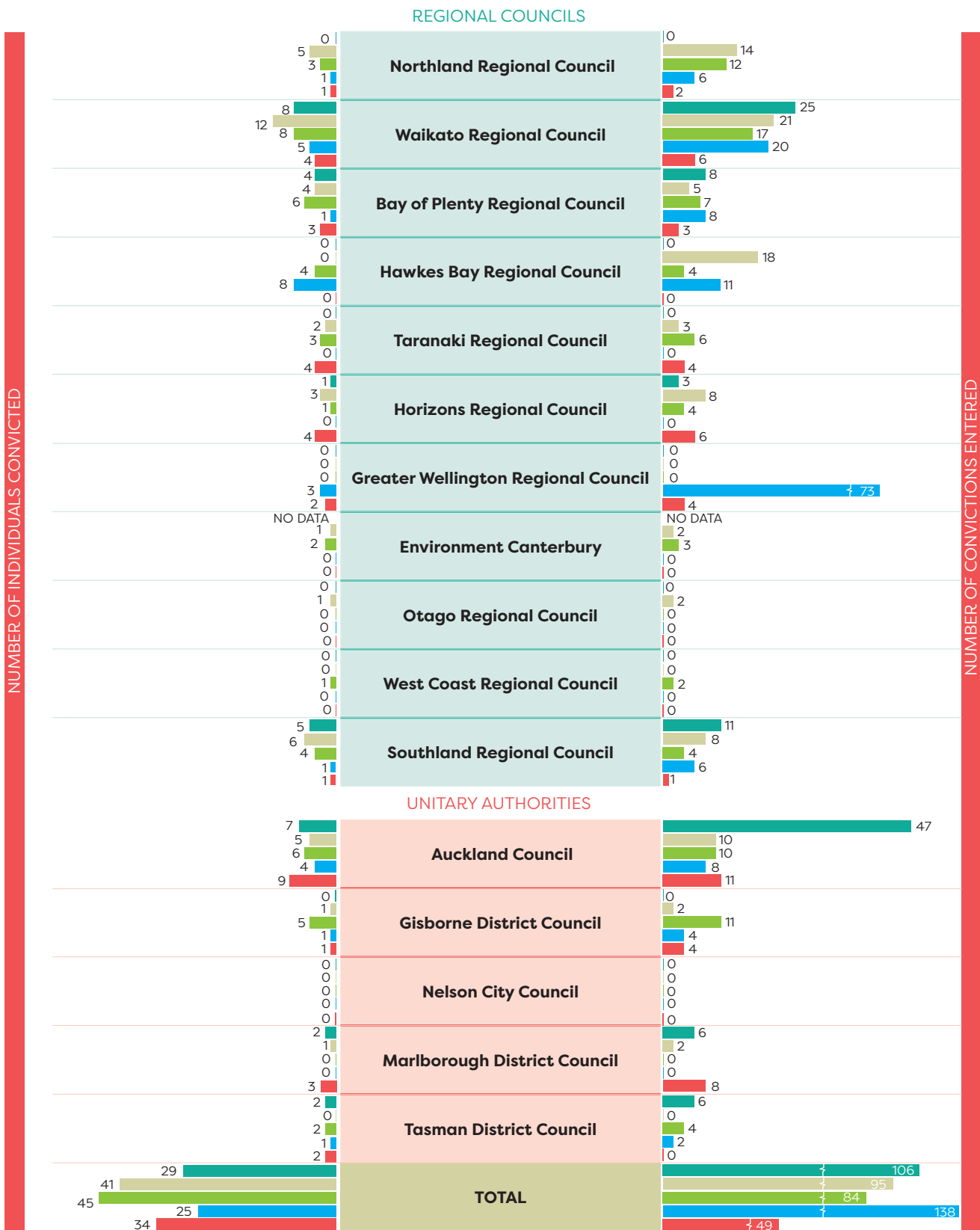


Figure 19: Individuals convicted across the regional sector



CORPORATES CONVICTED ACROSS THE REGIONAL SECTOR

2018 / 2019 2019 / 2020 2020 / 2021 2021 / 2022 2022 / 2023

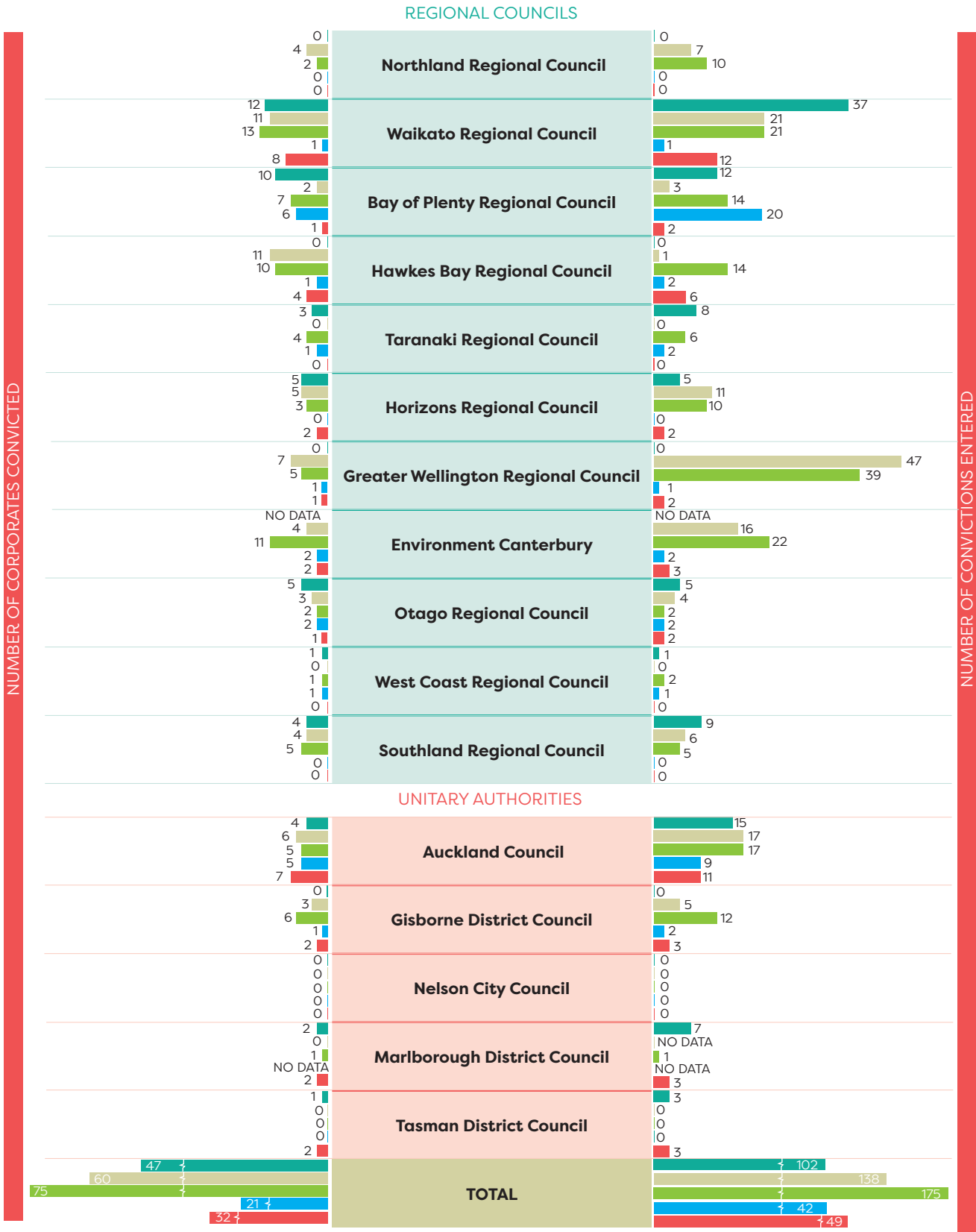


Figure 20: Corporates convicted across the regional sector



PENALTIES

The higher number of individuals and corporates convicted this year has influenced the total amount of fines. This year there were \$113,595 more individual fines and \$748,401 more corporate fines.

There were no occasions in which prison sentences were imposed this year.

	NUMBER OF COUNCILS
PRISON SENTENCE	0
ENFORCEMENT ORDER	6
REPARATION	3
COMMUNITY SERVICE	3
RESTORATIVE JUSTICE	2
DIVERSION	2
ALTERNATIVE JUSTICE	0
DISCHARGE WITHOUT CONVICTION	2

Table 8: Other sanctions handed down under the RMA

QUESTION 48. What is the total amount of fines imposed by the courts as a result of RMA prosecutions concluded in this period? Individual / corporate.

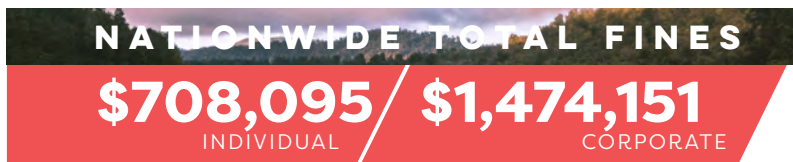
QUESTION 49. What other sanctions, if any, have been imposed by the courts as a result of RMA prosecutions concluded in this period? Prison sentence / Enforcement order / Reparation / Community Service / Discharge without conviction / Other.

QUESTION 50. How many prosecutions involved restorative justice, diversion or other alternative justice process?

- Restorative justice
- Diversion
- Alternative justice

QUESTION 51. Describe any outcomes relating to these processes.





	INDIVIDUAL FINES	CORPORATE FINES
REGIONAL COUNCILS		
NORTHLAND REGIONAL COUNCIL	\$15,520	\$0
WAIKATO REGIONAL COUNCIL	\$157,500	\$470,000
BAY OF PLENTY REGIONAL COUNCIL	\$33,850	\$35,625
HAWKES BAY REGIONAL COUNCIL	\$0	\$184,500
TARANAKI REGIONAL COUNCIL	\$95,750	\$0
HORIZONS REGIONAL COUNCIL	\$61,400	\$26,250
GREATER WELLINGTON REGIONAL COUNCIL	\$26,000	\$21,000
ENVIRONMENT CANTERBURY	\$0	\$78,375
OTAGO REGIONAL COUNCIL	\$0	\$94,063
WEST COAST REGIONAL COUNCIL	\$0	\$0
SOUTHLAND REGIONAL COUNCIL	\$15,000	\$0
REGIONAL SUBTOTAL	\$405,020	\$909,813
UNITARY AUTHORITIES		
AUCKLAND COUNCIL	\$57,500	\$255,213
GISBORNE DISTRICT COUNCIL	\$112,000	\$253,000
NELSON CITY COUNCIL	\$0	\$0
MARLBOROUGH DISTRICT COUNCIL	\$133,575	\$23,125
TASMAN DISTRICT COUNCIL	\$0	\$33,000
UNITARY SUBTOTAL	\$303,075	\$564,338
TOTAL	\$708,095	\$1,474,151

Table 9: Prosecution outcomes: fines

QUESTION 48. What is the total amount of fines imposed by the courts as a result of RMA prosecutions concluded in this period?

- Individual fines
- Corporate fines

PROSECUTIONS INVOLVING OTHER SANCTIONS IMPOSED BY COURTS

	PRISON SENTENCE	ENFORCEMENT ORDER	REPARATION	COMMUNITY SERVICE	DISCHARGE WITHOUT CONVICTION
REGIONAL COUNCILS					
NORTHLAND REGIONAL COUNCIL					
WAIKATO REGIONAL COUNCIL		2		200 hours	
BAY OF PLENTY REGIONAL COUNCIL					
HAWKES BAY REGIONAL COUNCIL					
TARANAKI REGIONAL COUNCIL		1			
HORIZONS REGIONAL COUNCIL		2	\$12,100	80 hours	1
GREATER WELLINGTON REGIONAL COUNCIL					
ENVIRONMENT CANTERBURY		2			
OTAGO REGIONAL COUNCIL		1			
WEST COAST REGIONAL COUNCIL					
SOUTHLAND REGIONAL COUNCIL					
REGIONAL SUBTOTAL		8			1
UNITARY AUTHORITIES					
AUCKLAND COUNCIL		2	3	1	2
GISBORNE DISTRICT COUNCIL			\$130,000		
NELSON CITY COUNCIL					
MARLBOROUGH DISTRICT COUNCIL					
TASMAN DISTRICT COUNCIL					
UNITARY SUBTOTAL		2			2
TOTAL		10			3

Table 10: Prosecutions involving other sanctions imposed by courts

QUESTION 48. What other sanctions, if any, have been imposed by the courts as a result of RMA prosecutions concluded in this period?

PROSECUTIONS INVOLVING RESTORATIVE JUSTICE, DIVERSION OR OTHER ALTERNATIVE JUSTICE

	RESTORATIVE JUSTICE	DIVERSION	ALTERNATIVE JUSTICE
REGIONAL COUNCILS			
NORTHLAND REGIONAL COUNCIL			
WAIKATO REGIONAL COUNCIL	1		
BAY OF PLENTY REGIONAL COUNCIL			
HAWKES BAY REGIONAL COUNCIL		5	
TARANAKI REGIONAL COUNCIL			
HORIZONS REGIONAL COUNCIL		1	
GREATER WELLINGTON REGIONAL COUNCIL			
ENVIRONMENT CANTERBURY	1		
OTAGO REGIONAL COUNCIL			
WEST COAST REGIONAL COUNCIL			
SOUTHLAND REGIONAL COUNCIL			
REGIONAL SUBTOTAL	2	6	0
UNITARY AUTHORITIES			
AUCKLAND COUNCIL			
GISBORNE DISTRICT COUNCIL			
NELSON CITY COUNCIL			
MARLBOROUGH DISTRICT COUNCIL			
TASMAN DISTRICT COUNCIL			
UNITARY SUBTOTAL	0	0	0
TOTAL	2	6	0

Table 11: Prosecutions involving restorative justice, diversion or other alternative justice

QUESTION 50. How many prosecutions involved restorative justice, diversion or other alternative justice process?



CME REPORTING

Reporting on a council’s Code of Municipal Ethics (CME) functions involves multiple channels, with the primary method being participation in the National Monitoring System. Beyond this national system, individual councils have the autonomy to establish their reporting procedures.

Typically, councils utilize various reporting avenues, including annual reports, briefings to councillors, and presentations during council committee meetings. Moreover, enhanced transparency is achieved by extending reporting to the public. This transparency is achieved through the publication of information in the annual report and making council committee meetings accessible to the public. It’s worth noting that a majority of councils employ three or more reporting channels to ensure comprehensive coverage.

CME REPORTING CHANNELS

	ANNUAL REPORT	REPORT TO COUNCILLORS	SNAPSHOT	REPORT(S) TO COUNCIL COMMITTEE MEETINGS (OPEN TO PUBLIC)	OTHER	TOTAL REPORTING CHANNELS
REGIONAL COUNCILS						
NORTHLAND REGIONAL COUNCIL	✓	✓		✓	✓	4
WAIKATO REGIONAL COUNCIL		✓	✓			2
BAY OF PLENTY REGIONAL COUNCIL	✓	✓		✓		3
HAWKES BAY REGIONAL COUNCIL	✓	✓	✓	✓		4
TARANAKI REGIONAL COUNCIL	✓	✓		✓	✓	4
HORIZONS REGIONAL COUNCIL	✓	✓		✓		3
GREATER WELLINGTON REGIONAL COUNCIL	✓	✓				2
ENVIRONMENT CANTERBURY	✓	✓	✓	✓	✓	5
OTAGO REGIONAL COUNCIL	✓	✓		✓		3
WEST COAST REGIONAL COUNCIL		✓		✓	✓	3
SOUTHLAND REGIONAL COUNCIL	✓	✓		✓		3
UNITARY AUTHORITIES						
AUCKLAND COUNCIL				✓	✓	2
GISBORNE DISTRICT COUNCIL	✓	✓			✓	3
NELSON CITY COUNCIL	✓	✓		✓		3
MARLBOROUGH DISTRICT COUNCIL	✓	✓	✓	✓		4
TASMAN DISTRICT COUNCIL	✓		✓	✓		3

Table 12: CME reporting channels

REGIONAL SCORECARDS

PART 3

The following pages are summaries of the key data for the regional and unitary councils on an individual basis. They enable councils to quickly and easily communicate the findings of the national scale analysis as it applies to them, and to use these figures as a basis for regional scale performance improvement. All pages contain identical categories of information, all of which is based on tables found elsewhere throughout the report.

CME METRICS REPORT 2022/2023

NATIONAL SUMMARY



5,116,600
NEW ZEALAND POPULATION
ESTIMATE 2022



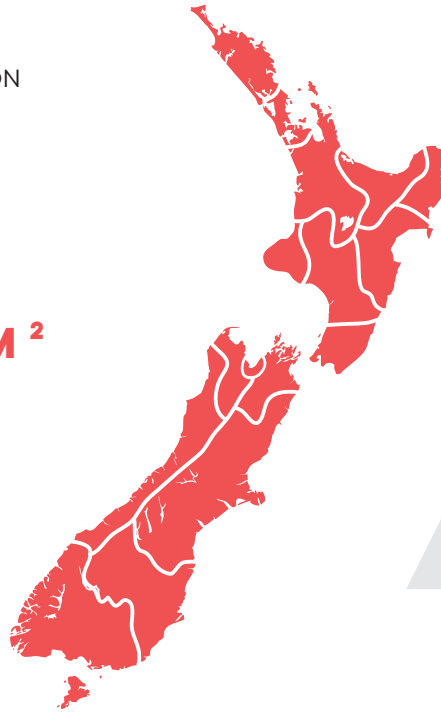
7.3%
POPULATION GROWTH
2017-2022



268,000KM²
GEOGRAPHIC
AREA



\$367,915M
GDP TO MARCH
2022



CME STAFF



FULL TIME EMPLOYEES	589
FTE/1000	0.16

CONSENTS



221,422
ADMINISTERED



57,518
REQUIRED
MONITORING



84%
CONSENTS MONITORED
OF THOSE REQUIRING IT

INCIDENTS



29,611
ENVIRONMENTAL
INCIDENTS REPORTED



98%
RESPONSE
RATE

ENFORCEMENT

414

WARNINGS
ISSUED

4,092

ABATEMENT NOTICES
ISSUED

1,742

INFRINGEMENT FINES
ISSUED

14

ENFORCEMENT ORDER
APPLICATIONS

46

PROSECUTIONS
CONCLUDED

87

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

NORTHLAND REGIONAL COUNCIL



200,100
NEW ZEALAND POPULATION
ESTIMATE 2022



11.9%
POPULATION GROWTH
2017-2022



13,778 KM²
GEOGRAPHIC
AREA



\$9,327 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **31**

FTE/1000 **0.15**

NATIONAL AVERAGE 0.16

CONSENTS



11,312
ADMINISTERED



4,275
REQUIRED
MONITORING



100%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



925
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

1

WARNINGS
ISSUED

240

ABATEMENT NOTICES
ISSUED

140

INFRINGEMENT FINES
ISSUED

1

ENFORCEMENT ORDER
APPLICATIONS

1

PROSECUTIONS
CONCLUDED

6

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

WAIKATO REGIONAL COUNCIL



511,000
NEW ZEALAND POPULATION
ESTIMATE 2022



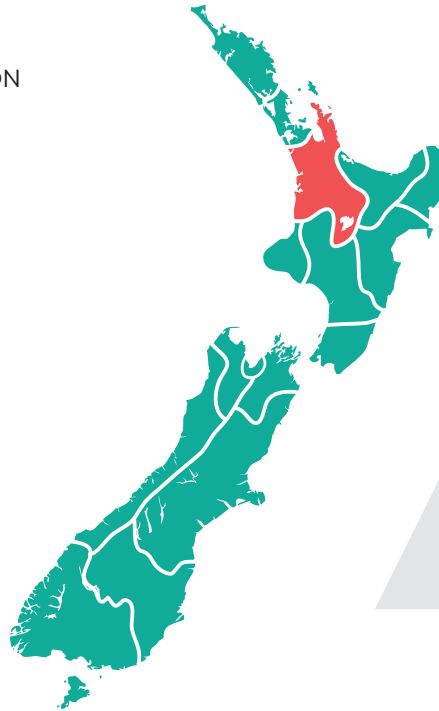
11.3%
POPULATION GROWTH
2017-2022



24,147 KM²
GEOGRAPHIC
AREA



\$32,558 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **50**
FTE/1000 **0.1**

NATIONAL AVERAGE 0.16

CONSENTS



12,742
ADMINISTERED



1,461
REQUIRED
MONITORING



100%+
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



1,574
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

170

WARNINGS
ISSUED

130

ABATEMENT NOTICES
ISSUED

21

INFRINGEMENT FINES
ISSUED

NO DATA

ENFORCEMENT ORDER
APPLICATIONS

6

PROSECUTIONS
CONCLUDED

12

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

BAY OF PLENTY REGIONAL COUNCIL



345,700
NEW ZEALAND POPULATION
ESTIMATE 2022



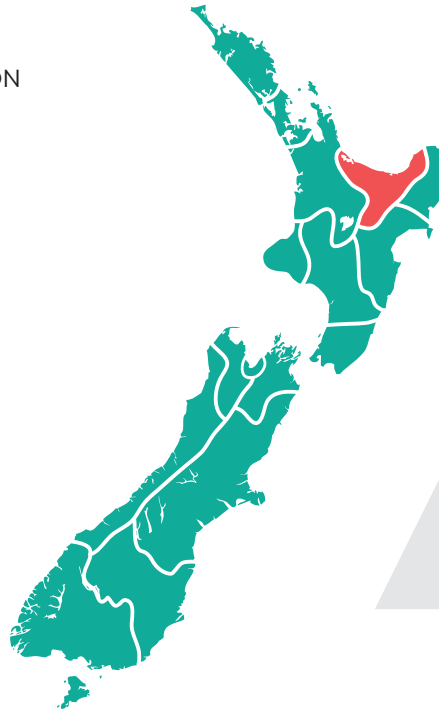
12.7%
POPULATION GROWTH
2017-2022



12,303 KM²
GEOGRAPHIC
AREA



\$21,666 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **39**
FTE/1000 **0.11**

NATIONAL AVERAGE 0.16

CONSENTS



8,442
ADMINISTERED



4,439
REQUIRED
MONITORING



83%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



2,388
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

0

WARNINGS
ISSUED

231

ABATEMENT NOTICES
ISSUED

82

INFRINGEMENT FINES
ISSUED

0

ENFORCEMENT ORDER
APPLICATIONS

3

PROSECUTIONS
CONCLUDED

9

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

HAWKES BAY REGIONAL COUNCIL



182,200
NEW ZEALAND POPULATION
ESTIMATE 2022



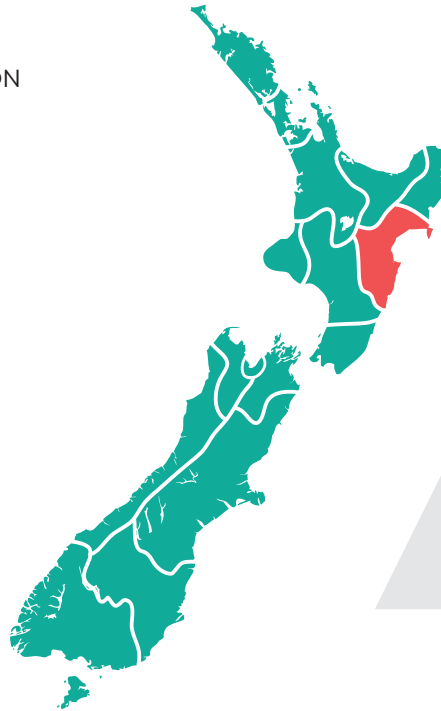
8.2%
POPULATION GROWTH
2017-2022



14,138 KM²
GEOGRAPHIC
AREA



\$10,708 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **19**
FTE/1000 **0.10**

NATIONAL AVERAGE 0.16

CONSENTS



8,673
ADMINISTERED



3,825
REQUIRED
MONITORING



81%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



737
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

29

WARNINGS
ISSUED

59

ABATEMENT NOTICES
ISSUED

45

INFRINGEMENT FINES
ISSUED

1

ENFORCEMENT ORDER
APPLICATIONS

9

PROSECUTIONS
CONCLUDED

12

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

TARANAKI REGIONAL COUNCIL



126,900
NEW ZEALAND POPULATION
ESTIMATE 2022



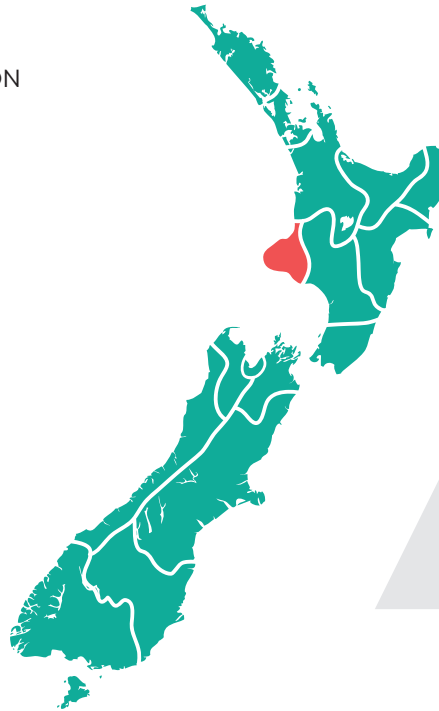
6.4%
POPULATION GROWTH
2017-2022



7,256 KM²
GEOGRAPHIC
AREA



\$9,599 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **39**
FTE/1000 **0.31**

NATIONAL AVERAGE 0.16

CONSENTS



4,313
ADMINISTERED



2,325
REQUIRED
MONITORING



100%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



448
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

0

WARNINGS
ISSUED

163

ABATEMENT NOTICES
ISSUED

99

INFRINGEMENT FINES
ISSUED

1

ENFORCEMENT ORDER
APPLICATIONS

1

PROSECUTIONS
CONCLUDED

2

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

HORIZONS REGIONAL COUNCIL



257,400
NEW ZEALAND POPULATION
ESTIMATE 2022



6%
POPULATION GROWTH
2017-2022



22,220 KM²
GEOGRAPHIC
AREA



\$14,328 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **18**
FTE/1000 **0.07**

NATIONAL AVERAGE 0.16

CONSENTS



6,500
ADMINISTERED



2,060
REQUIRED
MONITORING



100%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



1,145
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

12

WARNINGS
ISSUED

51

ABATEMENT NOTICES
ISSUED

46

INFRINGEMENT FINES
ISSUED

2

ENFORCEMENT ORDER
APPLICATIONS

3

PROSECUTIONS
CONCLUDED

5

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

GREATER WELLINGTON REGIONAL COUNCIL



543,500
NEW ZEALAND POPULATION
ESTIMATE 2022



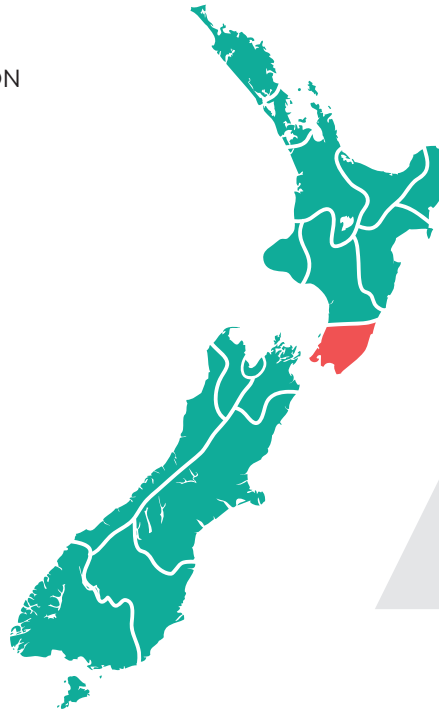
5.6%
POPULATION GROWTH
2017-2022



8,142 KM²
GEOGRAPHIC
AREA



\$44,987M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **25**
FTE/1000 **0.05**

NATIONAL AVERAGE 0.16

CONSENTS



7,567
ADMINISTERED



2,139
REQUIRED
MONITORING



82%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



1,177
ENVIRONMENTAL
INCIDENTS REPORTED



NO DATA
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

13

WARNINGS
ISSUED

37

ABATEMENT NOTICES
ISSUED

76

INFRINGEMENT FINES
ISSUED

NO DATA

ENFORCEMENT ORDER
APPLICATIONS

2

PROSECUTIONS
CONCLUDED

4

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022/2023

ENVIRONMENT CANTERBURY



653,300
NEW ZEALAND POPULATION
ESTIMATE 2022



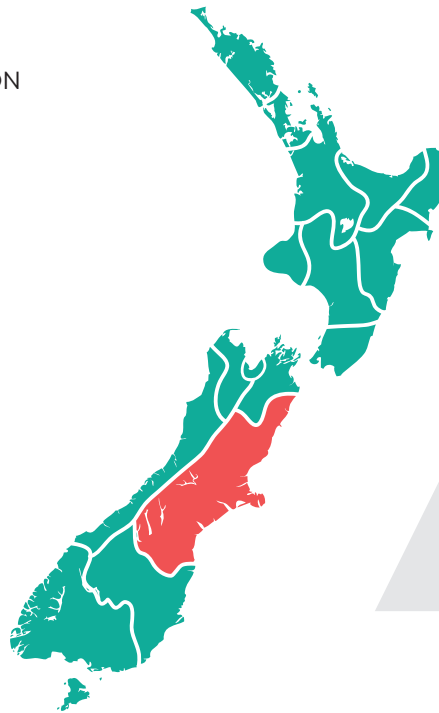
7.2%
POPULATION GROWTH
2017-2022



44,633 KM²
GEOGRAPHIC
AREA



\$44,032 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **73**
FTE/1000 **0.11**

NATIONAL AVERAGE 0.16

CONSENTS



23,522
ADMINISTERED



1,004
REQUIRED
MONITORING



73%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



3,394
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

96

WARNINGS
ISSUED

199

ABATEMENT NOTICES
ISSUED

116

INFRINGEMENT FINES
ISSUED

0

ENFORCEMENT ORDER
APPLICATIONS

2

PROSECUTIONS
CONCLUDED

5

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

OTAGO REGIONAL COUNCIL



245,300
NEW ZEALAND POPULATION
ESTIMATE 2022



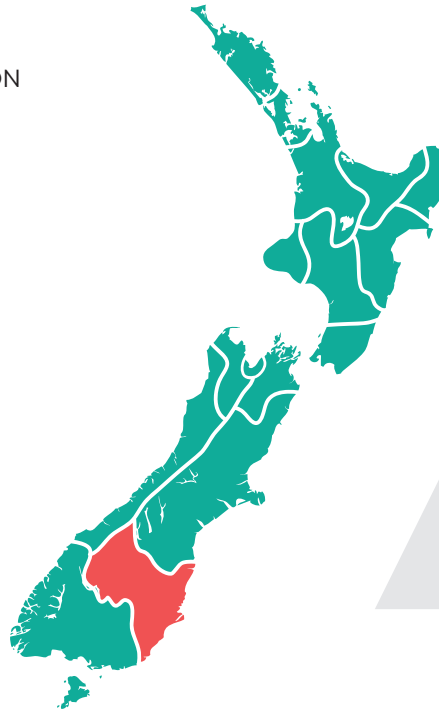
8.5%
POPULATION GROWTH
2017-2022



31,280 KM²
GEOGRAPHIC
AREA



\$15,336 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **38**

FTE/1000 **0.15**

NATIONAL AVERAGE 0.18

CONSENTS



6,731
ADMINISTERED



2,500
REQUIRED
MONITORING



100%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 82%

INCIDENTS



1,407
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

8

WARNINGS
ISSUED

55

ABATEMENT NOTICES
ISSUED

80

INFRINGEMENT FINES
ISSUED

1

ENFORCEMENT ORDER
APPLICATIONS

1

PROSECUTIONS
CONCLUDED

4

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

WEST COAST REGIONAL COUNCIL



32,800
NEW ZEALAND POPULATION
ESTIMATE 2022



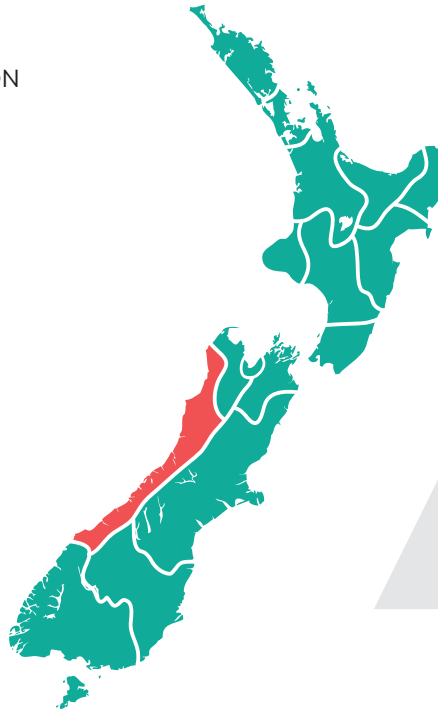
0 %
POPULATION GROWTH
2017-2022



23,277 KM²
GEOGRAPHIC
AREA



\$2,101M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **5**
FTE/1000 **0.15**

NATIONAL AVERAGE 0.16

CONSENTS



5,800
ADMINISTERED



1,268
REQUIRED
MONITORING



92 %
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



167
ENVIRONMENTAL
INCIDENTS REPORTED



100 %
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

3

WARNINGS
ISSUED

5

ABATEMENT NOTICES
ISSUED

12

INFRINGEMENT FINES
ISSUED

NO DATA

ENFORCEMENT ORDER
APPLICATIONS

0

PROSECUTIONS
CONCLUDED

0

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022/2023

SOUTHLAND REGIONAL COUNCIL



102,400
NEW ZEALAND POPULATION
ESTIMATE 2022



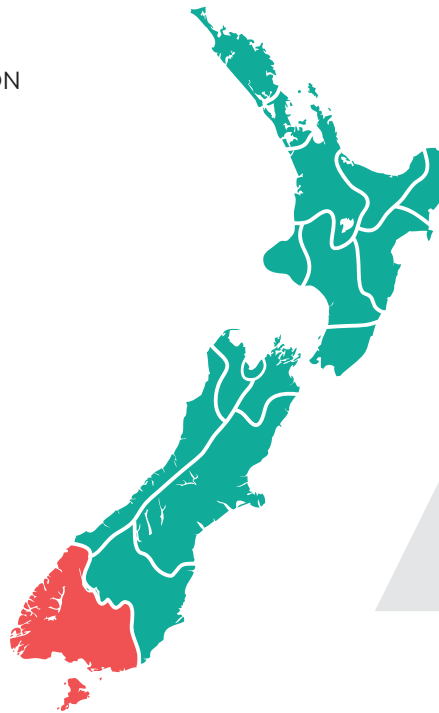
2.9%
POPULATION GROWTH
2017-2022



32,184 KM²
GEOGRAPHIC
AREA



\$7,396 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **22**

FTE/1000 **0.21**

NATIONAL AVERAGE 0.16

CONSENTS



4,966
ADMINISTERED



3,765
REQUIRED
MONITORING



79%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



719
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

39

WARNINGS
ISSUED

67

ABATEMENT NOTICES
ISSUED

28

INFRINGEMENT FINES
ISSUED

NO DATA

ENFORCEMENT ORDER
APPLICATIONS

1

PROSECUTIONS
CONCLUDED

3

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022/2023

AUCKLAND COUNCIL



1,699,200
NEW ZEALAND POPULATION
ESTIMATE 2022



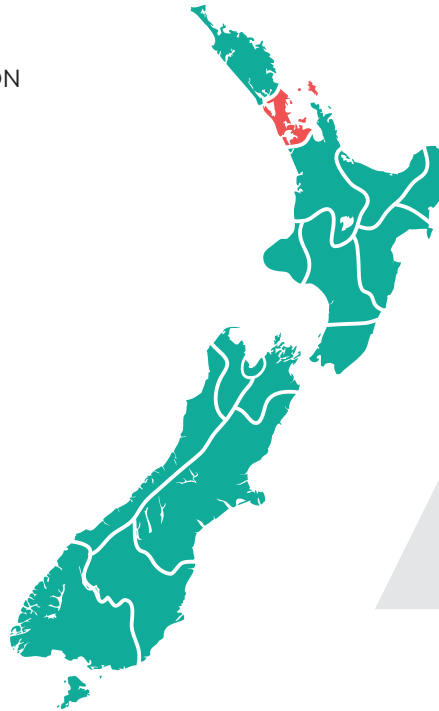
5.6%
POPULATION GROWTH
2017-2022



5,945 KM²
GEOGRAPHIC
AREA



\$136,493 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **179**
FTE/1000 **0.11**

NATIONAL AVERAGE 0.18

CONSENTS



80,483
ADMINISTERED



19,730
REQUIRED
MONITORING



45%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 82%

INCIDENTS



13,144
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

NO DATA

WARNINGS
ISSUED

2,726

ABATEMENT NOTICES
ISSUED

939

INFRINGEMENT FINES
ISSUED

6

ENFORCEMENT ORDER
APPLICATIONS

8

PROSECUTIONS
CONCLUDED

21

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

GISBORNE DISTRICT COUNCIL



51,900
NEW ZEALAND POPULATION
ESTIMATE 2022



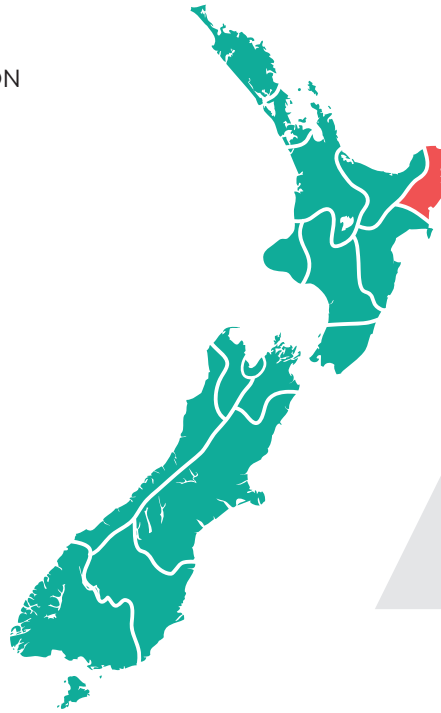
5.9%
POPULATION GROWTH
2017-2022



8,386 KM²
GEOGRAPHIC
AREA



\$2,690 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **14**
FTE/1000 **0.27**

NATIONAL AVERAGE 0.16

CONSENTS



7,914
ADMINISTERED



1,229
REQUIRED
MONITORING



67%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



330
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

20

WARNINGS
ISSUED

84

ABATEMENT NOTICES
ISSUED

9

INFRINGEMENT FINES
ISSUED

NO DATA

ENFORCEMENT ORDER
APPLICATIONS

3

PROSECUTIONS
CONCLUDED

3

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

TASMAN DISTRICT COUNCIL



58,600
NEW ZEALAND POPULATION
ESTIMATE 2022



10.6%
POPULATION GROWTH
2017-2022



9,764 KM²
GEOGRAPHIC
AREA



\$2,925 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **12**

FTE/1000 **0.20**

NATIONAL AVERAGE 0.16

CONSENTS



3,783
ADMINISTERED



3,707
REQUIRED
MONITORING



93%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



1,141
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

18

WARNINGS
ISSUED

7

ABATEMENT NOTICES
ISSUED

13

INFRINGEMENT FINES
ISSUED

1

ENFORCEMENT ORDER
APPLICATIONS

1

PROSECUTIONS
CONCLUDED

1

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022/2023

NELSON CITY COUNCIL



55,000
NEW ZEALAND POPULATION
ESTIMATE 2022



5.8%
POPULATION GROWTH
2017-2022



447KM²
GEOGRAPHIC
AREA



\$3,234M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **11**
FTE/1000 **0.2**

NATIONAL AVERAGE 0.16

CONSENTS



NO DATA
ADMINISTERED



526
REQUIRED
MONITORING



100%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



493
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

NO DATA

WARNINGS
ISSUED

21

ABATEMENT NOTICES
ISSUED

15

INFRINGEMENT FINES
ISSUED

NO DATA

ENFORCEMENT ORDER
APPLICATIONS

0

PROSECUTIONS
CONCLUDED

0

PROSECUTIONS IN
PROGRESS

CME METRICS REPORT 2022 / 2023

MARLBOROUGH DISTRICT COUNCIL



51,700
NEW ZEALAND POPULATION
ESTIMATE 2022



8.8%
POPULATION GROWTH
2017-2022



10,773 KM²
GEOGRAPHIC
AREA



\$3,466 M
GDP TO MARCH
2022



CME STAFF



FULL TIME
EMPLOYEES **14**
FTE/1000 **0.26**

NATIONAL AVERAGE 0.16

CONSENTS



28,674
ADMINISTERED



3,265
REQUIRED
MONITORING



86%
CONSENTS MONITORED
OF THOSE REQUIRING IT
NATIONAL AVERAGE 84%

INCIDENTS



422
ENVIRONMENTAL
INCIDENTS REPORTED



100%
RESPONSE RATE
NATIONAL AVERAGE 98%

ENFORCEMENT

6

WARNINGS
ISSUED

28

ABATEMENT NOTICES
ISSUED

20

INFRINGEMENT FINES
ISSUED

0

ENFORCEMENT ORDER
APPLICATIONS

5

PROSECUTIONS
CONCLUDED

0

PROSECUTIONS IN
PROGRESS



1. Which council are you completing this survey on behalf of? [Regional/ Unitary]

2. And this is for?

- Northland Regional Council
- Waikato Regional Council
- Bay of Plenty Regional Council
- Hawkes Bay Regional Council
- Taranaki Regional Council
- Horizons Regional Council
- Greater Wellington Regional Council
- Environment Canterbury
- Otago Regional Council
- West Coast Regional Council
- Southland Regional Council
- Auckland Council
- Gisborne District Council
- Nelson City Council
- Marlborough District Council
- Tasman District Council

3. What is your name and contact details?

COMMITMENTS TO IWI

4. In no more than 300 words describe your regional key commitments to work with iwi/Māori on CME. For example, joint management agreements or other co-management agreements.

Note: The report author may contact you for further information or clarification of your response.

CME OPERATIONS (MANAGING THE WORKLOAD)

5. Does your council register/count:

- an individual “incident” per notification?
- one incident per event, regardless of the number of separate complainants?

6. How many notifications (complaints) were received from members of the public (or other sources, but excluding information from council monitoring activity) relating to environmental incidents or potential breaches of environmental regulation?

This might include information from, for example, emergency services attending an incident or perhaps a council staff member observing something while on other duties, but excludes information from council monitoring activity.

- No. of individual complaints/calls?
- No. of individual incidents logged?
- Unknown

7. How many of these notifications were responded to by council?
This response may be in any form – e.g. phone call, site visit, desktop audit

8. How many of these notifications were physically attended by council staff?
If one incident had multiple visits, only count this as one.

9. How many of these notifications were confirmed as breaches of the RMA or subsidiary instruments?

10. How many of the breaches were for:
- Breach of a resource consent
 - Breach of a National Environmental Standard
 - Breach of a Permitted Activity Rule
 - Breach of a Permitted Activity Rule and/or National Environmental Standard

RESOURCE CONSENTS AND PERMITTED ACTIVITIES

11. How many individual, active resource consents exist in your region?
Exclude Land Use Consents where the activity is completed e.g. Land use subdivisions where the subdivision is complete and certificates issued or land use – building where the building has been constructed.
12. How many consents required monitoring during this period, in accordance with your monitoring prioritisation model/strategy?
13. How many of these consents were monitored (including desktop audit) in the period?

COMPLIANCE GRADINGS

From 2020/2021 onwards all councils adopted the four compliance gradings, these questions were removed.

14. What grades do you apply to non-compliance? (e.g. technical non-compliance, significant non-compliance)
- Fully Compliant
 - Technical/Low Non-Compliance
 - Moderate Non-Compliance
 - Significant Non-Compliance
 - Other (please specify)



15. What were the levels of compliance with consents according to the grades you use?

Note 1: Numbers provided under each grade is per monitoring event not per consent. E.g. a consent may be monitored 4 times in the year; on one occasion it may be Technically Non-Compliance and on three occasions it may be Fully Compliant, this would add 3 to the total of Fully Compliant and one to the total for Technical Non-compliance.

Note 2: The compliance grade is based on the condition with the worst compliance grade e.g. a consent with five conditions Fully Compliant and one condition Moderate Non-Compliance has an overall compliance grade of Minor Non-Compliance.

Note 3: Daily telemetry water readings where compliance with water take limits is continuously monitored are to be excluded from compliance grade totals.

- Fully Compliant
- Technical/Low Non-Compliance
- Moderate Non-Compliance
- Significant Non-Compliance
- Other (please specify)

MONITORING PERMITTED ACTIVITIES

16. Which permitted activities do you have a monitoring programme for?

- Agriculture (excluding dairy)
- Aquaculture
- Construction
- Culvert installation
- Dairy
- Forestry
- Horticulture
- Industrial Stormwater
- Mining
- Oil and gas
- Stock exclusion
- Tourism
- Vineyards
- Wineries
- Wintering
- Other (please specify)
- We don't have a monitoring programme for any permitted activities

17. What was the number sites visited?

Count each site once even if it had multiple visits

18. What is the criteria used to determine frequency of monitoring or if site visit made?

19. Please select any of the following that apply to the permitted activities

- Monitored under regional PA rule
- Monitored under NES (or other regulation)
- Requiring Notification

20. What is the type of monitoring done?

21. What is the frequency of monitoring done?

MAKING DECISIONS ON PRIORITIES

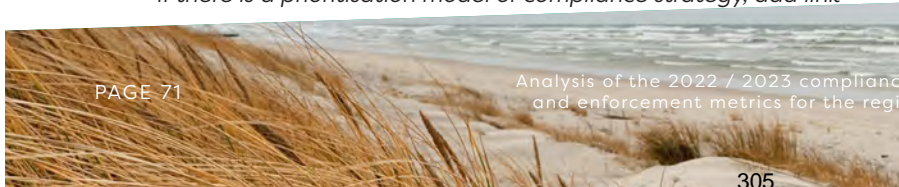
22. What basis is used for determining what notifications/complaints/incidents are physically attended and with what urgency or priority?

23. Describe how you determine which consents are monitored and how frequently?

If there is a prioritisation model or compliance strategy, add link

24. Describe the basis, which was used for determining what, if any, permitted activities were monitored.

If there is a prioritisation model or compliance strategy, add link



STAFFING LEVELS

25. How many FTEs does your council have who carry out monitoring roles?
Include contractors.
26. How many FTEs does your council have who carry out environmental incident or pollution response roles?
Include contractors.
27. How many FTEs does your council have who carry out investigation or enforcement roles?
28. How many FTEs does your council have who carry out a combination of the above roles?
Note 1: Include contractors
Note 2: Only answer this question if you have not included these staff in questions 21, 22 or 23
29. How many FTEs does your council have in CME support roles?
This includes administrative roles, e.g. staff who assist with issue of notices, reminder notices, upload of unpaid infringements to MoJ.
30. Across this area of council work (CME) on average for the year, how many vacancies have been carried?
Number of vacancies during the year/ Average length of vacancies
31. What have been the most significant factors influencing retention and recruitment of CME staff?
32. At the time of answering this question what is your staff's CME experience at council?
Less than 2 years. Number of staff
2-10 years. Number of staff
Greater than 10 years. Number of staff

CME POLICIES AND PROCEDURES

From 2020/2021 onwards all councils had an enforcement and conflict of interest policy, these questions were removed.

33. Who is involved in your process for making decisions about whether to proceed with enforcement action?
- Formal warning
 - Abatement notice
 - Infringement notice
 - Prosecution
- An individual officer can decide*
Officer plus a manager
Panel decision
34. Who are the panel members?
- Formal warning
 - Abatement notice
 - Infringement notice
 - Prosecution

Investigating officer
Investigating officer's manager/Team Leader
Enforcement Specialist
Compliance Monitoring Manager
Group Manager/General Manager/Director
Chief Executive
Legal Counsel (internal)
Legal Counsel (external)
Other (please specify):

35. Is there any other relevant information or comments?

36. What is your process for making decisions to take no formal enforcement action when a breach has been identified?

37. Who makes the decision to take no formal enforcement action when a breach has been identified?

- Individual officer
- Officer plus manager
- Panel manager
- Other

38. Who has the delegation to authorise filing of charges for a prosecution at your council?

ACTING ON NON-COMPLIANCE

39. What was the total number of actions taken during the period for:

Note: This relates to the instruments issued in relation to the different sections of the Act (listed once for brevity)

- Formal warnings issued
- Abatement notices issued
- Infringement notices issued
- Enforcement orders applied for

Section 9 Use of land

Section 12 Coastal marine area

Section 13 Beds of lakes and rivers

Section 14 Water

Section 15 Discharges of contaminants

Section 17 Duty to avoid, remedy & mitigate

Other breach e.g. Section 22

40. How many notices were issued for non-compliance with a resource consent?

- Abatement notices
- Infringement notices

41. How many notices were issued for a breach of a rule and/or NES?

- Abatement notices
- Infringement notices

PROSECUTION

42. How many RMA prosecutions were:

Note: For this question please consider an entire case (regardless of number of charges and defendants) as one prosecution.

- Concluded in the period
- Still in progress in the period

43. What is the total number of individual (person) defendants convicted as a result of RMA prosecutions concluded in this period?

44. For all of these (person) defendants what is the total number of convictions entered against them?

For example, there may be a total of 27 separate convictions entered against a total of nine 'individual' defendants.

PROSECUTION

45. What is the total number of corporate (e.g. Crown, company, body corporate etc) defendants convicted as a result of RMA prosecutions concluded in this period?

46. For all of these (corporate) defendants what is the total number of convictions entered against them?
For example, there may be a total of 30 separate convictions entered against a total of 12 corporate defendants.

47. Total number of convictions against: [see categories for sections of the Act as above]

- *an individual*
- *a corporate entity*

Total fine potential (Individual total x \$300,000, corporate entity total x \$600,000)

48. What is the total amount of fines imposed by the courts as a result of RMA prosecutions concluded in this period?

- *Individual fines*
- *Corporate fines*

49. What other sanctions, if any, have been imposed by the courts as a result of RMA prosecutions concluded in this period?

- *Prison sentence*
- *Enforcement order*
- *Reparation*
- *Community Service*
- *Discharge without conviction*
- *Other*

50. How many prosecutions involved restorative justice, diversion or other alternative justice process?

- *Restorative justice*
- *Diversion*
- *Alternative justice*

51. Describe any outcomes relating to these processes.

52. Of the prosecutions concluded, and currently in progress, what was the principal industry or activity involved?

- *Concluded*
- *In progress*

- Water take/abstraction
- Objectionable odour
- Burning
- Wastewater
- Animal effluent
- Industrial discharge
- Forestry
- Wetland clearance/activity
- Works in the bed of river
- Earthworks (sediment discharge)

53. Are there any other principle industries involved in concluded prosecutions?



EDUCATING AND ENGAGING WITH THE REGULATED COMMUNITY

54. Does your council have, or support, any education or engagement projects relating to compliance with the RMA or any of its derivative regulation? For example, workshops for earthworks contractors around erosion and sediment controls. Yes/No

If yes, briefly describe

CME REPORTING

55. What mechanisms does your council use to report CME data to the public? e.g. annual reports, reports to councillors

- *Annual Report*
- *Report to Councillors*
- *Snapshot*
- *Report(s) to Council committee meetings (open to public)*
- *Other (please specify)*

LONG FORM RESPONSES

(QUESTION 3)

APPENDIX 2

NORTHLAND REGIONAL COUNCIL

NRC has a range of initiatives to work in partnership with Māori. A key one is the Te Tai Tokerau Māori & Council Working Party (TTMAC), which is an advisory committee established in 2014. This group meets monthly. Four members of TTMAC sit on the Natural Resources Working Party (which has as one of their purposes to 'provide oversight on council's resource management planning and regulatory activities'. Council has signed with two hapu Mana Whakahono a Rohe. There is an agreed process for hapu signatories to meet with the Northland Regional Council to discuss opportunities for hapu to be involved in council CME activities. Council is currently participating in an independent review of consenting and compliance activities from the perspective of tangata whenua.

WAIKATO REGIONAL COUNCIL

WRC has operative Joint Management Agreements (JMAs) with five 'River' Iwi – Waikato, Raukawa, Te Arawa, Ngāti Maniapoto and Ngāti Tūwharetoa – as required by legislation. A key purpose of JMAs is to provide a framework for Iwi and the Council to discuss and agree processes for enabling co-management of planning, regulatory and other functions within the relevant Iwi's geographic area of interest. For all currently operative JMAs, this includes RMA compliance, monitoring and enforcement (CME) functions of Council. Whilst each of the JMAs was individually negotiated, there are common themes across all in relation to CME. The key commitments relating to CME within the JMAs generally include biannual operational meetings to discuss monitoring priorities, extent and methods; the potential for Iwi involvement in monitoring and enforcement processes; responses to non-compliance; consent review opportunities; the effectiveness of conditions and the effectiveness of compliance policies and procedures generally. The JMAs require various CME-related information to be provided, at different times – for example, summary updates of enforcement actions (prosecutions, enforcement orders, abatement notices and infringement notices) undertaken by the Council under the RMA for the JMA area. Agreed outcomes and actions from biannual operational meetings will, where appropriate, be reported up to the corresponding co-governance committees. The JMAs have facilitated closer personal and working relationship with Iwi which itself has engendered more effective engagement, co-operation and flow of information in both directions. As a result of JMA discussions with Tūwharetoa Māori Trust Board council has transferred some monitoring functions to them. We also have specific obligations to Te Kotahitanga o Tūwharetoa as a result of their comprehensive settlement in 2018. WRC have general obligations to all Iwi including Hauraki pending treaty settlement and once finalised will result in specific obligations.

BAY OF PLENTY REGIONAL COUNCIL

Partnership with Māori is one of the priorities for Toi Moana. We have a large number of Iwi and hapū in the Bay of Plenty with a varied degree of capacity. Through partnership agreements and co-governance forums we will build capacity to grow Māori partnerships. CME information is reported to co-governance groups including the Rangitaiki River Authority and Te Maru o Kaituna. For significant incidents Tangata Whenua are notified early of incidents and advice is sought where significant clean up is required. We have been rolling out a programme with Marae to support upgrading of OSET systems that are fit for purpose. This includes providing technical advice, support and funding. Cultural effects are sought and fed into enforcement decisions. We are also exploring opportunities to engage tangata whenua in monitoring work.

HAWKES BAY REGIONAL COUNCIL

Hawke's Bay Regional Council has a Māori Partnership Group who advises and offers strategic support and leadership to all staff in order to enable effective partnerships, engagement, and meaningful participation with tangata whenua. Council also has the Māori Committee, which includes both elected councillors and 12 representatives nominated by each of the four Ngāti Kahungunu Taiwhenua and Executive in our region. Additionally, there is the Regional Planning Committee, a co-governance group with an equal number of councillors and Post Settlement Governance Entity representatives. This committee works closely together to ensure the effective implementation of plans, processes, monitoring and enforcement. In conjunction with both Committees and Māori Partnerships, Council continue to work closely with Iwi on significant incidents, investigations, and prosecutions and regularly obtains cultural impact statements from Iwi for most prosecutions.

TARANAKI REGIONAL COUNCIL

The Council has 3 Iwi appointed representatives on each of its Operations and Regulatory and Policy and Planning Committees. This provides for CME input at this level. In addition the Council engages directly with Iwi over major pollution events and prosecutions, (obtains victim impact statements).

HORIZONS REGIONAL COUNCIL

No formal agreements are in place at this stage with Iwi around CME; however, in the event of a major incident or comprehensive investigation, the relevant Iwi are notified. In relation to comprehensive investigations Council endeavours to obtain cultural impact statements from Iwi that are then put before the court as part of the sentencing process.

GREATER WELLINGTON REGIONAL COUNCIL

The Council has no formal CME agreements with Iwi. The Natural Resource Plan for the Wellington Region lays out the collaborative work and strategy for involving Iwi. Part of that collaborative work is the ongoing establishment of Whaitua's to engage Iwi and communities in a catchment focused approach to management of the environment. This intrinsically includes a CME element.

Attachment 1 to Report 23.609

ENVIRONMENT CANTERBURY

While we do not currently have any CME joint management arrangements in place, there is an aspiration to do so in the future. In the meantime, we alert some of the rūnanga to incidents as they occur, to enable them to indicate those that they want to advise on. In some cases we fund a short Rūnanga impact statement to help inform internal decision making. In most prosecution proceedings, we work closely with the affected Rūnanga for more detailed impact statements. During 2022-23 we have continued to work closely with one rūnanga to design processes to resolve fish screen compliance issues, which have significant negative impacts on native fish. In 2022-23 plans to deliver on greater rūnanga involvement in our CME functions were not significantly advanced due to other organisational priorities.

OTAGO REGIONAL COUNCIL

No formal CME agreements at this stage with iwi. However, in the event of a major incident or comprehensive investigation iwi are advised. We have used iwi for cultural impact assessment reports on prosecution cases. We also notify Aukaha of any incidents involving waterways. ORC is working with Aukaha and Te Aō Marama Incorporated to improve engagement and involvement in CME activities, including notification of relevant pollution incidents and monthly hui to discuss cases and provide progress updates. Valuable input supported the recent review of the ORC Compliance Plan which sets CME priorities in the Otago region.

WEST COAST REGIONAL COUNCIL

The West Coast Regional Council and Poutini Ngai Tahu have signed a Mana Whakahono a Rohe - Iwi Participation Arrangement. The arrangement formally acknowledges the partnership and relationship between Council and Ngai Tahu. The document can be found on Councils web site under Strategies - publications. Te Runanga Ngati Waewae and Te Runanga Makaawhio have representation on Council and in decision making on relevant Council committees such as the Resource management Committee.

SOUTHLAND REGIONAL COUNCIL

Ngāi Tahu ki Murihiku (tangata whenua) have a particular interest in the work of Environment Southland. And mutually, the council has responsibilities towards Māori and Māori cultural and spiritual values. The approach we have in Southland today is unique in the South Island. Its aim is to ensure Māori values are reflected in the council's decision-making, so that Southland's mauri is protected for now and generations to come. Te Aō Marama Incorporated (the environmental arm of Ngāi Tahu ki Murihiku) was one of the key facilitators when the relationship between the council and iwi began in the early 90s. Te Aō Marama was delegated the responsibility of dealing with councils on environmental matters, on behalf of the four papatipu rūnanga who hold mana whenua over all ancestral lands in Murihiku – Awarua, Hokonui, Ōraka Aparima and Waihōpai. For 25 years the relationship with Environment Southland continues to grow, with various protocols being developed to ensure smooth and efficient processes for plan development and consents management, a jointly funded iwi policy advisor position, an iwi management plan Te Tangi a Tauira, and a partnership to improve Southland's water and land through the People Water and Land programme – Te Mana o te Tangata, te Wai, te Whenua. The most recent milestone in the council's relationship with iwi is the inclusion of mana whenua positions on two of Environment Southland's committees. Environment Southland, refers to the iwi relationship as te kōura tuia – the 'golden thread' that we weave through all our work. It's just part of how we operate. There is a commitment to the responsibility of improving Southland's local government understanding of all things Māori.

AUCKLAND COUNCIL

Regular contact with 19 Mana whenua groups through Kaitiaki forum (hosted by AC). Work specifically on CME includes assistance with impact statements in enforcement proceedings and remediation.

GISBORNE DISTRICT COUNCIL

Council is committed to providing for the rights of Māori in decision-making processes and allowing the roles as tino-rangitiratanga and kaitiaki to be exercised. Whilst there are no specific CME agreements GDC has several relationship and management agreements with Māori stakeholder groups (iwi/hapu, land trusts and others). These include memorandums of understanding, joint management agreements, co-management and co-governance arrangements and joint protocols for a particular site or process. Internally GDC has developed a resource for staff (Te Matapihi) to develop confidence when engaging with Maori. This resource provides an interactive map of iwi/hapu groups that identifies areas of interest for hapu/iwi groups in the region and lists all engagements/projects with mana whenua to reduce duplicity of contact.

NELSON CITY COUNCIL

No formal agreements are in place. Iwi are involved in revising plan provisions and council facilitates having an iwi monitor on site alongside council's monitoring officer when requested. All iwi are sent a weekly resource consent new applications summary. Council is also supporting iwi to build capacity in state of the environment monitoring and to establish cultural health monitoring practices.

MARLBOROUGH DISTRICT COUNCIL

Iwi and hapū as kaitiaki are considered in the implementation of Marlborough's CME activities, including notifications, cultural impact and priorities. This includes the provision of cultural impacts statements, and victim impact statements for sentencing. MDC is working on identifying opportunities to work together in delivery of CME and build relationships between MDC and tangata whenua.

TASMAN DISTRICT COUNCIL

No formal procedures have been established however, work is being done at present to identifying resource management issues for Iwi, harness their knowledge, and incorporate this into our monitoring and enforcement strategies.

Environment Committee
23 November 2023
Report 23.592



For Information

GREATER WELLINGTON'S MANAGEMENT OF FORESTRY SLASH

Te take mō te pūrongo

Purpose

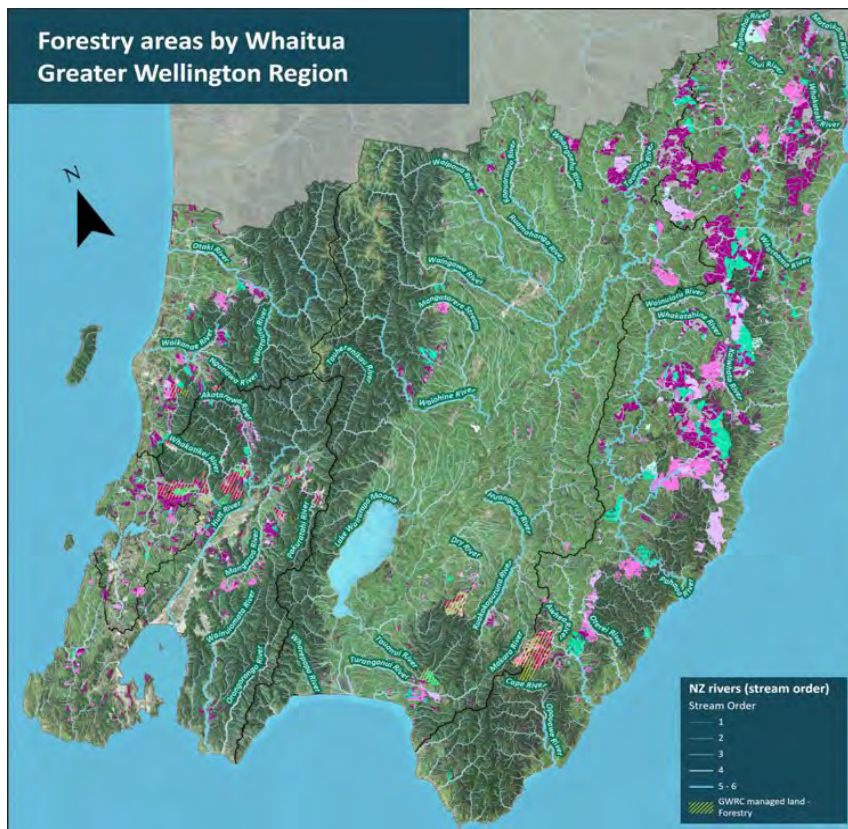
1. To provide an overview of forestry slash in the Greater Wellington Region and our role as the regulator of this activity.
2. This paper briefly covers the current state of forestry within the region, the relevant legislation for forestry, our compliance approach to date, updates to the National Environmental Standards for Commercial (changed recently from Plantation) Forestry, and our compliance approach going forward.

Te tāhū kōrero

Background

3. The Wairarapa Coastal Whaitua has the largest concentration of plantation forests within the region with 19.34% of the land in plantation forestry. This is followed by Te Awarua-o-Porirua Whaitua (13.47%), Te Whanganui-a-Tara Whaitua (7.9%), Kapiti Whaitua (6.61%), and Ruamahanga Whaitua (4.47%). The majority of the plantation forests are located on classes 6 and 7 Land Use Capability (soils prone to erosion).
4. Figure 1 shows where forestry is located within the region.

Figure 1: Forestry within the Greater Wellington region



5. *Slash* is defined as any waste from trees left behind after plantation forestry activities are undertaken; while it can include tree waste generated during land preparation, pruning and thinning and road building activities, the majority of slash is generated during large scale harvesting activities.
6. While slash can return nutrients to the ground and provide cover from surface erosion, problems can occur when there is too much slash or if slash is left in the wrong place. On steeper slopes, it can mobilise and create significant problems, for example, debris flows damaging waterways, roads and bridges, as we have seen widely in Tairāwhiti-Gisborne and Wairoa.
7. There is a 'window of vulnerability' of approximately 8 years – after a clear-fell harvest and before new trees take hold – within the vulnerable period, soil is not as stable. While roots of harvested trees provide some erosion protection, there is no canopy cover. A weather event during the 'window of vulnerability' presents a high risk of mobilising slash/woody debris.
8. It is not all slash from forestry that contributes to flooding - woody debris that gets washed down through flooding comes from crack willow, native forests, riparian margins as well as forestry sites.

Te tātaritanga Analysis

Recent flooding events and slash

9. After recent flooding events, studies were undertaken in Hawkes Bay and Tairāwhiti-Gisborne analysing the makeup of the woody flood debris that had made its way into rivers and onto beaches. The Hawkes Bay data provided a comparison of the makeup of slash after Cyclone Gabrielle to that of Cyclone Cook in 2017 and a Queens Birthday storm in 2018, both of which were in Gisborne. The large woody debris found in Tairāwhiti-Gisborne in 2017 and 2018 comprised an average of 76% pine, including 19% cut pine, which is pine with machine marks on it that is directly attributable to a forestry harvest operation. Comparing this with Hawkes Bay, 56% of the large woody debris was found to be pine and only 3% was found to be cut pine.
10. While Greater Wellington has not undertaken our own studies into the woody debris seen after Cyclone Hale and Gabrielle, the indications are that the makeup of that woody debris consisted of a wide variety of species including crack willow, native vegetation, and exotic vegetation both forestry related and non-forestry, similar to what was found in the Hawkes Bay.

Regulatory setting 2018-2023 – National Environmental Standards – Plantation Forestry (NES-PF)

11. The NES-PF were regulations created under the Resource Management Act 1991 (RMA) that provided a nationally consistent set of standards to manage the environmental effects of plantation forestry activities. A NES prevails over district or regional plan rules, except where it specifically allows more stringent plan rules. The NES-PF was generally more stringent than any rule in the NRP, with the exception of some minor rules around river crossings.
12. The NES-PF regulated eight core plantation forestry activities, including harvesting operations and slash management. The permitted activity condition specifying the requirements for slash is provided in section 69 of the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 – Permitted activity conditions: slash and debris management.
 - (1) *“Slash from harvesting must be placed onto stable ground.*
 - (2) *Slash from harvesting that is on the edge of landing sites must be managed to avoid the collapse of slash piles.*
 - (3) *Slash from harvesting must not be deposited into a water body or onto the land that would be covered by water during a 5% AEP event.*
 - (4) *If subclause (3) is not complied with, slash from harvesting must be removed from a water body and the land that would be covered by water during a 5% AEP flood event, unless to do so would be unsafe, to avoid–*
 - (a) *Blocking or damming of a water body;*
 - (b) *Eroding river banks*

- (c) *significant adverse effects on aquatic life;*
- (d) *damaging downstream infrastructure, property, or receiving environments, including the coastal environment.”*

13. If compliance with this condition could not be achieved, a resource consent was required.

Regulatory setting 2023 onwards – National Environmental Standards – Commercial Forestry (NES-CF)

14. The NES-PF was replaced on 3 November 2023 and incorporated changes recommended from the Year one Review of the NES-PF which was released in April 2021, along with feedback from public consultation and the Ministerial Inquiry on Land Use.

15. The NES-PF only managed forests planted for harvest. Since the NES-PF regulations were introduced in 2018, there has been an increase in continuous cover exotic species forestry (exotic carbon forests) which have not been subject to the same regulations as plantation forests.

16. The NES-CF regulations now apply to both plantation forestry and exotic continuous-cover forests (exotic carbon forests) that are deliberately established for commercial purposes. The NES-CF regulates the same 8 core forestry activities, including slash management.

17. The change in the permitted activity conditions specifying the requirements for slash is stated in section 36 of the Resource Management (National Environmental Standards for Commercial Forestry) Amendment Regulations 2023 – Regulation 69 amended (Permitted activity conditions: slash and debris management)

(1) *“In regulation 69(1), after “harvesting”, insert “that is produced at or on a landing”.*

(2) *Replace regulation 69(2) with:*

(2) *Slash from harvesting that is at or on a landing must be managed to avoid the collapse of–*

(a) *A slash pile; or*

(b) *the ground under a slash pile.*

(3) *After regulation 69(4), insert:*

(5) *On orange zone and red zone land (as described in regulation 63(2)(b)), slash from harvesting that is sound wood must be removed from the cutover, unless it is unsafe to do so, if it has–*

(a) *A length of over 2 m; and*

(b) *a large-end diameter of over 10 cm.*

(6) *However, a residual slash may be left on the cutover.*

(7) *In this regulation, –*

***residual slash** means a quantity of the slash required to be removed under subclause (5) not exceeding 15 m³ per hectare of the cutover*

***sound wood** means wood that can be safely lifted using harvesting equipment and transferred to a landing without degrading or breaking up."*

18. The key change in this condition is for forestry operators on orange and red zone land (land that is the most at risk of erosion). Operators on such land now have to remove slash that is over 2 metres in length and has a large end diameter of over 10 centimetres from land that has been completely harvested ("the cutover"), unless it is unsafe to do so.

NRP Plan Change 1

19. Plan Change 1 (PC1) applies to Whaitua Te Whanganui-a-Tara and Te Awarua-o-Porirua Whaitua only. PC1 was notified on 30 October 2023 and gives effect to whaitua and iwi implementation plans and the requirements of NPS-FM to set water quality objectives, targets and limits including for sediment in rivers, estuaries and harbours.
20. To give effect to these implementation plans and contribute to meeting water quality and ecosystem objectives required by NPS-FM, PC1 has proposed rules that will be more stringent than the NES-CF Regulations that manage forestry activities which disturb land and generate sediment and can allow replanting or afforestation on highest erosion risk land.
21. The PC1 proposed rules will require resource consent for forestry activities and afforestation, replanting, earthworks or mechanical land preparation will be prohibited on the highest risk erosion land beyond the current forest rotation.

Greater Wellington's compliance program and approach timeline

22. In 2015 forestry compliance was given a "medium" risk rating for our strategic compliance program. This was based on our experiences with this activity at the time and considered both the environmental impact and community concern.
23. Our compliance programs was, and still is, set up so that more resources and priority is given to "high risk" activities. For context, in 2015 our high risk activities included wastewater treatment plants, water takes, earthwork sites and the discharge of animal effluent. Forestry was rated as a "medium" risk activity until 2022.
24. When the NES-PF was introduced in 2018, given the limited resources and expertise we had at the time, we focussed heavily on educating and engaging our foresters on the new regulations. We did this by hosting events and regular meetings to discuss the details of NES-PF and how we would implement it. This approach worked really well, with all of the companies that manage our biggest forests attending and engaging.
25. Since 2015 there have been approximately 200 consented forestry sites active within the region. The vast majority of these were/are located in the eastern hills of the Wairarapa.
26. There have been an additional 400 (approximately) forestry sites operating under the permitted activity status that were active in the region during that time (on top of the consented sites). The vast majority of these were/are active in the eastern hills of the

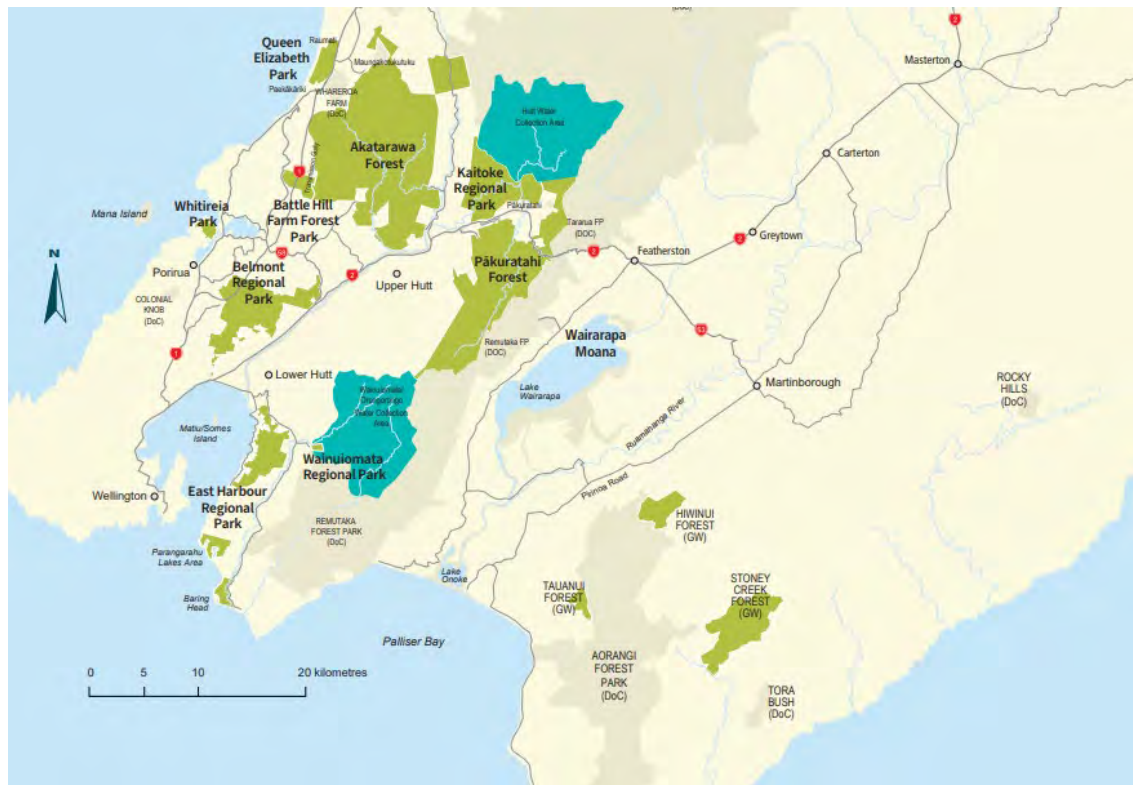
Wairarapa, however there are numerous permitted activity sites in the Te Whanganui a Tara, Kapiti Coast and Porirua catchments as well.

27. Consented forestry sites are given a risk rating themselves based on the environment they are working in, the attitude of the operators and compliance history. In the past all high and medium risk sites (does not meet at least one of the above criteria) were inspected once per year and low risk sites (meets all the above criteria) were inspected once every two years.
28. Permitted activity sites from 2018 - 2021 were rarely proactively inspected. We generally only undertook an inspection if we received a notification from members of the public about non-compliant works.
29. In 2021 we were successful in getting six new regulation focused roles through the Long Term Plan process to go towards our whole compliance program. Three of these staff began in 2021 and we were able to increase our compliance in the forestry space, among other areas. The focus was on attending more permitted activity sites, as this was where we were seeing more regular non-compliance. Proactive visits to high risk permitted activity sites have been undertaken over the past 18 months.
30. In 2022 we undertook a review of our whole compliance program, considering the activities scale of effects, environmental performance, policy direction, as well as community concern. Forestry was rated amongst the highest risk of all the activities we monitor, behind only wastewater treatment plants and landfills.

Greater Wellington owned forests and compliance

31. Greater Wellington as a land owner through the Parks team manages the land and relationship with the forestry cutting rights holder (China Forestry Group) and their forest managers (Forest 360) in:
 - a Two forests in the Upper Hutt Territorial Authority (Akatarawa and Pakuratahi – with minor forestry present in Kaitoke Regional park)
 - b Three forests in the South Wairarapa District (Tauanui, Hiwinui and Stoney Creek/Rough Hill)

Figure 2: Forestry sites on Regional Council land



32. The Eastern parks team work closely with the environmental regulation team to assure compliance with the new regulations on Greater Wellington land. Upon the commencement of any new harvest sites, the Eastern parks team (in partnership with environment regulation) does assurance to ensure that the cutting rights holder is compliant with regulations.

Enforcement action

33. While we have taken enforcement action on forestry companies within the last five years, it has been related to works within waterways. We have not found any incidents of excessive slash mobilising and entering waterways in the past five years and have therefore not taken any enforcement action on companies in relation to this.
34. Generally if we see slash that appears unstable on a cutover or at a processing site, we can point this out and forestry operators comply and move the slash to a more stable location.

Difficulties with undertaking compliance on slash

35. There have been difficulties when undertaking forestry compliance. Turnover within the regulation department has been relatively high and we are not trained forestry experts, therefore it takes time to build the competence and confidence to question the forestry practices of trained professionals.
36. The regulations have been and still are hard to enforce. We receive some pushback around the wording “unless it is unsafe to do so” when asking to move slash. This

essentially means that if forestry companies deem it unsafe to remove slash or place it somewhere stable, it is difficult to enforce them to do so.

37. There is always a balance between freshwater ecology and the risk to downstream infrastructure when considering slash in waterways as well. A small amount of slash left in situ can benefit freshwater ecology and in some circumstances the work required to remove slash can do more harm than good to waterways. This is frequently a matter of discussion with our forestry operators.

**Ngā Take e hāngai ana te iwi Māori
Implications for Māori**

The regulatory system on forestry aligns with Te Mana o te Wai.

38. We are working alongside Te Hunga Whiriwhiri to explore opportunities to engage with our mana whenua partners to co-design our entire compliance program, including how we undertake compliance on forestry and slash.
39. The Wairarapa Coast Whaitua process will establish what the environmental outcomes and water quality targets should be for all waterbodies, that reflect Wairarapa Coast community and mana whenua values. Given most of the forestry within the Greater Wellington Region is located within this Whaitua, this will be an opportunity for iwi to consider appropriate land uses in the catchment and how we are going to achieve suggested targets within a Whaitua Implementation Plan.

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

40. The inclusion of exotic based forests in the NES-CF will allow us to undertake compliance inspections on these sites to ensure setbacks to waterways are being complied with. While these forests are not planned to be harvested and therefore will not contribute to the cut pine portion of slash, pine plantations in general can contribute to large woody debris entering waterways if they are not complying with the setback to waterways conditions in the NES-CF. Therefore, being able to regulate these forests will give better oversight in our region going forward.

**Ngā kaiwaitohu
Signatories**

Writers	Will Syben – Team Leader, Environment Regulation Scott Ihaka – Team Leader, Planting Operations
Approvers	Shaun Andrewartha – Manager, Environment Regulation Fathima Iftikar – Director Strategy, Policy and Regulation Lian Butcher – Group Manager, Environment

<p>He whakarāpopoto i ngā huritaonga Summary of considerations</p>
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>This report supports the Environment Committee purpose to oversee the development, implementation, and review of Council's Environmental strategies, policies, plans, programmes, and initiatives to address environmental issues in the region (including issues relating to water and biodiversity) and regulatory systems, processes, and tools to meet Council's related legislative responsibilities.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>Regulating the forestry industry and slash in particular across the region contributes to the Long Term Plan overarching strategic priority to align with government direction. It will also contribute to achieving the following environment strategic priorities: (1) protect and restore freshwater quality and bluebelt, and (2) protect and restore indigenous biodiversity and ecosystem health.</p>
<p><i>Internal consultation</i></p> <p>Internal consultation involved Environment Regulation and Delivery teams.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>There is a risk that a high rainfall event could hit our region and mobilise slash into waterways, causing widespread damage to the environment and local infrastructure. Through Greater Wellington's compliance program we can support and regulate the forestry to ensure good management practices are implemented and compliance with local and national regulations as well as resource consents.</p>



Environment Committee
23 November 2023
Report 23.594

For Information

REGULATION OF WASTEWATER TREATMENT PLANTS

Te take mō te pūrongo

Purpose

1. To provide the Environment Committee an update on Greater Wellington Regional Council's role as regulator of wastewater treatment plants in the region.

Te tāhū kōrero

Context

2. This paper briefly describes the actors involved in the management of wastewater treatment plants (WWTP) in the Wellington Region, then focusses on Greater Wellington Regional Council's (GW) role in consenting, compliance, and enforcement. The recent re-consenting of the Porirua wastewater treatment plant is used as an example.
3. **Attachment 1** shows the current compliance status of wastewater treatment plants in the region and provides notes on those that are nearing expiry or have applied for new consents.

Wellington authority roles in wastewater treatment plant management

District Councils

4. District Councils own the WWTPs - as well as the wastewater and stormwater networks.
5. Porirua City (PCC), Wellington City (WCC), Hutt City (HCC), Upper Hutt City (UHCC) and South Wairarapa District Councils (SWDC) task Wellington Water Limited (WWL) to manage the treatment plants and networks, and deliver water services to communities.
6. Kapiti Coast (KCDC), Carterton (CDC), and Masterton District (MDC) Councils manage their own wastewater networks and treatment plants.
7. Councils make decisions on the maintenance, repairs, and upgrades to their treatment plants, and fund this through their Long-Term Planning process.

Wellington Water Limited

8. Wellington Water Limited (WWL) is the water services provider for the region.
9. WWL is council-owned and funded by GW, PCC, WCC, UHCC, HCC, and SWDC.
10. A representative from each shareholding council sits on the regional Wellington Water Committee that provides overall leadership and direction for the company. The current Regional Council representative is Councillor Connelly.
11. WWL is governed by a board of independent directors.
12. WWL gives its shareholding councils advice on their assets in terms of required maintenance, repairs and upgrades of piping networks and treatment plants.

13. WWL work to the budgets set by shareholder Councils, and prioritise work to make the best use of the funding and resources provided.
14. WWL do not own any water infrastructure, set policies, user charges, or rates.

Veolia

15. Veolia are contracted by WWL to operate the WWTPs they manage. Veolia provides water, waste and energy management services internationally, and have operated plants in the Wellington Region since 2004.

Greater Wellington Regional Council

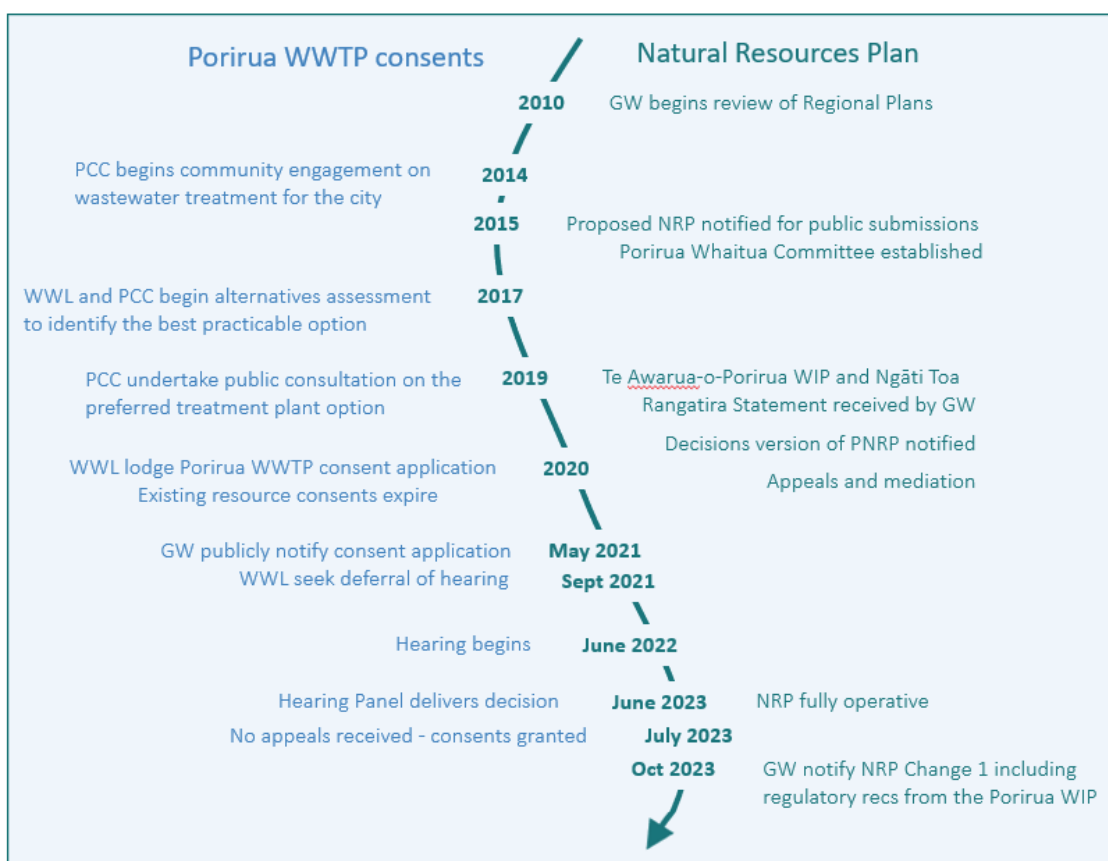
16. Greater Wellington Regional Council is the regulator of wastewater treatment plants in the region under the Resource Management Act 1991 (RMA). Our regulatory role covers what is discharged into the receiving environment: the quality, quantity, and odour of discharges to land, water (freshwater and coastal), and air.
17. Greater Wellington's Environmental Regulation teams:
 - process applications for resource consents,
 - undertake compliance monitoring against conditions of consent, and
 - investigate and enforce breaches of resource consent and the RMA.

Resource consenting for wastewater treatment plants

18. For new and existing wastewater treatment plants, getting the necessary resource consents is a lengthy and expensive process. Significant engagement, research, planning and investment are needed to design or upgrade a treatment plant to meet the needs and expectations of communities and regulations.
19. For existing plants, changes in national legislative settings, community expectations, and regional plan provisions mean that a new application will be processed under more stringent requirements than the existing consent. An application for resource consent to discharge wastewater can, therefore, take years for the consent holder to finalise and submit. The application must reach the point where Greater Wellington has sufficient information to be able to process and make a decision.
20. The *status quo* won't cut it when it comes to consent renewals, and significant infrastructure upgrades are often required to ensure improvements to the quality of discharges. This is magnified for treatment plants which discharge into a freshwater receiving environments due to the National Policy Statement for Freshwater Management 2020 (NPS-FW 2020) requirements around freshwater quality.
21. The high level of community interest, and potential for effects on the environment, mean that consent applications for treatment plants are almost certainly publicly notified. The decision-making is then delegated to an independent panel of Resource Management Commissioners. The decision of the panel can be appealed to the Environment Court by the applicant or any person who has made a submission.
22. Greater Wellington's role in publicly notified consent applications is to provide analysis and recommendations to the hearing panel on the environmental effects on the receiving environment, assess the proposal against the relevant policy framework, and support the hearing process.

23. The Hearing Panel considers applications against the objectives and policies of the *operative* regional plan, and any *proposed* plans or plan changes that have been publicly notified at the time they are making their decision. Plan-changes take years to be developed, notified, and made operative by councils, and do not impact on existing granted consents.
24. Plan Change 1 to the Natural Resources Plan (NRP), notified in October 2023, gives effect to the NPS-FM 2020 by enacting the regulatory recommendations of Te Awarua-o-Porirua and Te Whanganui-a-Tara Whaitua Implementation Plans (WIPs)¹. Figure 1 shows the passage of time between the establishment of the Porirua Whaitua Committee, delivery of the WIP, and regulatory impact of the recommendations against the timeline for reconsenting for Porirua WWTP.

Figure 1: Porirua WWTP consent timeframes alongside NRP timeframes



25. Plan Change 1 to the NRP was notified after consents were granted for the Porirua WWTP. Therefore, legally, the Hearing Panel were not required to consider the Whaitua recommendations or the draft plan-change in their decision-making. However, in this instance the applicant agreed to the inclusion of conditions relating to future water quality standards, policies or guidelines relevant to this coastal area (Condition 31)².

¹ While the NPS-FM 2020 relates to freshwater rather than the coastal waters, water quality objectives for enterococci in coastal waters were set by Te Awarua-o-Porirua and Te Whanganui-a-Tara whaitua committees.

² WGN20029 Coastal Discharge Permit Condition 31 ...*the consent holder shall undertake a review of the treatment processes and discharge infrastructure at the Porirua WWTP and of the monitoring required under this consent... including (b) compliance of the discharge of wastewater with any relevant national, or regional water quality policies, standards or guidelines in effect at the time of the review.*

26. The inclusion of the review conditions allowed for a longer duration of consent as discharges from the plant will be reviewed against the objectives and targets in NRP Change 1. The maximum duration of any consent is 35 years, and various submitters had sought a term of 10 years. The consent granted for the Porirua WWTP in July 2023 has a duration of 18 years.
27. A standard condition regarding the ability to *review any or all conditions of the consent pursuant to section 128 Resource Management Act* is also included. Condition 31 pre-empts the need to invoke section 128, which can be lengthy, litigious and costly, with no guarantees of success.

Greater Wellington's role in compliance monitoring and reporting

28. When resource consent applications are processed and granted, Greater Wellington's role then moves to monitoring compliance with the conditions of consent.
29. Consent holders have substantial reporting and monitoring requirements under the conditions of the individual consents. Standard compliance reporting and monitoring requirements for WWTPs include:
 - a Monthly, quarterly, and annual reporting against the conditions of consent
 - b Influent, effluent and environmental sample testing and submission of results
 - c Outflow volume monitoring
 - d Receiving environment monitoring
 - e Odour monitoring and reporting
 - f Updating and maintaining Operation and Management Plan(s)
 - g Notifying Greater Wellington of incidents and complaints related to non-compliance
 - h Regular inspections of all wastewater collection, treatment and discharge systems
 - i Maintenance of signage and public communication
 - j Ongoing communication with Community Liaison Groups and the wider public
 - k Maintaining public websites to report on WWTP operations and compliance.
30. The conditions of individual WWTP consents are highly variable. Consent conditions are determined during consent processing and will depend on multiple factors including the size and complexity of the site, the scale of environmental effects, the nature of the receiving environment(s), cultural sensitivities and public interest.
31. The compliance reporting and monitoring requirements scale up or down based on the above factors. Small community WWTPs tend to have a smaller number of consent conditions and low reporting and monitoring requirements. In contrast, large, complex sites which receive and treat large volumes of domestic and trade wastewater, and/or discharge treated wastewater to sensitive receiving environments, commonly have extensive reporting and monitoring requirements.
32. Environmental Regulation undertake regular assessments of all compliance information submitted in relation to WWTP consents. The relevant compliance officer for each site produces an annual compliance report which provides an overall compliance rating for each consent and summarises any non-compliances.

33. Investigations are undertaken in response to incidents, complaints and other non-compliances in line with Greater Wellington's Compliance Monitoring and Enforcement Policy (Draft June 2023). Site visits to WWTPs are undertaken as required noting the complexity of the plants, elevated health and safety requirements, challenges around access, and difficulties in observing non-compliances. The Regulatory teams rely on accurate and timely reporting and regular engagement with consent holders.
34. A review of the Greater Wellington's compliance monitoring programme was undertaken in early 2023. The review grouped consents by type and prioritised them by applying a weighted score to several factors, including the scale of effects, historic environmental performance, Long Term Plan/council priorities, and the regional and national regulatory frameworks. The review provides a prioritisation framework for staff undertaking compliance monitoring of consents in the region. Municipal wastewater was given the following rankings out of the 46 categories:
 - #1 High risk municipal wastewater consents
 - #10 Medium risk municipal wastewater consents
 - #17 Low risk municipal wastewater consents.
35. The updated compliance monitoring programme reinforces the critical need for effective compliance monitoring of municipal wastewater consents. Compliance work on high-risk municipal wastewater consents is prioritised above all other compliance work by the Regulation unit.
36. **Attachment 1** shows the current compliance status of wastewater treatment plants in the region, and notes on those that are nearing expiry or have applied for new consents.

Enforcement action for non-compliance

37. Enforcement action in relation to non-compliance ranges from education, formal warnings, advisory notices and infringements, up to enforcement orders, and prosecution in the most extreme cases.
38. Prosecution is considered where high level non-compliance has resulted in a high level of environmental effects, particularly where the receiving environment is sensitive or highly valued. The decision to prosecute is complex, and is conducted according to the Solicitor General's Prosecution Guidelines, including evidential and public interest tests. Established case law is also used to assist with determining the level of enforcement action taken.
39. The Regulatory unit is currently considering and/or undertaking enforcement action on eight WWTP consents. None of these are expected to result in prosecution.

Ngā Take e hāngai ana te iwi Māori Implications for Māori

40. Māori have a strong interest in the management and disposal of wastewater, which is reflected in the NPS-FM, and the provisions of the Regional Policy Statement and NRP. In particular, the disposal of wastewater to rivers and streams is offensive to Māori as these are treasured as ancestors. Mana whenua in the Wellington region participate in consent processes to varying degrees and are interested in the compliance of WWTPs.

41. Continuing the example of re consenting the Porirua treatment plant - Te Rūnanga o Toa Rangatira provided a cultural impact assessment (CIA) on the consent application. The CIA states that Te Moana o Raukawa is at the heart of the Ngāti Toa rohe and forms an integral part of their historical association and political dominance of the Cook Strait region. The CIA notes the role of kaitiakitanga in the management of natural resources is a serious matter of great significance to Ngāti Toa. The CIA, the applicant, council officers, and the hearing panel recognised that historically the relationship of Ngāti Toa has not been adequately recognised or provided for within Te Moana o Raukawa, which has resulted in an undermining of customary practices and the ability to exercise kaitiakitanga.
42. In addition to the CIA, Ngāti Toa made a written submission on the application, presented oral evidence at the hearing, and provided written comments to the hearing panel on draft conditions of consent – all of which represent a significant investment of time. The final consent conditions require WWL to invite representatives of Te Rūnanga o Toa Rangatira to be part of a working group, with the aim to improve wastewater discharges from the plant, particularly adverse effects on the values of significance to Ngāti Toa. In addition, Ngāti Toa will be invited to prepare a kaitiaki monitoring programme as part of the monitoring plan for the plant. If these invitations are not accepted, the conditions of consent provide an alternative pathway for assessing effects on cultural values during the term of the consent.
43. In another example, Greater Wellington appointed Te Atiawa ki Whakarongotai to provide a cultural impact assessment on KCDC's application to re consent discharges from the Paraparaumu WWTP. The plant discharges to the Mazengarb Stream and ultimately the Waikanae Estuary, which is of significant cultural value to the iwi, as listed in schedule C2 of the NRP. The CIA states that Te Atiawa consider the discharge to be the antitheses of mauri and are unable to live in harmony while the lower Mazengarb Stream is in this degraded state. The discharge prevents them from undertaking cultural activities including mahinga kai. The discharge causes significant adverse effects on their cultural values, and the proposal to continue the discharge will continue these significant effects.
44. This application is currently on hold for further information and is yet to be publicly notified. Consenting staff have been meeting regularly with KCDC and Te Atiawa to encourage progress with the application. KCDC have recently begun to work with Te Atiawa on the matters raised in the cultural impact assessment.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

45. Under current climate change predictions, extreme weather events are expected to increase in frequency and magnitude. These events have the potential to damage wastewater treatment plants, resulting in non-compliant discharges. Adapting to extreme weather events can take the form of increased protection to infrastructure, particularly in coastal areas, built-in redundancy for vulnerable treatment processes, and having rapid access to replacement parts.
46. High rainfall events are also predicted to increase in frequency and intensity as a result of climate change. They increase the volume of wastewater entering treatment plants as stormwater infiltrates wastewater networks, and this has the potential to overwhelm the design capacity of treatment plants. Where there is an exceedance of the plant's

capacity, bypasses result one or more stages of the treatment process being missed, or a discharge to an alternative location.

47. Additional onsite storage is a possible adaptation where space allows, such as in Paraparaumu where the storm basin is currently being deepened and lined to hold additional volume during heavy rainfall events. Storage options across the network are also being implemented. Improvements to the wastewater network to prevent inflow and infiltration of stormwater are underway across the region, and many are consents require continued progress in this area.
48. Other potential impacts of climate change include:
 - a rising temperatures leading to increased numbers of odour complaints
 - b sea level rise exacerbated storm surge affecting low-elevation plants (e.g. Seaview)
 - c climate-change driven pressures on indigenous biodiversity and ecosystems will place greater emphasis on improving plant performance, and effluent quality having fewer environmental and cultural impacts.
49. One potentially positive effect of climate change may come from the predicted reduction in overall rainfall in the Wairarapa - where most plants have significant stormwater inflow and infiltration issues that place pressure on plant performance and treatment quality.

Te whakatūtakitaki Engagement

50. Wellington Water Limited were informed that this paper was being prepared for the Environment Committee, and a draft of the paper was shared with them.

**Ngā āpitihanga
Attachment**

Number	Title
1	Wastewater Treatment Plant compliance and consenting status at 10 November 2023

**Ngā kaiwaitohu
Signatories**

Writers	Jo Frances – Team Leader, Environmental Regulation Joshua Knowles - Senior Resource Advisor Aaron Johnston - Compliance Monitoring and Enforcement Officer Michelle Conland - Resource Management Consultant
Approvers	Shaun Andrewartha – Manager, Regulation Fathima Iftikar – Director of Strategy, Policy and Regulation Lian Butcher – Group Manager Environment

<p>He whakarāpopoto i ngā huritaonga Summary of considerations</p>
<p><i>Fit with Council’s roles or with Committee’s terms of reference</i></p> <p>This paper provides information to assist the Committee in overseeing the development, implementation and review of Council’s regulatory systems, processes and tools to meet Council’s related legislative responsibilities.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>The Regulatory unit’s compliance monitoring programme reinforces the critical need for effective compliance monitoring of municipal wastewater consents. Compliance work on high-risk municipal wastewater consents is prioritised above all other compliance work by the Regulation unit.</p>
<p><i>Internal engagement</i></p> <p>Environmental Policy contributed to this paper in relation to Plan Change 1 to the Natural Resources Plan.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>Site visits to wastewater treatment plants are undertaken at a low frequency due to the complexity of the plants, elevated health and safety requirements, challenges around access, and difficulties in observing non-compliances in person. The Regulatory teams rely on accurate and timely reporting from consent holders.</p> <p>The Solicitor General’s Prosecution Guidelines and case-law inform enforcement decisions.</p>

Environment Committee meeting 23 November 2023

Attachment 1 to Report 2023.594 - Wastewater Treatment Plant compliance and consenting status at 10 November 2023

Kāpiti KCDC are the consent holder, owner and operator.

Plant	Annual compliance rating ¹	Current compliance status	Current compliance issues	Consenting Status
Ōtaki WWTP	Compliant	Minor Non-Compliance	One off breach of daily flow limit March 2023 Spring monitoring results show exceedance of e.coli	Granted 2016 Expires 2036
Paraparaumu WWTP	Non-Compliant	Minor Non-Compliance	Storage pond upgrade in progress Formal warning issued 11/10/2023 for exceedance of wastewater storage pond usage 2022-2023	Granted 1999 Expired 2022 Renewal application lodged December 2021 Granted s124 to continue operating while the application is under consideration On hold under s92 – request for further information Officers encouraging KCDC to work with Te Atiawa
Waikanae Pump Station	Compliant	Compliant	None	Granted 2022 Expires 2042

Porirua PCC are the consent holder and owner, WWL are the manager, and Veolia operate the plant.

Plant	Annual Compliance rating	Current Compliance Status	Issues	Consenting Status
Porirua WWTP ²	Significant Non-Compliance	Significant Non-Compliance	Bypass repair failed (second attempt), ongoing minor continuous undisinfectated leak. Investigations Ongoing 3 unconsented discharges (Sept - Nov 2023) Investigations Ongoing	Granted 2023 Expires 2041 See Figure 1 for consenting timeline

¹ WRC Monitoring Officers assess overall compliance rating annually. The ratings in this attachment are for 2022/23, unless that assessment is not yet completed.

² [Porirua Wastewater Treatment Plant \(wellingtonwater.co.nz\)](http://Porirua Wastewater Treatment Plant (wellingtonwater.co.nz))

Environment Committee meeting 23 November 2023

Attachment 1 to Report 2023.594 - Wastewater Treatment Plant compliance and consenting status at 10 November 2023

Te Whanganui a Tara The relevant TA owns the plant and holds the consents, WWL manages the plants, and Veolia are the operators.

Plant	Annual Compliance rating	Current Compliance Status	Issues	Consenting Status
Moa Point WWTP³	Significant Non-Compliance	Significant Non-Compliance	Non-Compliant effluent quality and short outfall Bypasses – under investigation Abatement notices served to direct: <ul style="list-style-type: none"> • Cease discharge of non-compliant effluent quality • Complete repairs to the inlet pumping station to reduce short outfall discharges Investigations Ongoing	Granted 2009 Expires 2034 New Sludge Dewatering Plant consented Dec 2022 New plant currently under construction
Seaview WWTP⁴	Significant Non-Compliance	Significant Non-Compliance	Effluent quality non-compliant 29 September 2023 Investigations Ongoing Considerably increased number of consented wet weather discharges to Waiwhetu Stream over 3 years (from 4-5 to 10-15+ per year) Unconsented short duration dry weather discharges due to power spikes in 2022-2023. Formal warnings issued 8 November 2023 Objectional and offensive odour November 2023. Investigations initiated	Coastal Discharge: Granted 2006 Expires 2031 Freshwater Discharge: Granted 2013 Expired 2018 HCC applied for a new consent to temporarily discharge treated wastewater to Waiwhetu stream Continues to operate under existing consent
Western WWTP⁵	Non-compliance	Moderate Non-Compliance	Main outfall pipeline is broken, resulting in treated wastewater discharge to the Karori Stream rather than the coastal marine area Formal warning issued on 13 September 2023 Investigations Ongoing	Granted 2010 Expires 2035 2 wastewater overflow consents will expire Dec 2023. These discharges are sought to be re-consented as part of a recently lodged global wastewater overflow application

³ [Moa Point Wastewater Treatment Plant \(wellingtonwater.co.nz\)](http://wellingtonwater.co.nz)

⁴ [Seaview Wastewater Treatment Plant \(wellingtonwater.co.nz\)](http://wellingtonwater.co.nz)

⁵ [Western Wastewater Treatment Plant \(wellingtonwater.co.nz\)](http://wellingtonwater.co.nz)

Environment Committee meeting 23 November 2023

Attachment 1 to Report 2023.594 - Wastewater Treatment Plant compliance and consenting status at 10 November 2023

Ruamāhanga In South Wairarapa, SWDC are the consent holder and owner, WWL manage and operate the plants.
 Carterton and Masterton WWTP are owned and operated by their District Councils.

Plant	Annual Compliance rating	Current Compliance Status	Issues	Consenting Status
Lake Ferry WWTP ⁶	Significant Non-Compliance	Moderate Non-Compliance	High inflow and infiltration. Operational and reporting non-compliances	Granted 2005 Expires 2025 WWL to prepare and submit consent application by March 2025 (6 months prior to expiry)
Martinborough WWTP ⁷	Significant Non-Compliance	Significant Non-Compliance	Exceeding limits for discharges to land/water volume and effluent quality To Do Abatement Notices served to WWL and SWDC on 15 August 2023 Compliance Delivery Plan being implemented	Granted 2016 Expires 2051
Featherston WWTP ⁸	Minor Non-Compliance	Minor Non-Compliance	Annual report shows good compliance during previous compliance year	Granted 2009 Expired 2012 Renewal applications lodged in 2012 and 2017. Granted s124 to continue operating. New application lodged May 2023. Currently on hold under s92 – request for further information Anticipated public notification mid-2024
Greytown WWTP ⁹	Moderate Non-Compliance	Significant Non-Compliance	Exceeding limits for discharge volume to river. Indications of environmental degradation in Papawai Stream Enforcement decisions under consideration Investigation ongoing	Granted 2016 Expires 2051
Carterton WWTP	Moderate Non-Compliance	Moderate Non-Compliance	New storage reservoirs and outfall discharge route fully operational Operational and reporting non-compliances	Granted 2018 Expires 2053 Consent variation granted June 2023
Masterton WWTP	Moderate Non-Compliance	Minor Non-Compliance	Exceeding E.coli limits Abatement Notice served August 2022	Granted 2009 Expires 2034

⁶ [Lake Ferry Wastewater Treatment \(wellingtonwater.co.nz\)](http://wellingtonwater.co.nz)

⁷ [Martinborough Wastewater Treatment Plant \(wellingtonwater.co.nz\)](http://wellingtonwater.co.nz)

⁸ [Featherston Wastewater treatment plant \(wellingtonwater.co.nz\)](http://wellingtonwater.co.nz)

⁹ [Greytown Wastewater Treatment \(wellingtonwater.co.nz\)](http://wellingtonwater.co.nz)

Environment Committee meeting 23 November 2023

Attachment 1 to Report 2023.594 - Wastewater Treatment Plant compliance and consenting status at 10 November 2023

Wairarapa Coast WWTPs are within Masterton District Council territorial boundary, owned and operated by Masterton District Council

Plant	Annual Compliance rating	Current Compliance Status	Issues	Consenting Status
Castlepoint	Minor Non-Compliance	Compliant	2023 annual report under review	Granted 2015 Expires 2029
Riversdale	Compliant	Compliant	2023 annual report under review	Granted 2009 Expires 2039
Tinui	Compliant	Compliant	2023 annual report under review	Granted 2005 Expires 2030

Environment Committee
23 November 2023
Report 23.574



For Information

REGIONAL PEST MANAGEMENT PLAN OPERATIONAL PLAN FOR 2023-2024

Te take mō te pūrongo

Purpose

1. To inform the Environment Committee about the alignment of the Regional Pest Management Plan 2019-39 and the Regional Pest Management Operational Plan for 2023/24.

Te tāhū kōrero

Background

2. Section 100B of the Biosecurity Act 1993 (the 1993 Act) states the requirements for an operational plan that implements a Regional Pest Management Plan (RPMP). Greater Wellington Regional Council (Greater Wellington), as the management agency under the 1993 Act, must:
 - a Prepare an operational plan annually and, if deemed appropriate, amend it; and then provide a copy to the council;
 - b Prepare an annual report on the operational plan, including on the effectiveness of implementation, not later than five months after the end of each financial year; and provide a copy of this annual report to the council;
 - c Make copies of the annual operational plan and annual report available to the public.
3. In addition, sections 100B(4) and (5) of the 1993 Act provide, in effect, that:
 - a The council may give Greater Wellington written notice that the council intends to disallow all or part of the operational plan on the ground that the council believes that the whole, or part of the operational plan, is inconsistent with the RPMP;
 - b The written notice must be given before, or within 20 working days after, the council receives the operational plan or an amended version.

**Te tātaritanga
Analysis**

4. The application of the requirements of sections 100B(4) and (5) of the 1993 Act to Greater Wellington’s context means that:
 - a Officers provide the annual operational plan to the Council to consider as its specific responsibilities include “oversee[ing] the development and review of Council’s environmental ... plans, programmes, and initiatives...”;
 - b The 20 working day period under section 100B(5) starts when the Council receives the report on the annual operational plan.
5. If the Council considers that all or part of the RPMP Operational Plan for 2023/24 (**Attachment 1**) is inconsistent with the RPMP, then it may move and recommend that Council issues a related written disallowance notice. A report will then be prepared for the Environment Committee’s first meeting in 2024 and will include a rewritten RPMP Operational Plan for 2023/24 to be recommended to Council.

Alignment of the RPMP and the annual operational plan

6. To assist the Council to consider the alignment between the RPMP and the RPMP Operational Plan for 2023/24, the following table indicates the relationship between the RPMP’s objectives and the related activities in the RPMP Operational Plan for 2023/24:

RPMP objective	Related RPMP Operational Plan activities for 2023/24
Minimise the actual or potential adverse or unintended effects associated with these organisms	Identify new incursion sites Respond to reports from the public within set timeframes Develop and implement response plans Visit management sites and undertake control on best practice basis
Maximise the effectiveness of individual actions in managing pests through a regionally coordinated approach	Support pest management in the region by providing advice and support to the public and communities on pest control and impacts. Build and maintain relationships with private landowners and Territorial Local Authorities (TLA) within the region through the Key Native Ecosystems (KNE) programme and provision of Biosecurity Services
Make a pest-free status of a considerable area of the Wellington region a reality	Eradicating target pests (mustelids, possums and rats) on land within the boundaries of Phase 1 (Miramar Peninsula) and Phase 2 (Island Bay to CBD) of the Predator Free Wellington initiative

7. Officers consider the RPMP Operational Plan for 2023/24 (**Attachment 1**) is consistent with the RPMP and recommend that no written disallowance notice is required under section 100B(4) of the 1993 Act.

Ngā Take e Hāngai ana te iwi Māori

Implications for Māori

8. Mana whenua and Māori make an important contribution to biosecurity. For mana whenua this includes involvement in biosecurity as an important part of exercising kaitiakitanga over their whenua. Māori also carry out significant pest management through their primary sector economic interests and as landowners and/or occupiers.
9. Activities carried out under the RPMP provide for the protection of the relationship between Māori and their ancestral lands, waters, sites, wāhi tapu and taonga, and the protection of those aspects from the adverse effects of pests. This protection is specifically required under the Biosecurity Act 1993.
10. The RPMP Operational Plan for 2023/24 aligns with the intentions of the RPMP on this aspect due to the nature of the activities specified in it.

Te whakatūtakitaki

Engagement

11. Engagement was carried out, as required by section 72 of the 1993 Act, as part of the process of developing the RPMP, which the annual operational plan implements. Due to an extensive consultation process in the review stages of the RPMP process there is no requirement to engage with public or stakeholders in developing the annual operational plans.
12. Section 100(1)(d) of the 1993 Act requires that copies of the annual operational plan, and every amended version, are made available to the public. An electronic version of RPMP Operational Plan for 2023/24 (**Attachment 1**) is ready to be made available on the Greater Wellington's website and a printed version is available upon request. A copy will also be supplied to both the Minister of Conservation and the National Library.

Ngā tūāoma e whai ake nei

Next steps

13. If the Council does not exercise its powers of disallowance the annual operational plan will be made available to the public in accordance with Section 100B(1)(d) of the Act.
14. If the Council does exercise its powers to disallow part of the annual operational plan, that part(s) will be rewritten and the plan resubmitted to the Environment Committee at the first Environment Committee meeting in 2024 to make a recommendation to Council.

**Ngā āpitihanga
Attachment**

Number	Title
1	Regional Pest Management Plan Operational Plan for 2023/24

**Ngā kaiwaitohu
Signatories**

Writer	Katrina Merrifield - Advisor Environment Policy
Approvers	Myfanwy Hill - Manager Environment Operations Jack Mace – Director Delivery Fathima Iftikar – Direction Strategy, Policy & Regulation Lian Butcher – Group Manager, Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<p><i>Fit with Council’s roles or with Committee’s terms of reference</i></p> <p>The purpose of the Environment Committee is to oversee the development, implementation and review of Council’s environmental strategies, policies, plans, programmes, initiatives and indicators to improve environmental outcomes for the Wellington Region’s land, water, air, biodiversity, natural resources, parks and reserves, and coastal marine area. This includes the RPMP.</p> <p>As part of reviewing the effectiveness of implementing and delivering the RPMP (one of the Environment Committees specific responsibilities), Council has retained the power under section 100B(4) of the Biosecurity Act 1993 to disallow all or part of the RPMP Operational Plan for 2023/24 if the Committee believes that the whole operational plan, or the part of it, is inconsistent with the RPMP.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>The RPMP Operational Plan for 2023/24 is intended to implement the RPMP’s objectives for 2023/24.</p>
<p><i>Internal engagement</i></p> <p>The Environment Operations team were consulted.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>There are no specific risks relating to the matters for decision, but there are environmental risks around the implications to the environment of not taking action.</p> <p>These key risks are the possibility of loss of native plants and animals; reduced productivity for farming and horticulture; public nuisance; and a failure to protect the ancestral lands, waters, sites, wāhi tapu and taonga of Māori.</p> <p>Specific risks are listed for each pest species stated in RPMP under the heading ‘Adverse effects’.</p>

OPERATIONAL PLAN 2023/24

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**REGIONAL PEST MANAGEMENT
PLAN 2019-2039**



1. Kupu Arataki/Introduction

1.1 Regional Pest Management Plan

The Regional Pest Management Plan 2019-2039 (RPMP) was prepared in accordance with the Biosecurity Act 1993 and became operative on the 2nd of July 2019.

This Operational Plan has been prepared in accordance with section 100B of the Biosecurity Act 1993. This plan identifies and outlines the nature and scope of activities that the Greater Wellington Regional Council (GW) intends to undertake in the implementation of its RPMP for the financial year 2023/24.

The RPMP contains objectives specific to individual pests and outlines how we, as the Management Agency, will achieve those objectives. The RPMP has clearly defined rules to be met by all land occupiers. It is our responsibility to ensure land occupiers are aware of, and meet, their obligations for pest management on their properties. We can also undertake pest control operations where there is recognised regional benefit.

1.2 Implementation

The purpose of this plan is to implement the RPMP region-wide by:

Monitoring for the presence of declared pests in the Wellington Region.

Minimising the actual and potential adverse or unintended effects associated with the specified organisms.

Eradicating certain organisms, reducing the extent of others, and containing those species that are already well established.

1.3 Areas of responsibility

This plan and the RPMP are based on the following core areas of our responsibilities:

Regulation (standards and enforcement)

Standards, rules and restrictions are set, and compliance enforced with penalties, when and where necessary.

Inspection

Regular property inspections ensure that rules and regulations are being met and changes in pest densities are determined over time.

Surveillance

Undertaking surveillance (also referred to as monitoring) for pests in the region to determine their presence, distribution and effects, and to measure the extent to which the objectives of the RPMP are being achieved.

Direct control

Funding and undertaking pest control in some circumstances as a service for regional benefit.

Advice and education

Free advice is given to raise awareness of pest problems and to provide land occupiers with the information to control their own pests.

Community initiatives

Guidance and support are provided for community driven initiatives to control pests.

Cost recovery

A full cost recovery operational service is available for pest control.

Biological control

As approved biological control agents become available, we may utilise them. Biocontrol is currently a key tool in the management of rabbits, various pest plants and other harmful species.

1.4 Integration with Annual Plan and Environment Business Plan

The Operational Plan is integrated with the GW Annual Plan and the Environment Group Business Plan. The Annual Plan sets the overall priorities and work programmes for the organisation and provides an overview of related pest management activities for the 2023/24 year. The Environment Group Business Plan is a more detailed plan for the year and includes implementation costs.

1.5 Implementation report

A report on the RPMP Operational Plan and the summary of its implementation will be prepared no later than five months after conclusion of the financial year. Copies of the report will be made available to the public.

1.6 Review

This plan will be reviewed and reported on annually. The plan may be amended to ensure that the objectives of the RPMP will be achieved within its terms. Section 100G of the Biosecurity Act allows us to make minor changes to the RPMP, provided we are satisfied that the changes will not have any significant effects on the rights and obligations of any persons.

2. Kaupapa - tirohanga whānui/Programme overview

2.1 Species led programmes

There are four species led programmes that are outlined in the RPMP:

Exclusion programme: To prevent the establishment of a species that is present in New Zealand but not yet established in an area.

Eradication programme: To reduce the infestation level of a species to zero levels in an area in the short to medium term.

Progressive Containment programme: To contain or reduce the geographic distribution of a species.

Sustained Control programme: To provide ongoing control of a species to reduce its impacts on values and spread to other properties.

Additionally, we are involved in four programmes that are part of national agreements and/or are funded nationally:

National Pest Plant Accord: To prevent the sale, distribution and propagation of a set list of pest plants (approximately 135 named species) within New Zealand.

National Interest Pest Response programme: To eradicate certain species (currently just Manchurian wild rice) from the Wellington Region.

Check, Clean, Dry: To keep our waterways clean and free of invasive freshwater pests.

Biocontrol programme: To fund biocontrol programmes for prioritised pest species.

2.2 Site led programmes

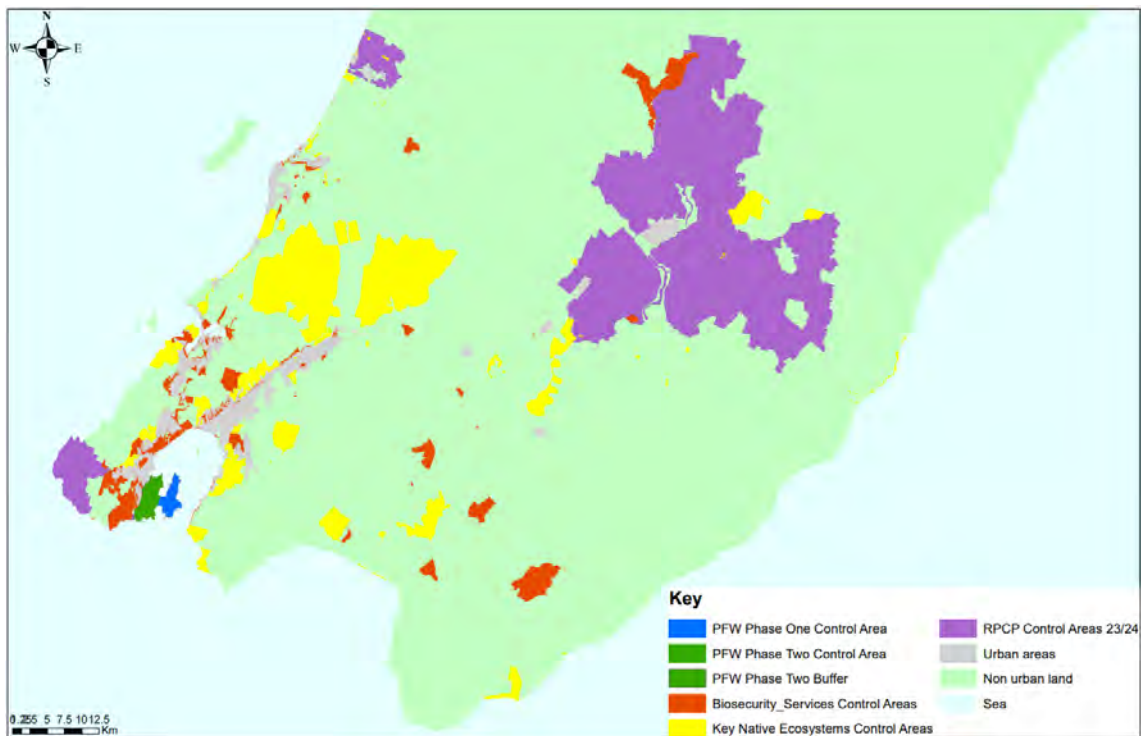
There are four site led programmes that are delivered through the RPMP (see Map 1).

Predator Free Wellington programme (PFW): To eradicate mustelids, possums and rats from the Miramar Peninsula before extending the project across the city. Predator Free Wellington is a programme funded by the Wellington City Council, GW, Predator Free 2050 and the NEXT Foundation.

Regional Predator Control Programme (RPCP): to control possums and other predators that are a serious threat to our native biodiversity and economy. The areas we work in are chosen based on protecting the best biodiversity ecosystems outside of the Key Native Ecosystem programme. 2023/24 will be a transition from the former programme that was driven largely by declarations of bovine Tb freedom to a new programme focused on maintaining or enhancing indigenous biodiversity.

Biosecurity Services programme: This activity aims to provide biosecurity delivery services across the region. This includes maintaining a buffer for predators around Pūkaha/Mt Bruce, providing cost recovery services to Territorial Authorities and landowners and controlling Argentine ants to minimise the risk to Kāpiti Island. Activities such as these lead to biodiversity gains for the region by reducing the impact of pest and invasive species.

Key Native Ecosystem programme (KNE): To protect and restore representative examples of original indigenous ecosystem types of high value in the Wellington Region through effective biodiversity management. This involves the development of strategic operational plans, planning operational activities, working with management partners and delivery of management activities including pest control.

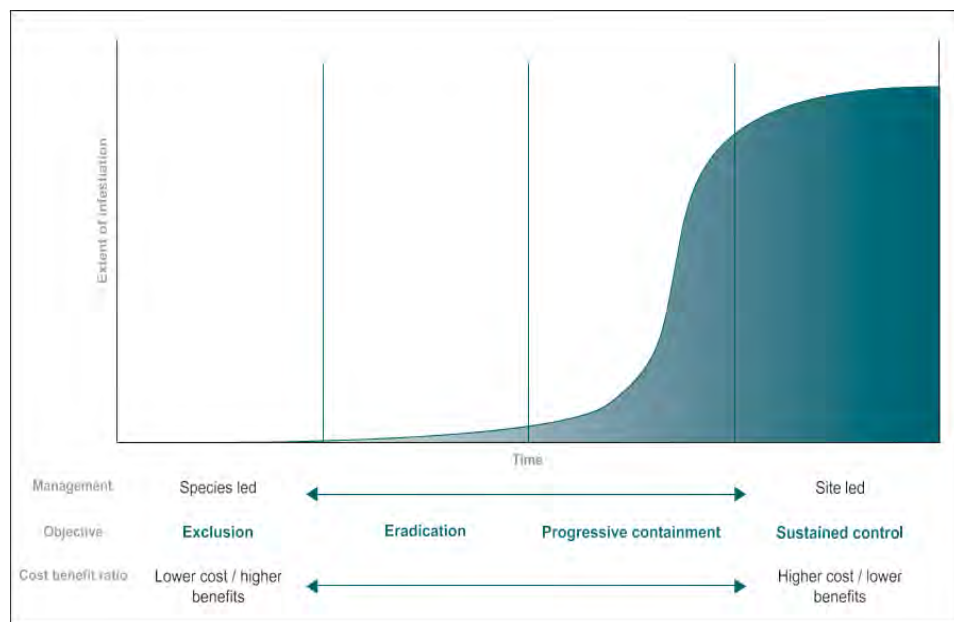


Map 1: Site led programme coverage of the region

2.3 How were the pest species decided?

A cost-benefit analysis (CBA) was undertaken for all species proposed for the RPMP. This process decided what control, if any, was to be undertaken and what level of management was needed for the species. The CBA works in conjunction with the invasion curve, which designates the different management programmes.

Table 1: The Invasion Curve



Management programmes	Infestation phase	Phase characteristics
Exclusion	Absent	Pest not yet established in the Wellington Region, or it has been eradicated from all known sites in the region.
Eradication	Lag	Pest numbers low, rate of population increase low, distribution limited.
Progressive Containment	Explosion	Rapid growth in pest population size and range.
Sustained Control	Established	Pest is abundant and/or widespread.

Figure 1: Pest infestation phases through time in relation to its appropriate management. Adapted from our Regional Pest Management Plan 2019-39

2.4 Pest control methods

We use a range of methods and tools to control pest plants and pest animals within the region. All control operations are undertaken by trained staff, contractors or volunteers using industry accepted best practice techniques. Our methodology considers innovation, environmental and humane factors alongside cost-effectiveness and practicality. Where chemical based pest control methods are utilised, the most effective and least harmful option is always preferred, with all chemical application following best practice manufacturer instructions, endorsed by the New Zealand Environmental Protection Authority.

3. Tipu Riha/Pest Plants

3.1 Exclusion programme

Alligator weed (*Alternanthera philoxeroides*), Chilean needle grass (*Nassella neesiana*), Nassella tussock (*N. trichotoma*).

Aim: Prevent the establishment of exclusion plant species in the Wellington Region.

Performance Measures

Identify new sites

Identify new incursion sites of exclusion plant species.

Incident investigation and response

Undertake initial investigations for all reports within five working days.

Develop and implement response plans within 20 working days.



Alligator weed

3.2 Eradication programme

Moth plant (*Araujia hortorum*), Senegal tea (*Gymnocoronis spilanthoides*), Spartina (*Sporobolus anglicus*, *S. alterniflorus*), Velvetleaf (*Abutilon theophrasti*), Woolly nightshade (*Solanum mauritianum*).

Aim: Destroy all known infestations of eradication plant species in the Wellington Region.

Performance Measures
<p>Identify new sites</p> <p>Identify new sites of eradication plant species.</p>
<p>Incident investigation and response</p> <p>Respond to reports from the public on eradication plant species within five working days and complete actions within 20 working days.</p>
<p>Best practice management</p> <p>Conduct routine control visits to all management sites in accordance with scheduled best practices.</p>

3.3 Progressive Containment programme

Purple loosestrife (*Lythrum salicaria*), Wilding conifers: European larch (*Larix decidua*), Douglas fir (*Pseudotsuga menziesii*) and pine species (*Pinus spp.*).

Aim: Progressively contain and reduce the geographic distribution of progressive containment plant species in the Wellington Region.

Performance Measure
<p>Incident investigation and response</p> <p>Undertake initial investigations for all reported sightings or discoveries of</p> <ul style="list-style-type: none"> • Purple loosestrife (in wetlands or waterbodies identified as natural and/or outstanding waterbodies and wetlands in the Natural Resources Plan for the Wellington Region), and • Wilding conifers (in the Pakuratahi Forest KNE site where the alpine and sub-alpine ecosystems are at risk) <p>within five working days and document decisions within 20 working days.</p>
<p>Best practice management</p> <p>Conduct routine control visits to all management sites in accordance with scheduled best practices.</p>

3.4 Sustained Control programme

Blue passionflower (*Passiflora caerulea*), Boneseed (*Chrysanthemoides monilifera*), Climbing spindleberry (*Celastrus orbiculatus*), Eelgrass (*Vallisneria spiralis*, *V. gigantea*).

Aim: Control sustained control plant species to reduce their spread and minimise adverse effects.

Performance Measures
<p>Incident investigation and response</p> <p>Undertake initial investigations for all reported sightings or discoveries of sustained control plant species within 10 working days and document decisions within 20 working days.</p>
<p>Best practice management</p> <p>Conduct routine control visits to all management sites in accordance with scheduled best practices.</p>

3.5 Site led programme

Banana passionfruit (*Passiflora mixta*, *P. mollissima*, *P. tripartita*), Cathedral bells (*Cobaea scandens*), Old man’s beard (*Clematis vitalba*)

Aim: Control and reduce the geographic distribution and/or extent of these species within the Hutt City Council Territorial Authority boundary (programme delivered by the Hutt City Council).

Performance Measure
<p>Incident investigation and response</p> <p>Provide compliance enforcement assistance to the Hutt City Council within 10 working days of receiving a request.</p>

3.6 National Pest Plant Accord

Aim: Prevent the sale, distribution and propagation of a set list of plants within the Wellington Region.

Performance Measures
<p>Incident investigation and response</p> <p>Undertake initial investigations for all reports of pest plants on the National Pest Plant Accord list within five working days.</p>
<p>Events</p> <p>Monitor events that sell plants and visit retail outlets.</p>

3.7 National Interest Pest Response programme

Aim: Eradicate National Interest Pest Response (NIPR) plants from the Wellington Region, as directed by the Ministry of Primary Industries.

Performance Measure

Identify new sites

Identify new incursion sites of National Interest Pest Response plants.

Incident investigation and response

Respond to reports from the public on National Interest Pest Response plants within five working days and complete actions within 20 working days.

Best practice management

Visit all Manchurian wild rice management sites and undertake control on scheduled best practise rotation.

Host Manchurian wild rice Best Practice workshop for stakeholders nationwide.

3.8 Biocontrol programme

Aim: Undertake Biocontrol for prioritised target weeds in the Wellington Region.

Performance Measures

Release and transfers of biocontrol agents

Release biocontrol agents (directly from Manaaki Whenua Landcare Research) or transfer from other translocation sites.

Progress towards establishment

Monitor agents until it is determined that a given agent has successfully established and is self-spreading or has failed to establish.



Buddleia showing damage from the buddleia leaf weevil



Buddleia leaf weevil

3.9 Check, Clean, Dry programme

Aim: Keep waterways in the Wellington Region free of invasive freshwater pests.

Performance Measures

Promote CCD message

Attend outdoor/freshwater events.

Regularly produce social media posts during summer.

Distribute CCD resources to relevant retailers etc in the region.

Waterside CCD signs maintained

Review and maintain 73 waterside signs at least once over the season.



Didymo

4. Kīrearea/Pest Animals

4.1 Exclusion programme

Wallaby (*Macropus rufogriseus*, *Macropus eugenii*).

Aim: Prevent the establishment of wallabies in the Wellington Region.

Performance Measures

Identify new sites

Identify new wallaby incursion sites.

Incident investigation and response

Undertake initial investigations for all reports within five working days.

Develop and implement response plans within 20 working days.

Continue to work with MPI and provide surveillance activities for the Kaitoke eradication.

Wallaby surveillance sites

Report on sites of interest/recent investigations.



Dama Wallaby (photo: Department of Conservation)



Bennett's Wallaby

4.2 Eradication programme

Rook (*Corvus frugilegus*)

Aim: Eradicate all rooks from the Wellington Region.

Performance Measures
<p>Identify new sites</p> <p>Survey historic rookeries and any new reported rookeries.</p>
<p>Best practice management</p> <p>Undertake control (by aerial nest treatment or ground control) of rooks at all known sites.</p>

4.3 Sustained Control programme

Feral rabbit (*Oryctolagus cuniculus*), Wasps (common wasp – *Vespula vulgaris*, German wasp – *V. germanica*, Australian paper wasp – *Polistes humilis*, Asian paper wasp – *P. chinensis*).

Aim: Sustained control of feral rabbits to minimise adverse effects to the environment and maintain populations below Level 5 McLeans Scale (See Appendix 1).

Performance Measure
<p>Public enquiries</p> <p>Respond to public enquiries about feral rabbits within 10 working days.</p>
<p>Cost-recovery management</p> <p>Undertake appropriate control at sites, as resources allow.</p>
<p>Monitoring</p> <p>Carry out regional trend monitoring using Modified McLean Scale, Kilometre night counts and fly testing for Rabbit Haemorrhagic Disease presence.</p>

Aim: Sustained control of wasps to minimise adverse effects to the environment and protect human health.

Performance Measures
<p>Public enquiries</p> <p>Respond to public enquiries about wasps within 10 working days.</p>
<p>Management</p> <p>Ensure appropriate wasp control is undertaken at sites to protect human health.</p>

5. Kaupapa - whakahaere ā-pae/Site led programmes

5.1 Predator Free Wellington

Mustelids (ferrets – *Mustela furo*, stoats – *M. erminea*, weasels – *M. nivalis*), Possum (*Trichosurus vulpecula*), Rats (*Rattus norvegicus*, *R. rattus*).

Aim: Eradicate mustelids, possums and rats from land contained within the boundaries of the Predator Free Wellington initiative (Phase one - Miramar Peninsula, Phase two – Island Bay to CBD).

Performance Measures

Community engagement

Gain permission from landowners/occupiers to work on private land.
 Enable and train community to continue predator control work in Phase two, and biosecurity work in Phase one.
 Maintain community support for the project.

Progress towards eradication

Eradicate remaining target species (*R. rattus*) on the Miramar Peninsula.
 Establish Phase one biosecurity network and maintain predator freedom.
 Commence eradication of target species in the Phase two area.

5.2 Regional Predator Control Programme

Mustelids (ferrets – *Mustela furo*, stoats – *M. erminea*, weasels – *M. nivalis*), Possum (*Trichosurus vulpecula*), Pest cat (*Felis catus*).

Aim: Control possums and other predators that are a serious threat to our native biodiversity and economy.

Performance Measure

Predator management

Complete planned control at all management sites (94,021ha)

Possum Monitoring

Monitor possum populations at selected sites

5.3 Biosecurity Services programme

European hedgehog (*Erinaceus europaeus occidentalis*), Feral deer – fallow, red and sika (*Dama*, *Cervus elaphus*, *C. nippon*), Feral rabbit (*Oryctolagus cuniculus*), Mustelids (ferrets – *Mustela furo*, stoats – *M. erminea*, weasels – *M. nivalis*), Pest cat (*Felis catus*), Possum (*Trichosurus vulpecula*), Rats (*Rattus norvegicus*, *R. rattus*).

Aim: Provide biosecurity delivery services across the Wellington Region.

Performance Measures
<p>Small mammal management</p> <p>Complete bait station and trapping operations at 31 Territorial Authority sites.</p>
<p>Small mammal management</p> <p>Complete predator trapping operations in the Pūkaha/Mount Bruce buffer and Wairarapa Moana area.</p>
<p>Feral rabbit management</p> <p>Complete feral rabbit night shooting control at 50 Territorial Authority sites and seven Recloaking Papatuanuku sites.</p>
<p>Ungulate management</p> <p>Complete planned control at all deer, goat and pig management sites (four sites).</p>
<p>Magpie enquiries</p> <p>Respond to owners/occupiers wanting to undertake magpie control with 15 days of receiving a request for information and/or assistance.</p>
<p>Magpie control</p> <p>Undertake control of magpies within 10 working days where there is a threat of injury to people.</p>
<p>Argentine ant control</p> <p>Control Argentine ants at Queen Elizabeth Park and Kāpiti Boating Club.</p>



Pig rooting at Wainuiomata Mainland Island

5.4 Key Native Ecosystem programme

European hedgehog (*Erinaceus europaeus occidentalis*), Feral deer – fallow, red and sika (*Dama*, *Cervus elaphus*, *C. nippon*), Mustelids (ferrets – *Mustela furo*, stoats – *M. erminea*, weasels – *M. nivalis*), Pest cat (*Felis catus*), Possum (*Trichosurus vulpecula*), Rats (*Rattus norvegicus*, *R. rattus*).

Aim: Protect and restore representative examples of original indigenous ecosystem types of high value in the Wellington Region (58 sites, approximately 48,000 ha). Below is the pest control component of this program.

Performance Measures: Pest Animals
<p>Small mammal management</p> <p>Complete bait station and trapping operations at 38 KNE sites.</p>
<p>Small mammal monitoring</p> <p>Undertake small mammal monitoring at selected sites.</p>
<p>Possum management (aerial)</p> <p>Complete follow up actions for the aerial sodium fluoroacetate (1080) operation in the Kaitoke - Hutt Water Collection KNE site. This involves carcass monitoring, sign removal, river searches.</p>
<p>Ungulate management</p> <p>Complete planned control at all deer, goat and pig management sites (14 sites).</p>
Performance Measures: Pest Plants
<p>Ground based weed control</p> <p>Complete ground-based weed control at 55 KNE sites.</p>
<p>Aerial based weed control</p> <p>Complete aerial-based weed control at up to three KNE sites.</p>

6. He Tohutohu, He Mātauranga, He Whakaanga/Advice, Education and Engagement

Aim: Support pest animal and plant management through education and advice on pest control and impacts.

Performance Measure

Response to public enquiries

Provide information to landowners about their responsibilities for pest control.

Provide information and advice to the public regarding pest identification, impacts and control, through website information, social media, events and site inspections.

Provide advice and support to community groups undertaking pest control.

Provide up to date information on all RPMP pest species on our website.

7. Tahua/Budget for 2023/24

Table 2: 2023/24 budget for implementing this Plan.

Species or Site led	Programme	Pest Animals or Pest Plants	Budget
Species led	RPMP	Pest Animals	\$1,493,899
		Pest Plants	\$1,519,143
	National	Pest Plants	\$45,000*
Site led	PFW	Pest Animals	\$3,823,050
	RPCP	Pest Animals	\$2,046,247
	Biosecurity services	Pest Animals	\$264,042*
	KNE	Combined	\$1,732,185

*external revenue for this work included in budget

Ngā ĀpitiHanga/Appendices

Appendix 1: Modified McLean Scale

Scale	Rabbit Infestation
1	No sign found. No rabbits seen.
2	Very infrequent sign present. Unlikely to see rabbits.
3	Pellet heaps spaced 10m or more apart on average. Odd rabbits seen; sign and some pellet heaps showing up.
4	Pellet heaps spaced 5-10m apart on average. Pockets of rabbits; sign and fresh burrows very noticeable.
5	Pellet heaps spaced 5m or less apart on average. Infestation spreading out from heavy pockets.
6	Sign very frequent, with pellet heaps often less than 5m apart over the whole area. Rabbits may be seen over the whole area.
7	Sign very frequent, with two or three pellet heaps often less than 5m apart over the whole area. Rabbits may be seen in large numbers over the whole area.
8	Sign very frequent, with three or more pellet heaps less than 5 metres apart over the whole area. Rabbits likely to be seen in large numbers over the whole area.



For more information, please contact Greater Wellington:

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November 2023



Environment Committee
23 November 2023
Report 23.548



For Information

ANNUAL FLOODPLAIN MANAGEMENT PLAN IMPLEMENTATION REPORT

Te take mō te pūrongo

Purpose

1. To advise the Environment Committee (the Committee) of progress made to 30 June 2023 in implementing the Hutt, Ōtaki, Waikanae, Pinehaven, Te Kāuru Upper Ruamāhanga Floodplain Management Plans (FMP), the Waiōhine River Plan (WRP), and the Lower Wairarapa Valley Development Scheme (LWVDS).

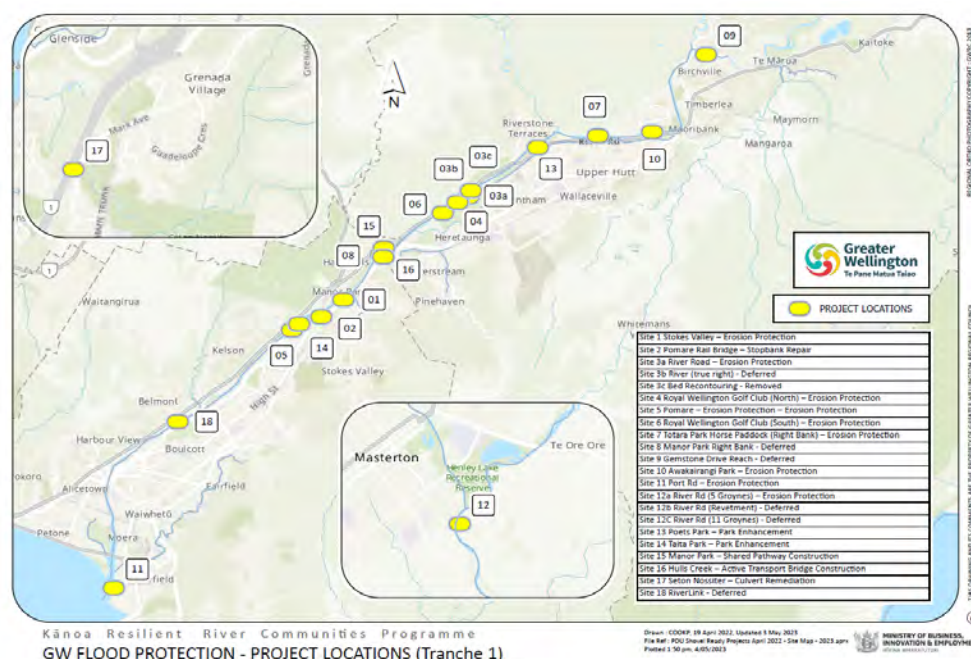
Te tāhū kōrero

Background

2. This is the twenty first annual report on the implementation of the Western Floodplain Management Plans and the sixteenth annual report on the Wairarapa Floodplain Management Plans and capital works.
3. An Annual Floodplain Management Implementation presentation (**Attachment 1**) will be presented at the Committee meeting.
4. The implementation of floodplain management planning is undertaken through three workstreams: Knowledge and Insights - Water (KIW); FMP Implementation; and Flood Operations. 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.
5. The Te Awa Kairangi/Hutt River, Pinehaven Stream, Waikanae and Ōtaki Floodplain Management Plans (western Floodplain Management Plans) were completed in 2001, 2016, 1997 and 1998 respectively. Greater Wellington Regional Council (Greater Wellington) has adopted a 40-year time frame to fully implement the four Floodplain Management Plans (FMP). Implementation of the FMPs commenced in 2001.
6. The Porirua Scheme structural works were completed in 1996 and no further works are programmed apart from maintenance. The flood hazard maps have been reviewed and shared with Porirua City Council to ensure this information is readily available. The review found that the scheme was providing the levels of service originally intended.
7. The Te Kāuru Floodplain Management Plan (Te Kāuru) was adopted by Council in June 2019. Capital funding to implement the major projects within the FMP was not available until 1 July 2022, therefore progress was slow for the first two years. However, planning, rates and governance changes were achieved in that time.

8. The Waiohine River Plan (the WRP) was adopted by Council in April 2022. At the time there was no capacity to start the implementation of the WRP, however the new rate required for the capital funding was able to be established by 1 July 2022.
9. The Lower Wairarapa Valley Development Scheme (LWVDS) had a major review in 2006, which recommended a structural upgrade programme to improve the security of the flood defences in the Lower Wairarapa Valley. The original programme was for implementation over eight years, commencing in 2007/08. Generally, the work involved strengthening riverbank protection and upgrading stopbanks on the Ruamāhanga and Tauherenikau Rivers. In 2011, Council approved the extension of the programme of works until 2022. The current review is being undertaken as part of a wider catchment plan, with work completed in time to feed into a renewal of the Schemes resource consents which expire in 2027.
10. During the 2020/21 financial year Flood Protection successfully obtained government funding for the following projects:
 - a Ministry for the Environment (MfE) – Major Rivers - Riparian Management from the ‘Jobs for Nature’ fund. A five-year programme.
 - b Kānoa – Regional Economic Development and Investment Unit (Kānoa) funding for resilient river communities. A two and a half year programme.
11. This funding has allowed works to be undertaken as part of the implementation of the Hutt River and Te Kāuru FMP’s.
12. Kānoa granted Greater Wellington \$10.752 million for Greater Wellington’s programme of work within this initiative. While initially a 1-year programme, with a value of \$17.6 M, the programme finally comprised work at 22 different sites in 3 catchments over 2 ½ years, with budget value \$23.6 Million. The site locations are shown in Figure 1.

Figure 1: Climate Resilience Programme site locations



Te tātaritanga Analysis

Floodplain Management Plan Implementation

Te Awa Kairangi/Hutt River Floodplain Management Plan (2001)

13. A major project delivery focus remains RiverLink. RiverLink is a partnership programme of work between Greater Wellington, Hutt City Council (HCC), Waka Kotahi NZ Transport Agency (Waka Kotahi), Ngāti Toa Rangitira and Taranaki Whānui. RiverLink is reported to this Committee separately, however, there have been significant milestones for the project in the programme in the last year which has moved from planning and consenting to delivery:
 - a Resource consents and Notice of Requirements were granted in November 2022.
 - b The interim Alliance partners Aecom|Fletcher were appointed in April 2023.
 - c Vacant possession of properties purchased by Greater Wellington started in late 2022 and continues into 2023.
 - d Demolition and house moving contracts were awarded by Greater Wellington to Ceres and Brittons respectively in mid-2023.
 - e A standalone RiverLink team supporting the programme across Greater Wellington was established in May 2023.
14. Kānoa funding has enabled work to be carried out at the following sites within Te Awa Kairangi/Hutt River, as shown in Figure 1:
 - a *Site 1*: Stokes Valley Stream weir repair and fish passage construction
 - b *Site 3a*: River Road erosion
 - c *Site 4*: Wellington Golf Club (North) Right Bank erosion repair
 - d *Site 7*: Totara Park Horse Paddock Right Bank erosion
 - e *Site 10*: Awakairangi Park (Right Bank) erosion
 - f *Site 11*: Port Road erosion

Kānoa programme status updates for the 2022-2023 year:

Site 1: Stokes Valley Weir Repair and Fish Passage Construction – completed

15. A new, permanent rock weir was constructed in the Stokes Valley stream to replace the failed concrete block structure. Fish passage has been incorporated into the design. Construction on the site was from April 2023 to June 2023. See Figure 2 for a photo showing the completed fish passage. The weir is not shown due to Stokes Valley Stream being in flood.

Figure 1: Site 1 Stokes Valley Fish Passage



Site 3a: River Road erosion repair – completed

16. Construction along River Road (State Highway 2), directly across the area from the Royal Wellington Golf Club, took place from June to July 2022. This mahi comprised construction of three groynes to help protect the riverbank from erosion.

Site 4: Wellington Golf Club Right Bank Erosion Repair (North)

17. Construction of three groynes to help protect the riverbank from erosion took place from June to July 2022.

Site 7: Totara Park Horse Paddock Right Bank – completed

18. Across the river from River Road (State Highway 2) in Upper Hutt, one groyne was built along the riverbank to protect against erosion. Planting of willow trees was also undertaken to further protect against the erosion of the riverbank and planting of native plants carried out to increase biodiversity and community enjoyment. This work took place from July to August 2022.

Site 10: Awakairangi Park (Right Bank) – completed

19. An old groyne in the river that had failed (concrete blocks and boulders) was removed and bed-recontouring work completed. This mahi will help protect against erosion of Awakairangi Park. This work took place in February 2023.

Site 11: Port Road - completed

20. Greater Wellington and HCC have worked together towards addressing erosion concerns for business and property owners in the Seaview area along Port Road, Lower Hutt. In the 2018/19 year, HCC completed temporary (ten year estimated life) repair work to a section of the erosion protection south of the Waiwhetu Stream mouth. Further protection along the bank from the mouth of the Waiwhetu Stream to Estuary

Bridge (450 metres in total), which is the responsibility of Greater Wellington, was forecast to commence in 2031, however Kānoa funding has enabled advancing this mahi. The works are designed to protect against a 1% Annual Exceedance Probability (AEP) design event. Physical works took place from October 2022 to April 2023.

21. In addition to the physical works at Port Road, Broader Outcomes initiatives were completed at the site. Seven Pohutukawa trees were replaced at the site. Fishing platforms were built at the site after community request. Three penguin homes were installed at the site after penguin surveys were conducted. See Figure 3 for penguin home installation and its newest resident.

Figure 3: Penguin homes installation and new resident



Sustainable Procurement:

22. Sustainable procurement was incorporated into each of the Kānoa projects, ensuring deliverables for social well-being, social procurement, environmental responsibility, community involvement, and enhancement. Each deliverable was met in an effective and meaningful manner, with initiatives having achieved the following:
 - a Over 60,000 native plants were planted through these projects, with 13,000 procured from Rimutaka prison.
 - b Poets Park’s redevelopment includes two rongoā areas because of collaboration with Ngāti Toa on the park’s design.
 - c The main-contractor for these projects (Mills Albert Ltd) created a wellbeing program that was rolled-out across the organisation. Four employees were trained as wellbeing champions and have delivered wellbeing workshops to all staff. To assist effective implementation of this programme, upper management went through strategy workshops, created policies and procedures, implemented an internal communications plan, and performed a baseline engagement survey.
 - d The main contractor also offered prostate testing for male employees, which make up most of their workforce.
 - e Career development of workers has also been strengthened through this programme. The main contractor has been able to support one young, wahine Māori worker to complete certification in business, one worker to receive their quarry manager certification, and another to gain hydro-excavation licensing.

- f Each of the programme’s four iwi partners (Ngāti Toa, Kahungunu ki Wairarapa, Taranaki Whānui, and Rangitāne) have brought their involvement to new heights through direct, paid involvement with Iwi Engagement Programme Service contracts. They are involved in co-design of tree planting, signage, and mahi toi, amongst other works.
- g Through this programme, Greater Wellington has worked with iwi partners to strengthen the relationship between iwi and Ara Poutama Aotearoa (the Department of Corrections). Iwi are leading the approach and desired end result, with Greater Wellington helping to facilitate strategy and to connect the appropriate personnel. This engagement has the potential to create meaningful ways for inmates to reconnect to their whenua, whanau, and identity overall.

Te Awa Kairangi/Hutt River Environmental Strategy

- 23. A change request for the Kānoa programme of works was submitted in May 2021 to the Climate Resilience Advisory Board, increasing the programme budget (responsibility of Greater Wellington) and adding five projects to the programme, four of these being planned outcomes of the Hutt River Environmental Strategy to enhance the river environment. The four Hutt River Environmental Strategy to enhancement projects are:
 - a *Site 13: Poets Park Upgrade*
 - b *Site 14: Taita Park Upgrade and safety works*
 - c *Site 15: Manor Park Shared Pathway*
 - d *Site 16: Hulls Creek Bridge*

Kānoa programme status updates for 2022-2023 year:

Site 13: Poets Park Upgrade – completed

- 24. Throughout the 2.5 kilometre stretch of Poets Park, Upper Hutt, the park has been re-designed to increase recreational space (making it more pedestrian and cycle friendly) and to bring back biodiversity. More than 40,000 native plants have been planted. Rongoā gardens were also planted in the park, incorporating approximately 2,000 medicinal plants such as harakeke, kowhai, and manuka. Both carparks were upgraded to a chipseal to enable more parking and easier access. Mahi took place from October 2022 to April 2023.

Site 14: Taitā Park Upgrade – completed

- 25. At Taitā Park, carparking improvements were carried out, metal barrier gates installed, landscaped mounds formed and grassed and the entrance road over the stopbank upgraded. Throughout the 2 kilometre stretch of Taitā Park, Lower Hutt, more than 7,000 native plants/trees were planted. Mahi took place from August to October 2022.

Site 15: Manor Park Shared Pathway – completed

- 26. Work to build a walking and cycling path through Manor Park's beautiful native bush took place from September 2021 to August 2022. HCC managed this project. This work aimed to encourage more people to use healthier, more environmentally friendly ways to get around (like walking and cycling) to support national emission reduction goals.

Site 16: Hulls Creek Bridge – completed

27. A pedestrian/cyclist bridge was constructed over Hulls Creek, as a part of the popular Hutt River Trail and to move people away from the busy road. Over 500 native plants were planted and landscaping mahi completed. Mahi took place from August to October 2022. See Figure 4 for bridge installation.

Figure 4: Hulls Creek Bridge installation



Operational matters – Te Awa Kairangi/Hutt River

28. The Te Awa Kairangi/Hutt River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2023-24 work programme. Continuing to meet levels of service with current levels of resourcing is a challenge; this is covered in a separate paper to this subcommittee.
29. The implementation of the new river management resource consents for Te Awa Kairangi/Hutt River and Wainuiomata River have been difficult. We have been compliant with the consent conditions though we have not been able to commit the necessary resources to make the further improvements we would have hoped.

Knowledge and Insights - Water – Te Awa Kairangi/Hutt River and Waiwhetu Stream

30. The Hutt River and Waiwhetu flood hazard modelling is currently in progress and is due for completion before Christmas 2023. This modelling is being progressed to support the review of HCC's District Plan.
31. The Waiwhetu modelling is being progressed jointly with Wellington Water and is nearing Independent Audit.
32. The Hutt modelling is being finalised and is currently undergoing breach scenario modelling, and final peer review.

Flood Risk Management Planning

33. Following the completion of the flood hazard modelling for the Hutt and Waiwhetu flood risk management plans are proposed. For the Hutt this will be a review and reprioritisation of the major projects identified in the Hutt FMP. For the Waiwhetu this will be the commencement of a full flood risk management plan.

Asset and River Management

34. The Moonshine stopbank investigation will be progressed once the flood hazard modelling for the Hutt River has been completed.

Pinehaven Stream Floodplain Management Plan (2016)

35. The Pinehaven Stream Flood Management Plan (PSFMP) was completed in 2016 with a range of structural and non-structural flood risk management measures proposed. These measures will guide the long-term management of the catchment. The implementation of the plan is being led by Upper Hutt City Council (UHCC). Wellington Water Limited has been appointed by UHCC to act as the agent to complete the physical work. Funding for the PSFMP has been established through a Memorandum of Understanding with a 50/50 allocation between Greater Wellington and UHCC being confirmed. Reporting on this project is provided by Wellington Water.
36. The objective of the planned Pinehaven Stormwater Improvements project is to provide improved capacity and an effective and efficiently functioning stormwater infrastructure in the stream and its tributaries to a 4% Annual Exceedance Probability (AEP) flood event level, which will also contribute to the management of flood risk to habitable floor levels up to the predicted peak 1% AEP flood level.
37. The project is being delivered in three distinct sections:
- a Upgrading culverts at Sunbrae Drive and Pinehaven Road (this is an Upper Hutt City Council roading renewal project)
 - b Enabling works – includes house removal and service relocation/upgrades
 - c Stream capacity and environmental improvement works – widening the stream, planting, bank stabilisation, retaining walls and earthworks (twelve stages).
38. The culvert upgrades and enabling works are complete. Funding for the full scope of works is now estimated by Wellington Water to cost \$57.4 million. Allowance for Greater Wellington's share of the cost increase for this project is being considered through the 2024-27 Long Term Plan.
39. Hydraulic modelling has been undertaken to develop the phasing of works and prioritise work on stream capacity upgrades. This work will be primarily construction of new rock walls, widening the stream bed and replacement of a pedestrian bridge within Willow Park. The works will be delivered in Phases:
- a Phase 1 – Culvert upgrades and enabling works (Complete)
 - b Phase 2 – Willow Park (Construction commencing in September 2023)
 - c Phase 3 – 28 Blue Mountains Road to Sunbrae Drive
 - d Phase 4 – Pinehaven roundabout to 28 Blue Mountains Road
 - e Phase 5 – Pinehaven reserve to Pinehaven Road
40. Over the past 12 months the project team have been undertaking Early Contractor Involvement to develop construction methodologies and subsequent construction management plans in accordance with the resource consent conditions for the stream capacity upgrades.

- a All relevant management plans for Willow Park to commence are now certified by both Greater Wellington and UHCC environmental compliance teams.

41. Progress on the key deliverables for the Pinehaven Stream Floodplain Management Plan is listed in Table 1.

Table 1: Pinehaven Stream FMP key deliverables

Item	Progress	Status
Upgrading culverts (Phase 1)	Culvert upgrades at Sunbrae Drive and Pinehaven Road were installed with practical completion of the project achieved in January 2022. Refer to Figure 5	Completed
Enabling works (Phase 1)	Enabling works were completed alongside the culvert upgrades, with practical completion of the project achieved in January 2022.	Completed
Stream capacity and environmental improvement works	Details of the upcoming phases of work listed below.	Progressing – reduced scope
Willow Park (Phase 2)	HEB construction have mobilised on site within the 10A Blue Mountains Road property. Environmental controls are set up and vegetation clearance in progress. Refer to Figure 6 and Figure 7.	Construction underway
28 Blue Mountains Road (Phase 3)	Construction planning underway	Indicative construction start mid-2024

Figure 5: Pinehaven culvert after the culvert was constructed (photo credit: GHD)



Figure 6: Willow Park vegetation clearance and setup for the stream bank upgrades (photo credit: GHD)



Figure 2: Willow Park vegetation clearance and setup for stream bank upgrades (photo credit: GHD)



Porirua Stream – Seton Nossiter Dam Culvert Upgrade

42. Remediation of the culvert at the Seton Nossiter Dam in Johnsonville was carried out between June 2022 to June 2023. This is a 196-metre-long culvert that runs under State Highway 1, and the Mark Avenue roading embankment. The culvert throttles flood flows and the State Highway and roading embankments function as a flood detention dam. The base of the culvert had deteriorated severely, increasing the likelihood of blockages; a fully or partially blocked culvert has been identified as a major contributing factor to an identified Potential Failure Modes (overtopping and internal erosion). The culvert inlet was remediated by removing loose and degraded aluminium panels from within the culvert and re-profiling the invert using concrete.
43. The concrete screen at the culvert intake was replaced with a new steel screen.

Ōtaki Floodplain Management Plan (1998)

44. The Ōtaki FMP provides a co-ordinated plan to upgrade existing infrastructure, provides new infrastructure, and adopts a range of non-structural measures to provide improved flood risk management.
45. A review of the Ōtaki FMP is currently taking place. Once this review is complete structural (major capital) projects and their relative priorities will be refreshed.
46. Ngā Hapū o Ōtaki (NHoŌ) and Greater Wellington have jointly drafted the scope for the development of the Winstone Ōtaki quarry lake management plan. Greater Wellington and NHoŌ made a commitment to progress this project as partners. The scope has now been signed off by both Greater Wellington and NHoŌ.

Te Roto Link - Te Roto Road to Lake.

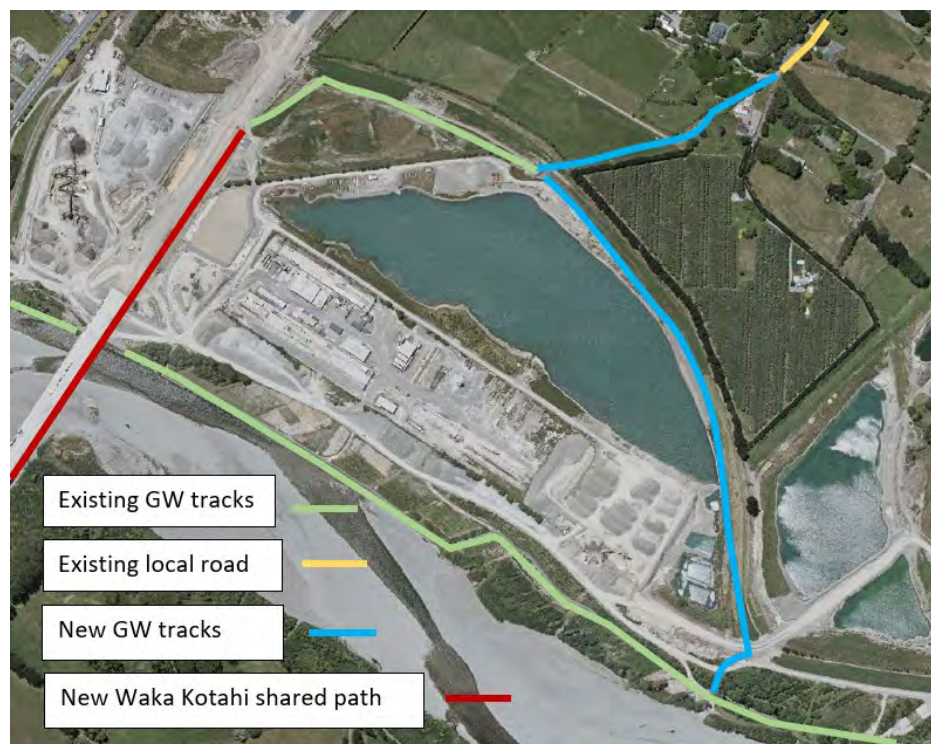
47. Greater Wellington and Kapiti District Council (KDC) aspire to have public access (by walking and cycling) from the end of Te Roto Road to the Winstones Ōtaki quarry lake

area (where the expressway track is). While there is a desire to have a shared track and a road (providing public vehicle access), and considerable time was spent designing a solution that fitted in the available space and met the required land development national standards. Technical, consenting, timing and funding issues resulted in a staged approach to works, with the shared track constructed first, followed by the road. The physical works are now complete, and the shared track is open.

Te Roto Link - Lake to River

48. Greater Wellington sought to provide public access from the north side of the lake, around to the east, over the two haul roads, and connecting to the track along the Ōtaki River. The track complements the above section of track, providing access for walking, cycling and equestrians, from the river track through to the track that links to Te Roto Road. The physical works for this track started before Christmas 2022 and are now complete.

Figure 8: Schematic showing the new track from Te Roto Road to the Ōtaki River



Operational Delivery matters – Ōtaki River

49. The Ōtaki River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2023-24 work programme, resourcing (both internal and external) is still challenging and will require careful management to ensure that levels of service continue to be met.
50. The Ōtaki-based Operations team organises and carries out activities such as: site preparation for the Friends of the Ōtaki River planting areas; planting (natives and willows); vegetation management (e.g., grass cutting and spraying); gravel management (gravel extraction, beach ripping, beach grooming); and miscellaneous activities (e.g., rubbish removal).

51. Summary of this financial years' activities on the Otaki River:

- a Access track maintenance
- b Berm maintenance
- c Channel maintenance and realignment
- d Edge protection rock placement
- e Gravel extraction
- f Pole cutting and planting
- g Support to Friends Group
- h Stopbank maintenance

52. Summary of this financial years' activities on the streams:

- a Drain clearing on the Mangaone Stream
- b Mouth cut on the Waitohu Stream
- c Pukenuamu Drain clearing
- d Weed boat carried out weed removal on minor drains.

Peka Peka to Ōtaki Expressway project interface

53. The Operations Manager met with the Peka Peka to Ōtaki (PP2Ō) Expressway Project Manager and other PP2Ō project representatives regarding planning, property issues and proposed works that interact with or impact areas and waterways that Flood operations manage.

54. Ongoing works:

- a PP2Ō Waka Kotahi/Greater Wellington Maintenance Plan
- b The finishing works under the new expressway bridge, including:
 - i. The walking tracks to be rationalised to a single route
 - ii. Modification of the swale to allow maintenance access to the rock revetment
 - iii. Closing off the lower vehicle access.

55. Winstones' rehabilitation of the lake edge. Fletcher Construction removed a significant amount of unsuitable material from the lake. This was placed on the lake edge to dried out and subsequently removed from the lake area. The area has been reinstated to a batter to the water's edge. Due to the use of a silt curtain, the clarity of the water in the lake was largely protected from sediment disturbance during the in-water works.

Knowledge and Insights - Water – Ōtaki River

Ōtaki Floodplain Management Plan review

56. The update of the Ōtaki FMP document is on hold. Updating the Ōtaki River and Waitohu Stream combined model is currently deemed a prerequisite to the Ōtaki FMP review. As such, work directly on the Ōtaki FMP review is not expected to restart until July 2025.

Ōtaki River Environmental Strategy review.

57. The 1999 Ōtaki River Environmental Strategy review and action plan is occurring in two parts:
- a A review of the existing environmental strategy, including recommendations (completed)
 - b An action plan for future works (started). The only progress in the 2023 Financial year was a meeting with Friends of the Ōtaki River in August 2022 to discuss potential items for the action plan.

Waitohu Flood Risk Management Plan

58. We are working with NHoŌ, other stakeholders and the community to investigate the flooding issue further and identify the best way forward. We engaged Stantec circa May 2022 to further develop options and test them in the hydraulic model. Circa August 2022 NHoŌ presented their report covering flooding issues and options for managing the stream. Late 2022, Stantec incorporated the options from NHoŌ into their modelling investigations. Modelling showed that no option will work on its own and each option results in locations where that the flooding is improved but also results in locations where the flooding is made worse. In December 2022 we met with the Convent Road and Bennett's Road community to share the results of the modelling. There has been no further progress due to resource challenges.

Ōtaki River and Waitohu Stream combined model

59. Status: The Ōtaki flood hazard model is due for an update. We are working with KCDC's Stormwater Engineers to deliver an up-to-date flood hazard model for Kāpiti. This combined model will allow us to model the interactions between each water course. There will also be a tie-in with KCDC's stormwater modelling. In early 2023, we asked consultants to project manage this project on our behalf, which they are doing. We have procured a hydrologist to work on this programme and are on track to complete the hydraulic modelling in 2024.

Gauging network review - Waitohu Stream

60. This is part of a region wide project led by our hydrology team, to assess and upgrade (if needed) the flow monitoring and gauging sites on our streams and rivers. The situation at the Waitohu Stream flow monitoring and gauging sites is that, although the flow can be monitored, the flow cannot be gauged during high flows. This is due to not having appropriate infrastructure at the site (a slack line and associated basket, winch, and platform), but also as the Waitohu Stream water level rises and falls very quickly it is a logistical challenge to have personal at this location at exactly the right time, which is a very short time window during a major flood. Other flow monitoring and gauging site assessment and improvements are currently the focus of this project. As such, while no major infrastructure will be installed in the foreseeable future, recently a flood flow camera has been physically installed at the flow monitoring site on the Waitohu stream.

Waikanae Floodplain Management Plan (1997)

61. The Waikanae FMP provides a co-ordinated plan to upgrade existing historic infrastructure, provide new infrastructure, and adopt a range of other non-structural measures to provide improved flood risk management.
62. The Waikanae FMP was reviewed and updated between 2009 and 2012, and the FMP republished in 2013. It provides the basis for the current development and operational Flood risk work programmes.
63. There are six planting sites along the Jim Cooke Park that have progressed this financial year. Activities include:
 - a 1,030 natives planted in a new area, and 170 natives planted as infill planting at Pukekawa Reserve, along with site preparation, mulching, spray releasing and pest control.
 - b Plant maintenance, spray releasing and pest control at Dave's patch (River Glade).
 - c 730 Manuka infill planting at the Greenlines site and the Picnic site, with associated spray releasing and pest control – noting that this site is now at approximately 50% canopy cover.
 - d Small amounts of weed spraying for plant releasing at the Kura Crescent site.
64. Greater Wellington is in negotiations with a private landowner adjacent to Jim Cooke Park regarding acquiring more land in this area. This process to acquire more land may take some time (years) and may or may not be successful. This year both parties have updated land cost valuations. There is still a significant gap between the two valuations.

Parikawau/Edgewater Park Reach Restoration

65. This is a joint project involving GroundTruth (who are the coordinators of the Waikanae Ministry for Environment funded Jobs for Nature programme), Friends of the River community groups, local iwi, KCDC, and Greater Wellington. This year the project has been planned, and site preparation, such as: mulching of dead trees and weeds, hand clearance and some specific control of noxious weeds have been undertaken. This has been followed by spot spraying in preparation for planting 600 natives in late winter 2023.

Operational Delivery matters – Waikanae River

66. The Waikanae River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2023-24 work programme, resourcing (both internal and external) is still challenging and will require careful management to ensure that levels of service are continued to be met.
67. Day-to-day river and stream management. The Operations team organises and carries out activities such as: planting, removal of blockages, vegetation maintenance, hand stream clearing, weed boat stream clearing, and track maintenance.
68. This financial year's activities for the Waikanae include:
 - a Track repairs
 - b Stop bank maintenance in Otaihanga

- c Tree removal (poplars)
 - d Environmental work via local contractor
 - e Removal of rail iron fence from the river
 - f Pest plant removal and mulching
 - g Waikanae Channel maintenance – Gravel extraction around and downriver of the Expressway bridge.
69. This financial year’s activities for the Waimeha include:
- a Three Waimeha Mouth cuts
 - b Stream maintenance - Hand clearing of the Waimeha Stream.
70. The erosion opposite Jim Cooke Park around Cross Section 255, is no longer an area of erosion and has become an area of deposition – that is gravel is now collecting in the location that the erosion used to be. The erosion face has moved down stream and is no longer a concern. The erosion opposite Greenaway Road that was close to the track is a similar story to above. The meander that was causing the erosion has moved, and the erosion has moved with it. We are not currently concerned that the track will be affected by the river giving itself a little bit more room.

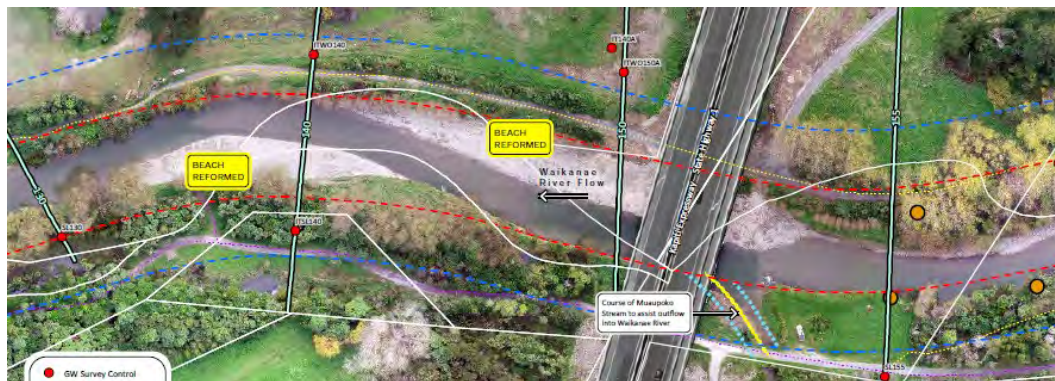
Gravel at El Rancho/Expressway bridge

71. The hydraulic investigation carried out in 2022 indicated that the gravel build-up between cross section 90 and 230 in the vicinity of El Rancho to Jim Cook Park (where the river channel is confined) was having an adverse effect on flooding in the local area. Details of the gravel extraction are below:
- a Between 17 April 2023 and 22 May 2023, we removed some 2800 tonnes of gravel (just under 1500m³) from the river, around and just below the Expressway bridge.
 - b These works took longer than expected due to two weather events on 22 April 2023, and 4 May 2023.
72. These works were carried out with Iwi monitors from Te Atiawa ki Whakarongotai. See Figure 9 and Figure 10 below for before and after drawings with aerials. As you can see, there is still a lot of gravel in the river. Our intention was not to remove all the gravel but to remove some gravel and use the remaining gravel to create a favourable meander.

Figure 9: Design drawing with aerial from 4 October 2022



Figure 10: As built drawing with aerial from 18 May 2023



Knowledge and Insights – Water – Waikanae River

Gauging network review – Waikanae

73. This is part of a region-wide project led by our hydrology team, to assess and upgrade (if needed) the flow monitoring and gauging sites on our streams and rivers. The situation at the Waikanae River flow monitoring and gauging sites is that, although the flow can be gauged when the river is shallow, the flow cannot be gauged during high flows. This is due to erosion undermining some of the gauging infrastructure (one of the anchor points for the slack line and the platform with the winch). This made the high flow gauging infrastructure unsafe to use and it has been removed. Plans are progressing to install a new slack line in 2023 so we can gauge high flows again. A new preferred high flow gauging site has been identified. This is slightly down river of the existing one. We are currently in talks with landowners about the new proposed location for gauging station and access arrangements.

Update to the hydraulic model for the Waikanae River

74. The Waikanae River flood hazard model is due for an update (it needs completely rebuilding). We are working with KCDC’s Stormwater Engineers to deliver an up-to-date flood hazard model for Kāpiti. The rebuilt model will include the Waikanae River and the Waimeha Stream and will have a tie-in with KCDC’s stormwater modelling. In early 2023, we asked PDP to project manage this project on our behalf, which they are doing. We have procured a hydrologist to work on this programme and are on track to complete the hydraulic modelling in 2024.

Hydraulic modelling investigating the impact of the gravel build up at the Waikanae River mouth

75. Greater Wellington has completed an investigation using the current Waikanae flood model to assess the changes in capacity and its effect on flooding in the lower reaches of the river. The modelling investigation is now finished. The conclusions in the report are that:
 - a The impact of the gravel build-up within the scientific reserve has a minor impact (within the +/-5mm of modelling error) on the modelled flood levels (in relation to the peak levels for a major flood including the allowances for climate change). This is the widest part of the Waikanae River channel so the increase in gravel is small compared to the available flood cross section.

- b The gravel build-up where the river channel is confined (between cross section 90 and 230 in the vicinity of El Rancho to Jim Cook Park) is having a negative effect on flooding. Channel management (including gravel extraction) in this area is recommended to get back to and maintain 1991 bed levels.

76. Not all of the Waikanae community is protected from flooding in a 100-year flood, and that climate change and housing densification will increase the number of dwellings that will flood in a 1% AEP flood event. Part of this is that the Otaihanga Flood Wall overtops in the 1% AEP flood event.

Te Kāuru Floodplain Management Plan (2019).

77. During the financial year 1 July 2022 to 31 June 2023 the implementation of Te Kāuru began. The projects that were started are outlined below, with some projects completed within this timeframe.

Rate and Governance changes – Te Kāuru

78. The rating change from a targeted riverside landowner rate to the Te Kāuru catchment wide rate was successfully implemented and started on 1 July 2022. This rating change enabled the capital projects within Te Kāuru to commence and changed how operational funds were utilised within the schemes.

79. Instead of a set budget for operational work in each scheme within the Upper Ruamāhanga catchment, there is now one budget that can be utilised across the entire area.

80. With the change to the Te Kāuru catchment wide rate, governance was able to be aligned with Te Kāuru FMP recommendations. The existing river schemes were disestablished, and new River Management Groups (RMGs) were established. This enabled anyone residing within the Te Kāuru catchment to become involved with river management and operational works planning. The first meeting of the RMGs took place just outside of this financial year, during the week starting 17 July 2023.

81. The Upper Ruamahanga River Management Advisory Committee (URRMAC) met three times to discuss matters such as:

- a The rating changes.
- b Ministry for Environment (MfE) jobs for nature project progress.
- c Kānoa – Climate Resilience project progress.
- d River Management Advisory Group establishment and URRMAC representative's role in representing these groups.
- e Design lines – what are they, how are they used, why are they being updated.

Capital projects – Te Kāuru

Climate Resilience programme

82. The Kānoa – funded Climate Resilience Programme Project at River Road in Masterton was completed on 30 June 2023. The project was the installation of six 1,000 tonne rock groynes at the closed Masterton District Council landfill site. There were some delays, such as, rock supply that meant that the project was not finished as soon as

originally planned. The main rock supply quarry had to stop supply as they were unable to progress their resource consent application. Because of this an alternative rock supply had to be sourced, which took time and the rock was more expensive.

Figure 31: Ruamāhanga River - site of groyne construction



83. Engagement with our mana whenua partners was a crucial part of the success of the River Road project. Regular hui took place between Greater Wellington and our iwi partners, Kahungunu ki Wairarapa and Rangitāne o Wairarapa. Our partners were involved in the co-design of this project, as well co-design of work for the further two stages (150 metre rock revetment and 11 further groynes). Further hui are to be held regarding the final stage of the project that involves the 11 groynes.
84. A significant outcome from working with Kahungunu ki Wairarapa was a strengthened relationship between the iwi and Ara Poutama Aotearoa (the Department of Corrections). This relationship has enabled a programme to be developed by Kahungunu for ex-prisoners to reintegrate into their communities, reconnecting with their whenua and marae. This will be furthered by programmes assisting them to develop marketable skills, including growing seedlings for projects like ours.
85. Rangitāne have been coached through the procurement process and have been contracted to Greater Wellington to plant 3,000 plants at the Site 13, River Road Ruamāhanga River. The Rangitāne General Manager sees this as a way to directly support iwi.

River Road – Stage two

86. Stage two of River Road is a 150-metre rock revetment (wall) starting at the confluence of the Ruamāhanga and Waipoua rivers. During this financial year easements were put in place for the properties that will receive this erosion protection structure. The design has been finalised, and rock supply has been sourced. Construction will commence this summer 2023/24.

Memorandum of Understanding – MDC raw water supply

87. A draft memorandum of understanding (MoU) for the Masterton District Council (MDC) raw water supply was developed to confirm responsibilities. MDC's raw water supply pipeline runs along the Waingawa River. This MoU is yet to be finalised.

Paierau Road – flood signage

88. Paierau Road flood signage project took longer than anticipated due to a lack of contractors available to install the signs. We had hoped to have the signs in place before the end of this financial year, however the signs were installed in September 2023.

Operational Delivery matters - Te Kāuru

89. At the beginning of the financial year, the operations teams work was to address the large number of erosion problems that developed after numerous floods events. The eastern rivers, such as the Kopuaranga River, suffered serious bank erosion and debris blockages.
90. By the end of this financial year the operations team had completed all the required in-channel works ahead of fish spawning. The river berm above the rail bridge on the Waipoua river had been widened and lowered, as outlined in the Te Kāuru FMP. However, blockages within the eastern river schemes remain a problem.
91. An erosion site opposite the Masterton District Council closed landfill at Little Avondale Farm was repaired.
92. Cyclone Gabrielle caused erosion damage throughout various rivers. Impacts were mainly felt in the east with large blockages. In the Waingawa River, a large erosion bay threatened powerlines. Large willow trees were tied along the riverbank with wire rope to protect the area from further erosion.

Waiōhine River Plan (2022)

93. A new Project Manager was employed to implement the Waiōhine River Plan in May 2023.

Operational Deliver matters – Waiōhine River Plan

94. The focus at the beginning of the year was around construction of gravel groynes, removal of vegetation on stopbanks, a river walkover with the Waiōhine Action Group, clearing tree blockages in the Mangatarere river and gravel extraction from targeted river beaches.
95. Native plants were supplied by the Waiōhine scheme to the community group who undertook a community planting day at the Kuratawhiti Street access point.
96. The Mangatarere stream had a major erosion event outside of the scheme extent, which increases the flood risk to the Carterton township. This issue is currently being worked through.

Lower Wairarapa Valley Development Scheme (LWVDS) – Operations

97. The LWVDS was less affected by the high flow events experienced in the upper catchment in the early part of this financial year. However, as the year progressed there were three moderate flood events that did affect the catchment. The community requested a meeting, which was held on 23 May 2023 in Pirinoa with a turnout of approximately 30 people. One of the main outcomes of the meeting was the desire to create a community catchment group. Work commenced on how this would best be achieved.
98. Stopbank repair works continued along the Ruamāhanga River. The Mahaki Road stopbank requires retreating, which involves a relocation of a Powerco pole. Final design and consultation with Powerco is underway, with construction to commence in the summer of 2023/24.
99. Other general works continued throughout the financial year, these included gravel extraction, vegetation clearance and willow pole planting.

Ministry for the Environment (MfE) Project (Jobs for Nature)

100. During this financial year the MfE riparian planting project achieved the following:
 - a 25 hectares of planting
 - b 5.7 kilometres of fencing
 - c Site preparation for the remaining 25 hectares of planting
 - d Ongoing maintenance of the 50 hectares planted in years one through three is on schedule.

Flood Modelling

Waipoua Urban Catchment Plan and Upper Ruamāhanga rural modelling

101. Flood hazard modelling for both the Waipoua river urban reach and the Wairarapa rural area was calibrated ahead of producing the 1% Annual Exceedance Probability (AEP) flood hazard outline. By the end of the financial year the flood hazard maps had been peer reviewed and supplied to the Wairarapa Combined District Plan team.

Wairarapa Aggregate Demand

102. At the beginning of this financial year Greater Wellington were leading the work with the aggregates industry, principally focussing on long term solution to address the increased demand for materials (sand, gravel, rocks, etc).
103. Contact was made with GNS's geologists regarding the nature and location of alluvial and 'blue rock' resources in the Wairarapa.
104. GNS have progressed this project to producing a series of 'opportunity zones' i.e., potential areas for exploratory field investigations. There are 340 such zones in the Wellington region.

Summary of progress

Implementation progress

105. In the 2021-31 Long Term Plan, the resilient future community outcome for flood protection has the strategic priority of ‘communities safeguarded from major flooding’. The level of service is to ‘provide the standard of flood protection agreed with communities’, with the performance measure ‘major flood protection and control works are maintained, repaired and renewed to the key standards defined in the relevant documents’. Implementing the FMPs and maintaining the existing and new assets achieves this strategic priority.
106. Riverlink also has a performance measure of ‘Implement Riverlink in accordance with the approved preliminary design’, with a target for 2022/23 of ‘Construction started’.
107. Table 1 shows the percentage of progress of the recommendations within the respective FMPs. These figures are based on the original FMP costs. The figures in Table 1 below have been indexed to 2023 dollar values using reserve bank CPI calculator. Note that expenditure used for stage one of River Road, Masterton (Te Kāuru FMP), was central government funded (Kānoa).

Table 1 – Implementation Progress (structural measures)

FMP or Scheme	Actual % Complete to June 2022	Actual % Complete to June 2023
Hutt	41%	44%
Pinehaven	47%	29% ¹
Waikanae	63%	63%
Ōtaki	47%	47%
LWVDS	41%	42%
Waiōhine	33%	34%
Te Kāuru FMP funded spend	0%	17%

108. Table 2 outlines the financial summary of the implementation of the FMPs. These figures are based on the original FMP costs. The figures in the table have been indexed to 2023-dollar values using reserve bank CPI calculator. (Noting that: Index value based

¹ Wellington Water has changed the way that the percentage complete is reported on and now use their current project costs, planning out the work in a phased approach, and have separated out the project with their own budgets to more closely monitor this. This change in reporting will align with their monitoring of each of the projects/phases within the programme of works and will provide a more consistent approach going forward with a real link to how works are actually being carried out. This does result in a drop in percent complete from that reported on last year (47%). This is due to the change of approach to percent complete with the lack of progress on physical works over the last year and the increase in estimates.

on 30 June value. No inflation included for year estimate originated. General CPI values have been used).

Table 2 – FMP Implementation Financial Summary

FMP	Original FMP Total 40 year estimate (\$M) - Adjusted for Inflation	Expenditure to June 2023(\$M)	Total Budgeted to 2031 (\$M)	Total expenditure forecast to 2031 (\$M)
Hutt	141.5	176.3	247.5	423.8
Pinehaven	6.3	7.1	4.5	11.6
Waikanae	16.0	8.4	5.5	13.9
Ōtaki	21.8	9.1	15.4	24.6
Total Western FMPs	185.6	200.9	272.9	473.9
LWVDS	13.0	8.8	11.7	20.5
Waiōhine	2.1	1.1	2.1	3.2
Te Kāuru	33.4	2.2	10.6	12.8
Total Wairarapa FMPs	48.5	12.1	24.4	36.5
Total	234.1	213.0	297.3	510.4

108. **Attachments 2-5** to this report show each floodplain management plans summary of progress.

Regional Initiatives

Flood Modelling

109. Greater Wellington is currently reviewing and updating the regional flood hazard modelling standard based on lessons from recently completed flood hazard modelling projects.

Flood Risk Management Planning

110. Greater Wellington is currently updating the flood risk management planning guidelines and assessing how these plans will progress in the new Environment Group Operating model.

Flood Incident Management

111. Flood Forecasting – Greater Wellington is continuing to work on bringing Delft Flood forecasting and Early Warning System, our chosen flood forecast platform online. Testing and integration of Met Service products is ongoing and intended to be complete by Christmas 2023. In 2024 work will be carried out with our duty officers to integrate the system into Greater Wellington’s flood incident management procedures. Red

Warning and the wider flood warning chain have been workshopped with the MetService, Wellington Region Emergency Management Office (WREMO) and Wellington Water and officers will continue to develop these conversations over the coming financial year.

112. Flood monitoring network improvements programme – This programme has been on hold due to staff changes but has now been reinvigorated. The programme is being reviewed in the context of recent extreme weather events to ensure that system resilience during flood events is the top priority.
113. Automated Warning Systems – Greater Wellington is piloting a system to replace the manual phone-trees currently used to promulgate flood warnings in the Wairarapa. Officers have worked through an extensive market sounding exercise and are piloting a TNZ system currently in operation in the Bay of Plenty. Officers are currently selecting a phone list for use in the pilot and intend to have this phase running for six months after which, if successful, the automated system will be rolled out across the region.
114. Asset Emergency Plans – Greater Wellington has commenced a programme of developing emergency plans for assets that have been identified through the annual asset performance inspections as being below standard. These action plans will have in place temporary trigger levels, evacuation plans, and specific response plans in the event a flood event occurs before the assets can be brought back up to the required standard.

Ngā hua ahumoni

Financial implications

115. For this reporting period, projects are within the current flood protection budgets.
116. Kānoa funded projects required part funding from Greater Wellington, and officers have brought Long Term Plan funding forward to enable the gains for these projects to be realised.

Ngā Take e hāngai ana te iwi Māori

Implications for Māori

117. 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.
118. Implementation with mana whenua partners is guided by Te Whāriki – the new Māori Outcomes Framework as part of Council's Long-Term Plan 2021–31.
119. Cultural liaison or co-design contracts have been signed by Te Rūnanga o Toa Rangatira Inc., Rangitāne ō Wairarapa Inc., Ngati Kahungunu ki Wairarapa Charitable Trust and Port Nicholson Block Settlement Trust for enhanced involvement and collaboration on programme work for the Climate Resilience Programme.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

120. Each project within the catchment considers and responds to the predicted impacts of climate change when considering the appropriate response to the issue the project seeks to address.
121. This programme aligns with the 2015 Climate Change strategy which states we will help the region adapt to climate change. The projects increase climate change adaptation and resilience to natural disasters in the region.
122. The greenhouse gas (GHG) emissions from rock supply vary depending on the quarry source of the rock and transport to the work sites. Quarry sources for projects vary. The emissions from rock supply production and transport are not presently part of the organisation's GHG inventory.
123. Heavy machinery will also be used to carry out the work proposed in these projects. The emissions from these have not been estimated. However, in the 2018-19 year use of heavy machinery mainly for flood protection works at Greater Wellington represented two percent of the total organisational carbon footprint (835 tCO₂e).
124. Quarry selection will be the single largest determinant of project emissions. While it seems likely that quarry operations could be improved to reduce emissions to some extent, the avoidance of long-distance transport of the rock is the most obvious means to minimise emissions. This was looked into as part of procurement for projects, however scarcity of rock supply and lack of suitable material made any emissions avoidance extremely difficult.
125. Targeted planting was carried out to mitigate CO₂ emissions for the Kānoa projects.
126. Greater Wellington currently assesses options to address flood risk based on the predicted impacts of climate change over the next 100 years. Unless specified differently for specific projects, these values are an increase in rainfall intensity of twenty percent, and a sea level rise of 1 metre for District Planning and 1.3 metres for infrastructure planning.

Ngā tūāoma e whai ake nei

Next steps

Te Awa Kairangi/Hutt River Floodplain Management Plan (2001)

127. Progress the RiverLink project: commence construction; continue community connection and project awareness.
128. Gauging and monitoring improvements.
129. Continue reviewing and updating the regional flood hazard modelling standard, updating the flood risk management planning guidelines and flood emergency planning and projects.
130. Continue FMP and Environmental Strategy Projects as budgets allow.

Pinehaven Floodplain Management Plan (2016)

131. Progress the stream capacity and environmental improvement works.

Otaki Floodplain Management Plan (1998)

132. Ōtaki, Waitohu and Mangapouri combined flood hazard modelling.

133. Ōtaki River Environmental Strategy review.

134. Waitohu Flood Risk Management plan.

135. Further discussions with Iwi and others, so that we can obtain a river management consent for the Ōtaki River.

136. Ongoing Environmental monitoring.

137. Asset performance assessment.

138. Assessing and scoping the next major project on the Otaki River (in lieu of the reviewed FMP giving this direction). One of the projects we are considering is Otaki Cliffs.

139. Native planting and minor willow planting.

140. Support to Friends of the Ōtaki River.

141. Gravel extraction.

142. Vegetation maintenance.

143. River beach contouring and beach grooming.

144. Continued interface with both Winstones and the PP2Ō project.

145. Left bank upstream of the Cliffs, infill of erosion.

Waikanae Floodplain Management Plan (1998)

146. Updating the Hydraulic Model for the Waikanae River.

147. Further discussions with Iwi and others, so that we can obtain a river management consent for the Waikanae River.

148. Asset performance assessment.

149. Ongoing plant maintenance for all recent native plant sites

150. Continuing negotiations to acquire more land.

151. Planting 600 natives at Parikawau/Edgewater Park.

152. Track and vegetation maintenance as required.

Te Kāuru Floodplain Management Plan (2019).

153. Completion of Stage two – River Road, Masterton (150m rock revetment) – targeted to be complete by the end of summer 2023/24.

154. Finalisation of the design and procurement for Stage three – River Road, Masterton.

155. Contamination report for South Masterton stopbank.

156. Commencement of buffer planting – riparian planting of native trees.

- 157. Commencement of development of the Environmental Strategy with community and iwi partners.
- 158. Options assessment for the Waipoua river urban reach now that the flood hazard has been identified.

Waiōhine River Plan (2022)

- 159. Consultation with directly affected landowners, final stopbank designs, flood modelling and consent application.
- 160. Appointments to the Waiōhine River Plan Advisory Committee (completed 21 September 2023) and meeting commencement.
- 161. Ongoing maintenance works including Fullers Bend erosion repair.
- 162. Development of the Environmental Strategy, with community and iwi partners.

Lower Wairarapa Valley Development Scheme (LWVDS) - Operations

- 163. Awaroa Sill upgrade.
- 164. Whakawhiriwhiri streamworks to manage flooding.
- 165. Mahaki stopbank relocation.

**Ngā āpitihanga
Attachments**

Number	Title
1	Annual Floodplain Management Implementation presentation
2	Hutt Floodplain Management Plan summary progress table
3	Pinehaven Floodplain Management Plan summary progress table
4	Te Kāuru Floodplain Management Plan summary progress table
5	Lower Wairarapa Valley Development Scheme summary progress table

**Ngā kaiwaitohu
Signatories**

Writers	Sharyn Westlake – Principal Engineer, Riverlink Madeliene Playford – Acting Team Leader, FMP Implementation, Logistics and Resourcing, Delivery Richard Coles - Senior Project Manager, FMP Implementation, Logistics and Resourcing, Delivery Andy Brown – Team Leader, Knowledge Water, Knowledge and Insights Hamish Fenwick – Team Leader, Flood Operations, Environment Operations, Delivery
Approvers	Jacky Cox – Manager, Logistics and Resources, Delivery Jack Mace – Director, Delivery Lian Butcher – General Manager, Environment Group

He whakarāpopoto i ngā huritaonga Summary of considerations
<p><i>Fit with Council's roles or Committee's terms of reference</i></p> <p>The Environment Committee has the responsibility to oversee the development, implementation and review of Council's environmental strategies, policies, plans, programmes, initiatives and indicators to improve environmental outcomes for the Wellington Region's land, water, air, biodiversity, natural resources, parks and reserves and coastal marine area.</p>
<p><i>Contribution to Annual Plan / Long term Plan / Other key strategies and policies</i></p> <p>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. Development and implementation of related work programmes fall under the core activities of the 2021-2031 Long Term Plan.</p>
<p><i>Internal consultation</i></p> <p>Specific projects consult with groups and departments across Greater Wellington where relevant to a project.</p>
<p><i>Risks and impacts: legal / health and safety etc.</i></p> <p>The purpose of implementation floodplain management plans is to reduce the risk to communities and improve the region's resilience.</p>

Annual Floodplain Management Plan Implementation Report

June 2022 – June 2023

Presented by:

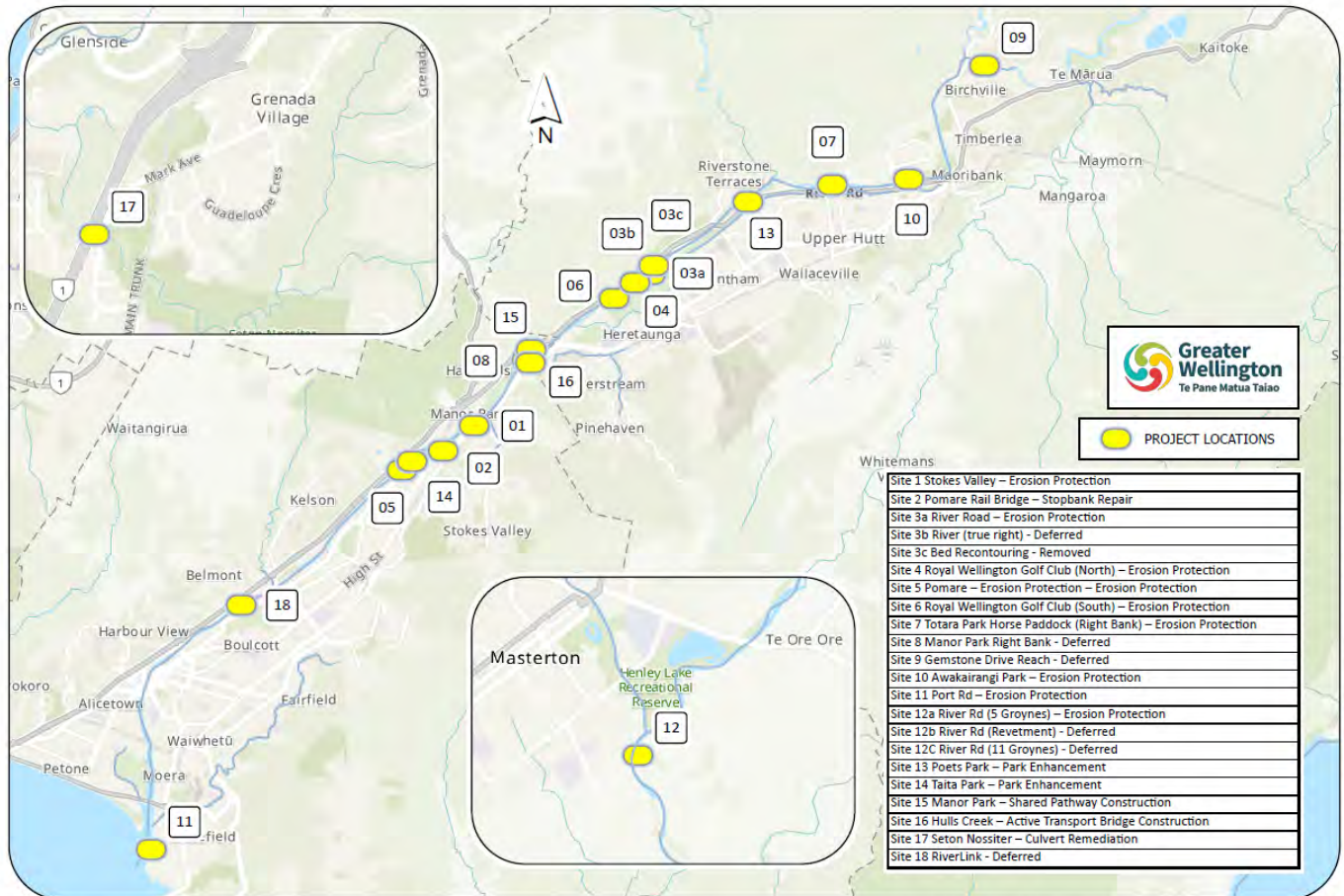
Madeliene Playford - Acting Team Leader, Floodplain Management Plan Implementation, Greater Wellington Regional Council



Highlights of the 2022 – 2023 financial year

- Completion of the Kānoa Climate Resilience programme
- New rates set for Te Kāuru FMP and Waiōhine River Plan, enabling capital works to commence.
- Additional resource within the FMP Implementation team.
- Successful continuance of the MfE Riparian Management Jobs for Nature project
- Continuation of walking and cycling tracks through the Waikanae and Otaki rivers.

Climate Resilience Programme



Initially

1.5 year duration
 Value \$17.6M - funded:
 Kānoa \$10.7M / GW
 \$5.7M / MDC \$0.34M

Finally

2.5 years duration
 Value \$23.6M – funded:
 Kānoa \$10.7M / GW
 \$12.5M / Other co-funders \$0.4M

Kānoa Resilient River Communities Programme
 GW FLOOD PROTECTION - PROJECT LOCATIONS (Tranche 1)

Drawn : COOKP, 19 April 2022, Updated 3 May 2023
 File Ref : PDU Show Ready Projects April 2022 - Site Map - 2023 apr
 Plotted 1:50 pm, 4/05/2023



Te Wai Takamori o Te Awa Kairangi - RiverLink

- Resource consents and Notice of Requirements granted November 2022
- Interim Alliance partners Aecom|Fletcher appointed April 2023
- Vacant possession of properties purchased by GW started late 2022 and continues 2023.
- Demolition and house moving contracts were awarded by GW to Ceres and Brittons mid-2023.
- GW RiverLink team established May 2023.



Site 1: Stokes Valley Weir Repair and Fish Passage



Before



After

Site 3a: River Road Erosion Repair – 3 groynes



Before

After



Site 7: Totara Park Horse Paddock – replacing damaged rock groyne



Before



After

Site 10: Awakairangi Park – removed damaged structure and bed recontouring

Attachment 1 to Report 23.548



Before



After

Site 11: Port Road – rock revetment

Attachment 1 to Report 23.548



Before



After



Penguin Home

Environmental Outcomes – Poets Park



Before



After

Site 12 – River Road Masterton Stage One



Pinehaven Stream



Otaki and Waikanae river – walking and cycling tracks



Operational Matters – Environmental Strategy Implementation



Recreational facilities management and seat installation



Operational Matters – River Works

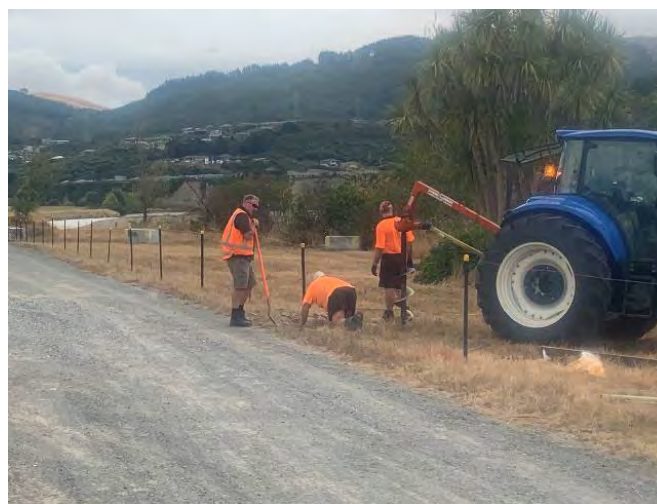


Building rock groynes at Whakatikei



Attachment 1 to Report 23.548

Willow tethering at Belmont



Safety fencing at Gibbons St erosion site

Operational Matters

Keeping the river channel clear

Attachment 1 to Report 23.548



Planning and Emergency Management

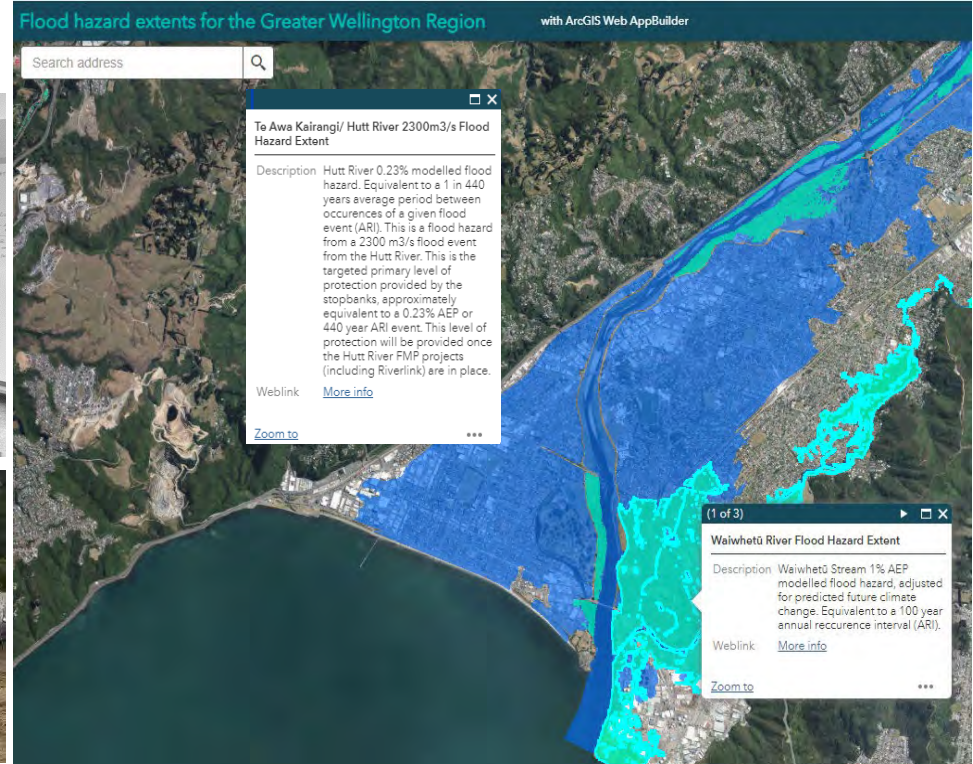


<https://www.thepost.co.nz/a/nz-news/350007890/the-perfect-wellington-storm-could-test-even-our-best-laid-emergency-response-plans>
Ethan Te Ora – May 6th 2023

Attachment 1 to Report 23.548



GWRC Situation Report (SitRep)			
Details			
Report date & time	17-02-2023 10:00	GWRC Incident category	MODERATE
Incident name/reference	12FEB2023-Ext-Gabrielle		
Local classification (by EOC Area)			
Wairarapa	MODERATE	Kāpiti	MINOR
Upper Hutt	MINOR	Porirua	MINOR
Hutt	MINOR	Wellington	MINOR
Incident summary			



Work Planned for 23/24

FMP	Mahi
Hutt FMP	Progress Riverlink Continue FMP and Environmental Strategy Projects
Pinehaven FMP	Progress stream capacity and environmental improvements
Otaki FMP	Assess next major projects, such as Otaki Cliffs
Waikanae FMP	Planting of 600 natives at Parikawau/Edgewater Park
Waiohine FMP	Consultation with directly affected landowners, finalise stopbank designs, flood modelling and consent application
Te Kauru FMP	Completion of Stage 2 River Road, Masterton Finalise design for Stage 3 River Road, Masterton Contamination report for South Masterton Stopbank Commencement of buffer planting - with natives trees Options assessment for Waipoua river - urban reach
Other	Gauging and monitoring improvements Continue process, planning and project work

Questions?

Hutt Floodplain Management Plan summary progress table

Updated 26/9/23											September 2023					
TOTALS IMPLEMENTATION HUTT FMP											Date AMP	COST \$M 2001 FMP	Target % at completion			Percent Complete to date
											2000-2051	\$77.76	100.00%			44.34%
REACH 1 : River Mouth to Estuary Bridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	4.69%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	2.35%	HRFMP (Page #)						
River Mouth Channel Works	1	6	after 2010	2032-2035	\$3.65	4.69%	Partially complete	0.5	2.35%	52						
REACH 2 : Estuary Bridge to Ava Rail Bridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	17.16%	STAGE		6.71%	HRFMP (Page #)						
Shandon golf course (RB) stopbank	2	2	after 2010	Ava Woolen Mills (2028-2034)	\$1.72	2.21%			0.00%	54						
Light rock protection works (Estuary to Ava rail bridge)	2	2	after 2010	Ava Woolen Mills (2028-2034)	\$0.43	0.55%	Partially complete	0.5	0.28%	54						
Woolen mills (Estuary to Ava LB) stopbank	2	6	after 2010	Ava Woolen Mills (2028-2034)	\$3.99	5.13%			0.00%	54						
Relocation and rock lining (Estuary to Ava LB)	2	6	after 2010	Ava Woolen Mills (2028-2034)	\$2.20	2.83%			0.00%	54						
Ava rail bridge investigations	2	1	2000-2002	Alicetown Strand Project (2000-2010)	\$0.23	0.30%	Complete	1	0.30%	54						
Ava rail bridge waterway improvements	2	1	2003-2008	Alicetown Strand Project (2000-2010)	\$4.77	6.13%	Complete	1	6.13%	54						
REACH 3 : Ava Rail Bridge to Ewen Bridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	38.14%	STAGE		20.53%	HRFMP (Page #)						
Strand park (Ava to Ewen RB) river realignment and land purchase	3	3	2000-2005	Alicetown Strand Project (2000-2010)	\$4.48	5.76%	Complete	1	5.76%	56						
Strand park stopbank upgrade (Ava to Ewen LB)	3	1	2000-2010	Alicetown Strand Project (2000-2010)	\$2.64	3.40%	Complete	1	3.40%	56						
Tarna Street stopbank upgrade (Ava to Ewen RB)	3	3	2000-2010	Alicetown Strand Project (2000-2010)	\$2.48	3.19%	Complete	1	3.19%	56						
Melling Bridge investigations	3	3	2001-2002	RiverLink (2015-2028)	\$0.06	0.08%	Complete	1	0.08%	56						
Daly Street (Ewen to Melling RB) stopbank upgrade and land purchase	3	1	2008+	RiverLink (2015-2028)	\$4.61	5.93%	In Design + land	0.5	2.96%	56						
Marsden Bend (RB) channel works	3	3	after 2010	RiverLink (2015-2028)	\$1.91	2.46%	In Design		0.00%	56						
Pharazyn St (Ewen to Melling RB) stopbank	3	3	after 2010	RiverLink (2015-2028)	\$3.70	4.76%	In Design		0.00%	56						
Riverside car park channel works (LB) and light protection works (Ewen to Melling LB)	3	1	after 2010	RiverLink (2015-2028)	\$1.78	2.29%	In Design		0.00%	56						
Land for Melling Bridge Upgrade	3	14	after 2010	RiverLink (2015-2028)	\$8.00	10.29%	In Design + land	0.5	5.14%	56						
REACH 4 : Melling Bridge to Kennedy Good Bridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	11.75%	STAGE		10.71%	HRFMP (Page #)						
Melling to Kennedy Good Bridge channel works	4	1	after 2010	RiverLink (2015-2028)	\$1.11	1.43%	In Design + land	0.5	0.71%	58						
Melling Bridge (RB) stopbank upgrade	4	3	after 2010	RiverLink (2015-2028)	\$0.26	0.33%	In Design		0.00%	58						
Boulcott Golf Course (LB) stopbank upgrade and land compensation	4	1	after 2005	Boulcott (2010-2013)	\$5.44	7.00%	Complete	1	7.00%	58						
Connolly Street (LB) stopbank and land purchase	4	1	after 2010	Boulcott (2010-2013)	\$2.33	3.00%	Complete	1	3.00%	58						
REACH 5 : Kennedy Good Bridge to Pomare Rail Bridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	5.61%	STAGE		0.91%	HRFMP (Page #)						
Kennedy Good Bridge to Pomare (LB) stopbank upgrade	5	4	after 2010	KGB Pomare (2037-2042)	\$0.86	1.11%			0.00%	60						
Vegetation at Kennedy Good Bridge to Pomare rail bridge (LB/RB)	5	14	after 2010	KGB Pomare (2037-2042)	\$1.63	2.10%			0.00%	60						
House Raising at Belmont to 1900	5	8	after 2010	KGB Pomare (2037-2042)	\$0.45	0.58%			0.00%	60						
Rock protection at Belmont, Nash St and Pomare Rail Bridge (LB/RB)	5	4	after 2010	KGB Pomare (2037-2042)	\$1.42	1.83%	Partial Work	0.5	0.91%	60						
REACH 6 : Pomare Rail Bridge to Silverstream Bridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.98%	STAGE		0.00%	HRFMP (Page #)						
Pomare rail bridge to Silverstream Bridge channel works (LB/RB)	6	13	after 2010	Manor Park Pomare (2041-2051)	\$1.34	1.72%			0.00%	62						
Manor Park stopbanks to 2300	6	13	after 2010	Manor Park Pomare (2041-2051)	\$0.98	1.26%			0.00%	62						
REACH 7 : Silverstream Bridges to Moonshine Bridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	5.85%	STAGE		0.64%	HRFMP (Page #)						
Moonshine Bridge investigations	7	10	2001-2002	Trenham to Whakatiki (2032-2036)	\$0.06	0.08%	Investigation beg.	0.5	0.04%	64						
Moonshine bridge waterway upgrade	7	10	after 2010	Trenham to Whakatiki (2032-2036)	\$3.31	4.26%			0.00%	64						
Whitiraki Crescent stopbank to 2300	7	5	2004-2006	Trenham to Whakatiki (2032-2036)	\$0.47	0.60%	Complete	1	0.60%	64						
Trenham to Whakatiki stopbank (part)	7	8	after 2010	Trenham to Whakatiki (2032-2036)	\$0.71	0.91%			0.00%	64						
REACH 8 : Moonshine Bridge to Whakatiki River																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.89%	STAGE		0.00%	HRFMP (Page #)						
Trenham to Whakatiki (LB) stopbank (part)	8	8	after 2010	Trenham to Whakatiki (2032-2036)	\$2.00	2.57%			0.00%	66						
Moonshine to Maoribank (LB) channel works (part)	8	10	after 2010	Trenham to Whakatiki (2032-2036)	\$0.25	0.32%			0.00%	66						
REACH 9 : Whakatiki River to Norbert St. Footbridge																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	8.31%	STAGE		0.00%	HRFMP (Page #)						
Totara park stopbanks to 2300	9	10	after 2010	NOT IN AMP	\$1.42	1.83%			0.00%	68						
Elbow park channel upgrade	9	10	after 2010	NOT IN AMP	\$1.41	1.81%			0.00%	68						
Whakatiki to Maoribank (LB) stopbank	9	10	after 2010	NOT IN AMP	\$0.28	0.36%			0.00%	68						
Moonshine to Maoribank channel works (part)	9	10	after 2010	NOT IN AMP	\$3.35	4.31%			0.00%	68						
REACH 10 : Norbert St. Footbridge to Gemstone Drive																
WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.61%	STAGE		2.49%	HRFMP (Page #)						
Norbert Street footbridge to Akatarawa Channel works	10	14	2004-2005	2037-2042	\$0.34	0.44%	Complete	1	0.44%	70						
Akatarawa Road (LB) floodwall at 1900	10	12	2004-2005	2037-2042	\$0.72	0.93%	Complete	1	0.93%	70						
Gemstone Drive channel works to 1900	10	12	2005-2006	2037-2042	\$0.64	0.82%	Complete	1	0.82%	70						
Gemstone Drive (LB) stopbank to 1900	10	12	2005-2006	2037-2042	\$0.15	0.19%	Complete	1	0.19%	70						
Bridge Road House Raising to 1900	10	7	2003-2007	NOT IN AMP	\$0.18	0.23%	Partial Work	0.5	0.12%	70						

Pinehaven Floodplain Management Plan summary progress table

Physical Works & Consultancy							
Stage	Budget/Contract value	Actual	Remaining budget	% Complete	Forecast at Completion	Variance at Completion	Comment
Phase 1 (Culverts)	\$12,349,839	\$12,349,839	\$0	100%	\$12,349,839	\$0	
Chargeable works to UHCC							
Property purchase	\$2,182,956	\$2,182,956	\$0	100%	\$2,182,956	\$0	
Culvert purchase	\$484,000	\$484,000	\$0	100%	\$484,000	\$0	
Roundabout construction	\$230,541	\$230,541	\$0	100%	\$230,541	\$0	
Phase 2 (Willow Park)	\$6,078,571	\$1,436,402	\$4,642,169	24%	\$6,078,571	\$0	Includes \$778k spent in FY2023 for early procurement
Phase 3 (28 BMR to Sunbrae Drive)	\$6,330,000	\$0	\$6,330,000	0%	\$6,330,000	\$0	
Phase 4 (28BMR to Pinehaven Roundabout)	\$10,760,000	\$0	\$10,760,000	0%	\$10,760,000	\$0	
Phase 5 (Pinehaven reserve to Pinehaven Roundabout)	\$18,960,000	\$0	\$18,960,000	0%	\$18,960,000	\$0	
Total Costs	\$57,375,907	\$16,683,738	\$40,692,169	29%	\$57,375,907	\$0	
Contingency							
Item	Contingency Reserve		QRA Contingency Estimate		Remaining QRA Contingency Estimate		Comment
Project contingency							Included in estimates above
Project funding risk	\$2,868,800		\$0		\$2,868,800		
Sub-total	\$2,868,800		\$0		\$2,868,800		
Forecasted outturn cost					\$60,244,707		

Te Kāuru Floodplain Management Plan summary progress table

IMPLEMENTATION TE KAURU FMP	UPDATED JUNE 2023			COST \$M FMP	Target % Complete		Percent Complete to Date	
				\$37.99	100.00%		1.18%	
WORK PLANNED IN FMP	Type	REACH	PRIORITY	COST \$M FMP	100.00%	% Complete	1.18%	Te Kauru (Page #)
Design Line Review	Monitoring	Western	High	\$0.20	0.53%	1	0.53%	15
Pool Riffle Run Envelopes	Monitoring	Western	High	\$0.05	0.13%	0	0.00%	19
Emergency Management and Flood Warning Improvements	Monitoring	All	High	\$0.10	0.26%	0	0.00%	23
New Governance and Funding Structures	Monitoring	All	High	\$0.05	0.13%	1	0.13%	30
Wairapa Combined District Plan Review (includes designations)	Other	All	High	\$0.20	0.53%	1	0.53%	20
Riparian Planting of the Buffer	Non-Structural	All	High	\$25.00	65.82%	0	0.00%	17
Pest Plant and Animal Management	Non-Structural	All	High	\$3.30	8.69%	0	0.00%	18
Strategic Land Purchase	Non-Structural	All	High	\$5.00	13.16%	0	0.00%	41
Waingawa River	Operational Activities	14 to 17	High	\$0.04	0.11%	0.5	0.05%	135
Waipoua River	Operational Activities	9 to 13	High	\$0.05	0.14%	0.2	0.03%	100
Ruamahanga River	Operational Activities	1 to 8	High	\$0.14	0.37%	0.2	0.07%	49
Kopuaranga River	Operational Activities	18	High	\$0.02	0.06%	0.2	0.01%	163
Whangaehu River	Operational Activities	22	High	\$0.00	0.01%	0.2	0.00%	163
Taueru River	Operational Activities	29	High	\$0.00	0.01%	0.2	0.00%	163
River Road erosion protection works	Structural	5	High	\$0.63	1.66%	0.5	0.83%	78
Urban Waipoua Structural	Structural	13	High	\$0.00	0.00%	0	0.00%	131

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IMPLEMENTATION TE KAURU FMP	UPDATED JUNE 2023			COST \$M FMP	Target % Complete		Percent Complete to Date	
Community Officer	Other	All	Low	\$0.06	0.16%	0	0.00%	25
Hood Aerodrome erosion protection	Structural	17	Low	\$0.76	2.00%	0	0.00%	160
Environmental Strategy	Monitoring	All	Medium	\$0.20	0.53%	0	0.00%	24
Riparian Management Officer	Other	All	Medium	\$0.12	0.32%	0	0.00%	27
Kopuaranga River Scheme extension (24km)	Other	N/A	Medium	\$0.00	0.00%	0	0.00%	164
Rathkeale College stopbank	Structural	4	Medium	\$1.00	2.63%	0	0.00%	70
Paierau Road Flood Hazard	Structural	12	Medium	\$0.02	0.05%	0	0.00%	122
MDC raw water supply erosion protection	Structural	16	Medium	\$0.32	0.84%	0	0.00%	150
South Masterton stopbank	Structural	16	Medium	\$0.59	1.55%	0	0.00%	152
MDC Homebush WWTP	Structural	5	TBC	\$0.13	0.33%	0	0.00%	80

Lower Wairarapa Valley Development Scheme summary progress table

Work	Spent to date					Revised Schedule								2020/21	Actual 2021/22	Actual 2022/23	Forecast 2023/24	Forecast for 6 yrs	Total for 11 years
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20						
																	0		
Upgrade of stopbanks	73,580	119,776															0	193,356	
Rock groynes(Xs 20-21RB)																	0	0	
Boulder groynes (RC - LB)																	0	0	
Boulder groynes (Donald - LB)																	0	0	
Bufferzone planting				47,696													0	47,696	
Delta Investigation												50,000	50,000				100,000	100,000	
																	0		
Stopbank upgrade							402,000	470,000									872,000	872,000	
Fencing & planting		19,325		2,554													0	21,879	
Land/stopbank/fencing			446,266			71,500					335,000						406,500	852,766	
																	0		
Planting			3,520														0	3,520	
Fencing			1,218														0	1,218	
Rock/boulder groynes/retards		172,617	180,827	98,600													0	452,044	
Boulder groynes U/s Shelton						4,500											4,500	4,500	
Boulder groynes Wildes						35,000											35,000	35,000	
Boulder groynes Guscott																	0	0	
Clumps/boulders Tuckers						60,000		30,000									90,000	90,000	
Boulder groynes Herricks				14,827													0	14,827	
Upgrade S/B Kershaw																	0	0	
Boulder groynes Handyside							9,000										9,000	9,000	
Boulder groynes Ashton							10,500										10,500	10,500	
Develop Tawaha Spilway																	0	0	
																	0		
S/b setback 20m	25,500																0	25,500	
Culvert upgrade									70,000								70,000	70,000	
Remove overburden																	0	0	
Boulder groynes																	0	0	
Boulder groynes		20,952															0	20,952	
Battering/Boulders						20,000		15,000									35,000	35,000	
Flood Gate						20,000											20,000	20,000	
W.Cabling/Boulder								50,000									50,000	50,000	
Remove overburden																	0	0	
Boulder groynes																	0	0	
S/b setback 20m or b/groynes				8,636													0	8,636	
Boulder groynes																	0	0	
Remove overburden																	0	0	
S/b setback 20m + b/groynes	103,250	75,127		36,172													0	214,549	
Boulder groynes	60,350																0	60,350	
Boulder groynes	65,000						11,000										11,000	76,000	
Boulder groynes	51,420																0	51,420	
Boulder groynes	83,950					10,000											10,000	93,950	
Boulder groynes	81,200																0	81,200	
Purchase property									430,000								430,000	430,000	
Rock berm (rip rap)	98,750	144,209	21,305														0	264,264	

Attachment 5: Report 23.548

Remove overburden																			0	0					
Remove overburden																			0	0					
Retreat stopbank																		480,000	480,000	480,000					
S/b setback					481,549	909,574													0	1,391,123					
Boulder groynes	130,650																		0	130,650					
S/b setback 20m																			0	130,650					
Remove overburden													364,005	323,798	25,000	4,000	0	450,000	1,166,803	1,166,803					
Remove overburden																			60,000	60,000					
Remove overburden																			40,000	40,000					
Benching/groynes		35,854																	0	35,854					
Boulder groynes				31,571															0	31,571					
Benching/groynes		36,168																	0	36,168					
Scour protection																			95,000	20,000					
Boulder Protection																			115,000	115,000					
Regrade, remove trees, culverts																			0	0					
							55,000	231,000	170,000	120,525	50,000								175,000	4,000	250,000	0	801,525	801,525	
																								0	0
Boulder rip rap	101,850	82,640	68,137	57,680	69,045	52,000	92,000	10,000	60,000															214,000	593,352
Planting the slope		1,690	26,813	32,197	18,915	35,000	20,000	7,000	0															62,000	141,615
boulder rip rap					27,691	60,000																		60,000	87,691
						21,000																		21,000	21,000
									230,000															230,000	230,000
Remove build up		44,270																						0	44,270
Total cost	875,500	752,628	779,657	765,084	1,040,052	444,000	775,500	752,000	1,105,525	70,000	335,000	414,005	373,798	200,000	8,000	250,000	930,000	5,403,828	9,616,749						
	9.10%	7.83%	8.11%	7.96%	10.82%	4.62%	8.06%	7.82%	11.50%	0.73%	3.48%	4.31%	3.89%	2.08%	0.08%	2.60%	9.67%							1.00	
	9.10%	16.93%	25.04%	32.99%	43.81%	48.43%	56.49%	64.31%	75.80%	76.53%	80.02%	84.32%	88.21%	90.29%	88.29%	92.89%	97.96%								

Environment Committee
23 November 2023
Report 23.531



For Information

FRESH WATER FARM PLANS

Te take mō te pūrongo

Purpose

1. To inform the Environment Committee (the Committee) on Freshwater Farm Plans (FWFPs) and the proposed approach to the implementation of FWFPs in the Wellington Region.

Te horopaki

Context

What are Freshwater Farm Plans?

2. FWFPs were introduced as part of the Government's Essential Freshwater Package in 2020. The FWFP regulations were gazetted in early June 2023. The Government's stated aims with the Freshwater Package and Farm Plans are to:
 - a Stop further degradation of New Zealand's freshwater resources and improve water quality within five years; and
 - b Reverse past damage and bring New Zealand's freshwater resources, waterways, and ecosystems to a healthy state within a generation.
3. FWFPs will be property specific and provide farmers the flexibility to find the right solution for their farm and catchment. Many farmers in the Region already have a farm environment plan or are part of an industry programme and FWFPs will build on that work.
4. Under the regulations, FWFPs will be needed for properties if they trigger the land use thresholds. These triggers are shown below:
 - a 20 or more hectares of the farm is arable land use, or
 - b 20 or more hectares of the farm is pastoral land use, or
 - c 5 or more hectares of the farm is horticultural land use, or
 - d 20 or more hectares of the farm is a combination of any two or more of the land uses described above.
5. FWFPs are different to Certified Farm Environment Plans (CFEP). Under regional rules in the Natural Resources Plan farm operators in eight priority catchments are required to have a CFEP. Originally Greater Wellington did not propose any 'catch-all' intensification or land use rules in relation to farming in the proposed Natural Resources

Plan. However, this was appealed and mediation in the Environment Court resulted in the requirement of CFEPs in the eight priority catchments. The timeframes for FWFP and CFEP are not well aligned.

Te tātaritanga Analysis

What is included in a FWFP?

6. The specific content of a FWFP is specified in the regulations. This includes:
 - a Administrative details about the farm
 - b Maps
 - c Catchment context information
 - d Identification and assessment of risks to freshwater and freshwater ecosystems, and
 - e Identifying actions with timeframes to avoid, remedy or mitigate effects on freshwater and freshwater ecosystems.
7. Currently, there is no specified format or template for FWFPs in the regulations. However, Te Uru Kahika – Regional and Unitary Councils Aotearoa (Te Uru Kahika) now intends to develop a template for a FWFP. This will be developed in collaboration with the regional sector, the Ministry for the Environment (MfE) and the Ministry for Primary Industries (MPI). This is a response to requests from both councils and industry for a template that can be used by those who do not have an existing farm plan template, who do not want to purchase access to any of the private sector systems being developed, and who want to develop their own plan.

Process for the FWFPs

8. The process for FWFPs is shown in the below diagram (Figure 1). The general process is that a farmer, or grower will:
 - a Need to determine if they are covered by the regulations
 - b Prepare the plan themselves or arrange for someone to prepare it for them
 - c Have their plan certified within 18 months of the regulations turning on in their part of the Wellington region and then again, every 5 years
 - d Implement their actions in line with their plan, and
 - e Get their plan audited in the first 12 months of having it certified and then again at a frequency based on their last audit grade.

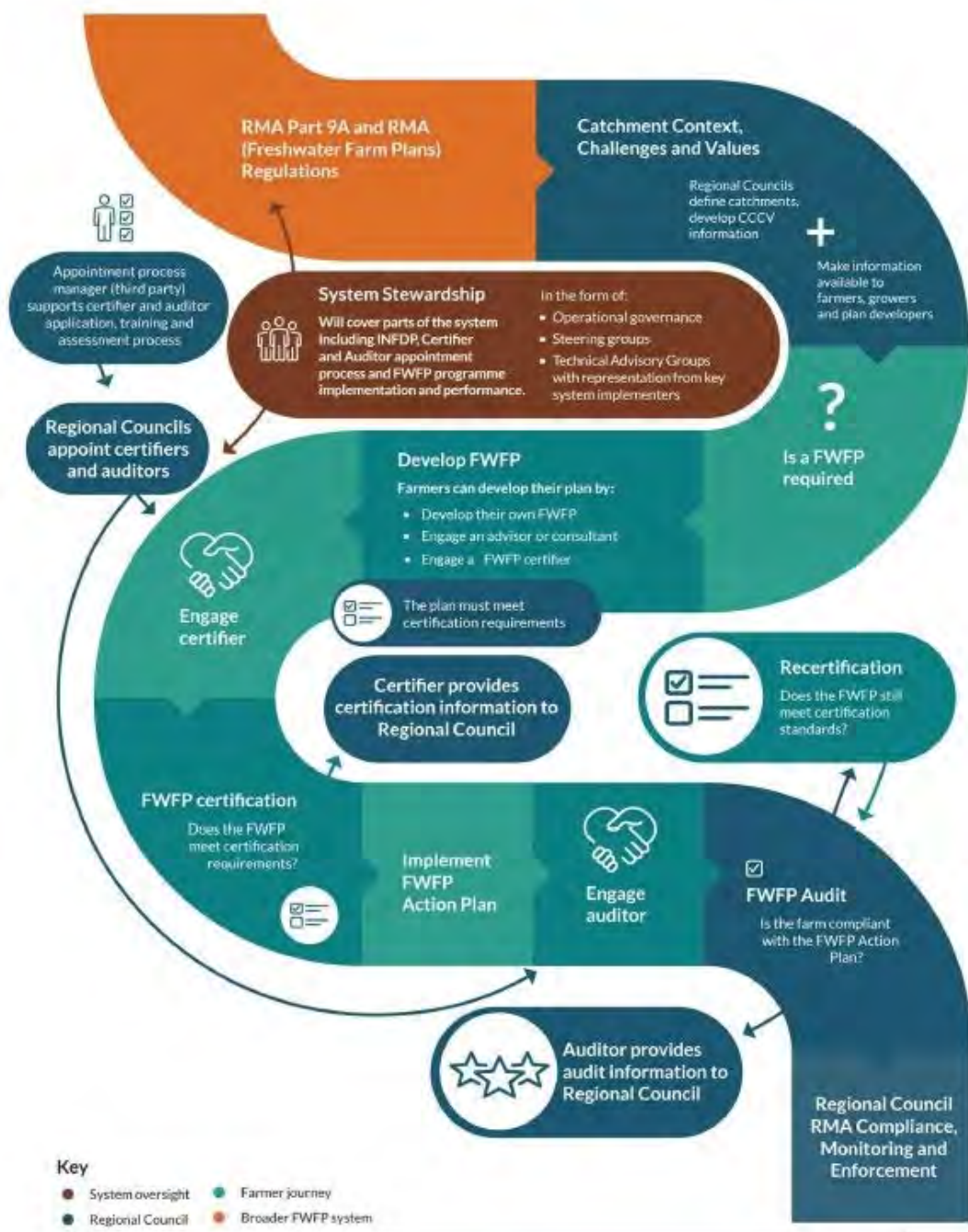


Figure 1: Freshwater Farm Plan System Overview.

Certification and Auditing process for FWFP

9. FWFPs will need to be certified. A certifier will assess if a plan meets the certification requirements, which includes deciding if the plan has appropriately identified and assessed on farm risks to freshwater, selected actions to manage risks and accounted for their catchment context (See figure 2).

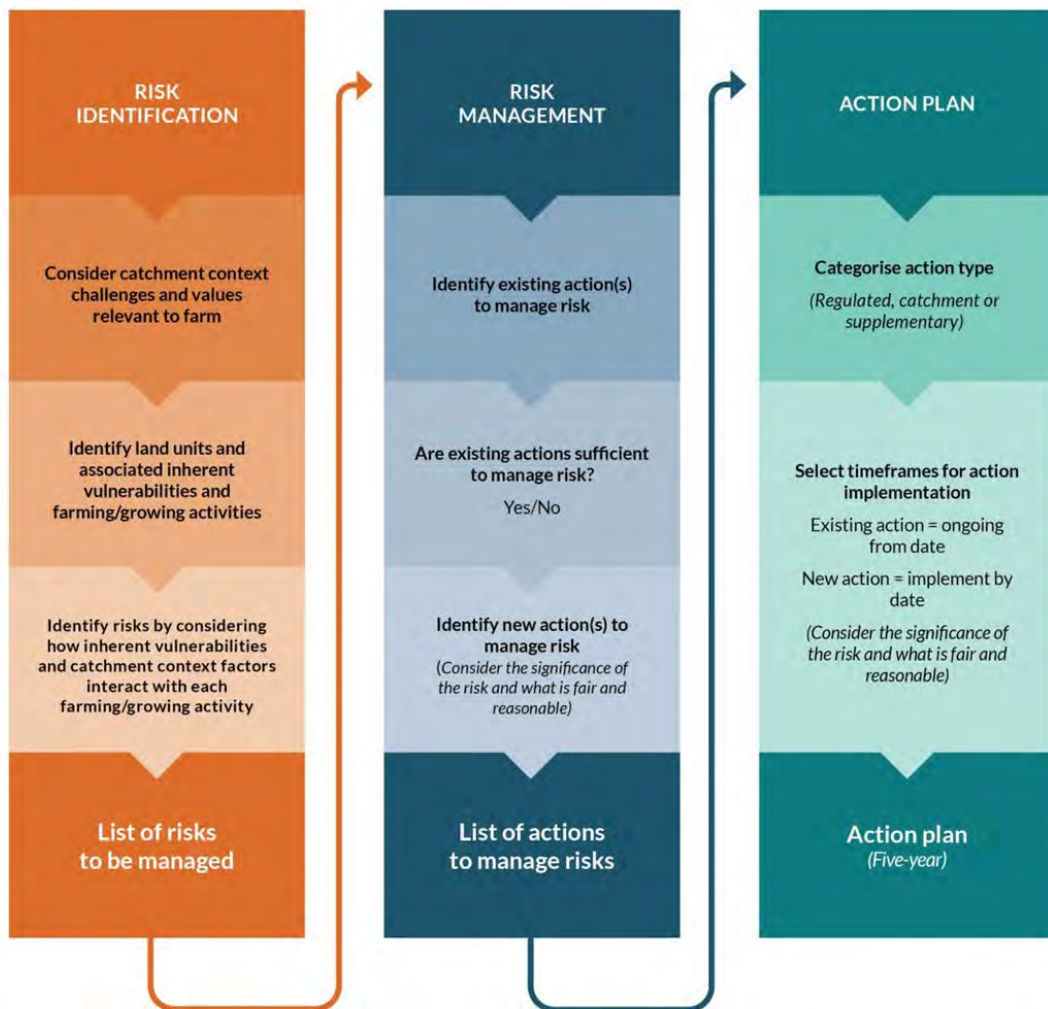


Figure 2: The process for developing a FWFP.

10. FWFPs will need to be audited. The auditor will assess whether the farm operator is implementing the actions as set out in the certified FWFP. The audit grade will determine the timeframe that the farm operator must arrange the next audit after receiving the final audit report.
11. A person can be a certifier and an auditor but cannot audit a plan they prepared or certified.

12. The system of certifiers and auditors will mostly be administered at the national level. There will be a mandatory national training for certifiers and auditors. The national training will run by AsureQuality. Once certifiers and auditors have completed national training, they will need to undertake regional training as developed by regional councils. Greater Wellington must develop the regional training content.
13. Once appointed and trained, the tasks of auditing and certifying FWFPs happen separate to regional council.
14. The legislation does not allow for FWFPs to be certified prior to the regulations going live in the area the farm is located.
15. Certification and auditing are new approaches for farmers and growers in the Wellington region. Currently, only farm operators in the eight priority catchments outlined in the Natural Resources Plan require Certified Farm Environment Plans (CFEP), but there is no auditing requirement.

Use of existing farm plans

16. It is envisaged that existing farm plans can be used as a starting point for FWFPs, but they will need to be amended to meet the requirements in the FWFP regulations.

Data ownership and records

17. FWFPs will contain information about a property, some of which will need to be supplied to Greater Wellington by certifiers and auditors. This information includes administrative details, the certified action plan, maps, a statement of where the plan is being used to meet other regulatory requirements, a conflict-of-interest declaration, audit report and audit grade. All other data and information included in the plan does not need to be proactively supplied to Greater Wellington.
18. Te Uru Kahika is developing a system called the Integrated National Farm Data Platform (INFDP). This will provide councils with the ability to track certified FWFP action plans, identify farms still to obtain a certified FWFP and to report on actions taken and planned to improve freshwater. Until this is in place a bridging system will be used, which will hold the data until it can be transferred to the INFDP.

Catchment context, challenges and values

19. There is a requirement for regional councils to develop catchment context, challenges, and values (CCCV) to align with the proposed rollout order. The purpose of the CCCV is to provide catchment information to be included in the FWFPs so that people can understand the risks in their catchment and target their onsite actions to the specific issues in their catchment. A CCCV developed by a regional council must include matters such as:
 - a Existing local information (for example: soil data, freshwater data, significant sites, priority contaminants and significant species).
 - b Identified cultural matters of importance to mana whenua.

- c Freshwater objectives, policies, rules in relevant Regional Policy Statement or Natural Resources Plan.
 - d Relevant freshwater matters in plans recognised by an iwi authority and lodged with the regional council; and
 - e Actions plans made by the regional council under the NPS-FM.
20. CCCV relies on information already held by councils. It is not a process to introduce new requirements for farmers or growers. It is to be based on currently available information and does not require specific community consultation. A CCCV is to be publicised as soon as possible after the regulations are turned on in the region. For the Ruamāhanga Whaitua, which will be the first catchment to have the regulations turned on in the Wellington Region, the CCCV would need to be published by September 2024 at the very latest.
21. The CCCV will be displayed geospatially on our website. Matters such as specified keys for maps will also be considered through the development of this platform. The CCCV can be updated on an as needed basis.

Cross-regional boundaries

22. Properties that require a FWFP may cross regional, or rollout boundaries. A farm operator who has a farm that straddles a boundary, either within a region created by intra-regional phasing or a boundary between two regional councils will only be required to submit a FWFP to a certifier when the latter of the two councils, or areas of the region have had the regulations turned on. They will only need to prepare one plan.
23. Certifiers and auditors certifying/auditing a FWFP that straddles a council boundary need to be appointed in both regions.

Links to existing legislation and planning documents

24. FWFPs link to other legislation including the National Environmental Standards for Freshwater (NES-FW) and the National Policy Statement for Freshwater (NPS-FM). Currently these links relate to:
- a FWFPs are one component giving effect to the NPS-FM; and
 - b The ability to use FWFPs as a pathway to demonstrate effects of activities specified in legislation are the same or similar to if they were a permitted activity. As a result, a consent would not be required. This pathway is currently available for activities such as intensive winter grazing.
25. Te Mana o te Wai is the central concept in the NPS-FM for all freshwater management (see figure 3). Te Mana o te Wai hierarchy of obligations prioritises: first, the health and wellbeing of freshwater ecosystems; second the health needs of people; third the ability of people and communities to provide for their social, economic, and cultural wellbeing, now and in the future. Under the NPS-FM councils must actively involve mana whenua in freshwater management, as well as engage with others, to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region. The local

approach to giving effect to Te Mana o te Wai, and the content of regional plans will be reflected in FWFPs through the CCCV requirements.

26. Greater Wellington has existing regional freshwater planning documents, including a Natural Resources Plan (NRP) and a Regional Policy Statement. The information and policy direction contained in these documents will be used to help write the CCCV ensuring efficiency.

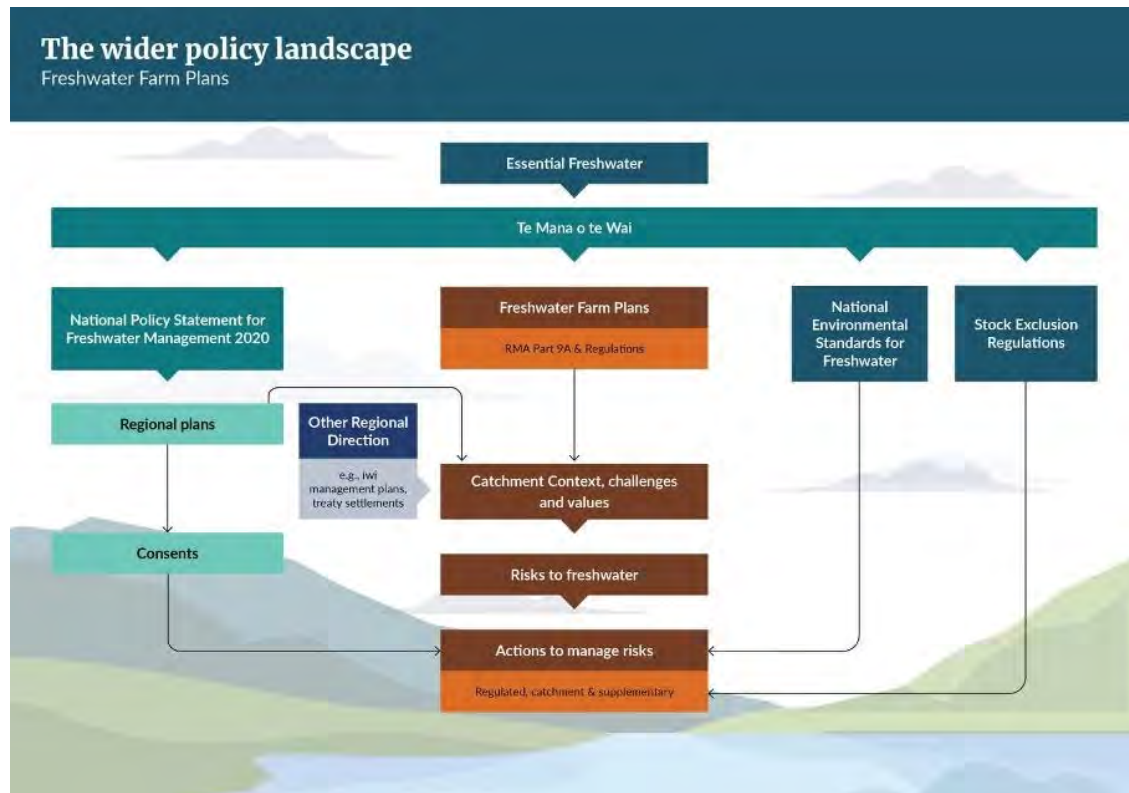


Figure 3: The wider policy landscape.

Benefits for farmers and growers

27. Whilst it is recognised that FWFPs are an additional requirement for parties to complete, there are a number of benefits of FWFPs. Broadly these benefits include:
 - a Combining and building on existing plans and reducing potential for duplication.
 - b Providing a structured approach for farmers and growers to maintain and, if needed lift performance.
 - c Ownership in understanding and managing risks on farm. There are many actions farmers and growers are already taking and this can support getting those down on paper.
 - d Provide farmers with a flexible framework to review their environmental impact and achieve positive outcomes. FWFPs are relevant to individual farms and their catchment context.

- e Provide a tool for farmers and growers to report on actions undertaken to maintain and improve freshwater in their catchment.

Compliance monitoring

- 28. Regional councils are required “to monitor compliance by farm operators with their duties under this Part and with any requirements in regulations.” Regional councils can employ all the tools available to them under the RMA to enforce compliance with the FWFP regulations.
- 29. The focus of compliance, monitoring and enforcement (CME) activities will be on educating and supporting farmers to understand the FWFP requirements. Engagement is already underway with primary industry stakeholders, and discussions with farmers when staff are on-site.
- 30. If non-compliance is identified, appropriate action will be undertaken in accordance with the RMA Compliance and Enforcement Policy.
- 31. A CME strategy for the FWFP system will be developed. Greater Wellington will work closely with Te Uru Kahika to develop our approach, and particularly with Horizons Regional Council to support best practice and consistency across the regional boundaries.

Roles for regional councils and mana whenua

- 32. The national system involves several parties. As well as the roles outlined previously for certifiers and auditors within the regulations, there are distinct roles for regional councils and mana whenua.

Regional Council's role

- 33. Greater Wellington’s expertise, local knowledge and relationships will contribute to the successful roll out of the system and help shape FWFPs in the Wellington region. The system requires regional councils to:
 - a Provide the CCCV as detailed previously
 - b Engage with the community to let them know how the FWFP system will be implemented
 - c Develop regional-specific training for certifiers and auditors
 - d Appoint certifiers and auditors as per guidance provided and support of the national processes being established with AsureQuality
 - e Keep records of certified FWFPs and audits of FWFPs undertaken using the INFDP.
 - f Develop and implement a CME strategy for the FWFP system as detailed above.

The role of mana whenua

- 34. In addition to the NPS-FM requirements on engagement with mana whenua and the community, the regulations include specific requirement for mana whenua involvement. This is specifically noted in the below sections of the regulations:

- a Clause 46, where Greater Wellington must collate information on CCCV including values and matters of importance to mana whenua.
- b Schedule 2 requires that certifiers and auditors must be able to demonstrate an understanding of the Treaty of Waitangi (te Tiriti o Waitangi), te ao Māori, Te Mana o Te Wai and sites or species of cultural significance as defined by mana whenua. This information will be included in the regional training for auditors and certifiers and will be developed with mana whenua.
- c Clause 5 in Schedule 2 requires Greater Wellington to engage with mana whenua in the preparation and delivery of training for certifiers on catchment context, and on the competencies for certifiers. Greater Wellington must also engage with mana whenua regarding practical assessments of certifiers if practical assessments are required as part of the certifier appointment process.
- d Clause 12 in Schedule 2 has the above requirement regarding auditor training.

Greater Wellington's FWFP implementation approach

- 35. The aim is to take a collaborative approach to implementation to ensure that farmers and growers are supported on the FWFP journey. It is recognised that for successful rollout of FWFPs within the region, Greater Wellington's relationships with industry, mana whenua, catchment groups and our farmer/grower community are essential.
- 36. The rollout of the FWFP system in the region is still to be confirmed by MfE and will come into effect in an Order in Council. We will use the Whaitua as our catchments and the proposed turn on dates for the regulations in each Whaitua are listed below (See Table 1, Figure 4).
- 37. Under regional rules in the Natural Resources Plan farm operators in eight priority catchments are required to have a Certified Farm Environment Plans (CFEP) or FWFPs. As CFEPs have an earlier completion date than FWFPs, we are providing guidance to certifiers of CFEPs to give effect to both sets of regulations. The priority catchments and their CFEP completion deadlines are listed below:
 - a Waitawa (within Kāpiti Coast Whaitua), Parkvale (within Ruamāhanga Whaitua) ***30 December 2023,***
 - b Otukura, Mangatārere, Waipoua (all within Ruamāhanga Whaitua) ***30 September 2024,*** and
 - c Kōpuaranga, Makakahakaha, Taueru (all within Ruamāhanga Whaitua) ***30 June 2025.***

Table 1: Proposed rollout order for the Wellington region

Catchment	Turn on dates	Anticipated number of farms+	Approximate area to be covered by FWFPs (ha)*
Ruamāhanga Whaitua	1 September 2024	1,000	205,000
Te Whanganui-a-Tara Whaitua	1 June 2025	200	25,400
Te Awarua-o-Porirua Whaitua	1 June 2025	70	7,200
Wairarapa Coast Whaitua	1 December 2025	330	196,000
Kāpiti Coast Whaitua	1 December 2025	200	14,800
Total		1,800	448,400

+ Likely underrepresents horticulture but overrepresents smaller holdings or vacant land use.

*Rounded down to the nearest 100 ha. When properties span two Whaitua the hectares are recorded in the catchment that contains most of the property.

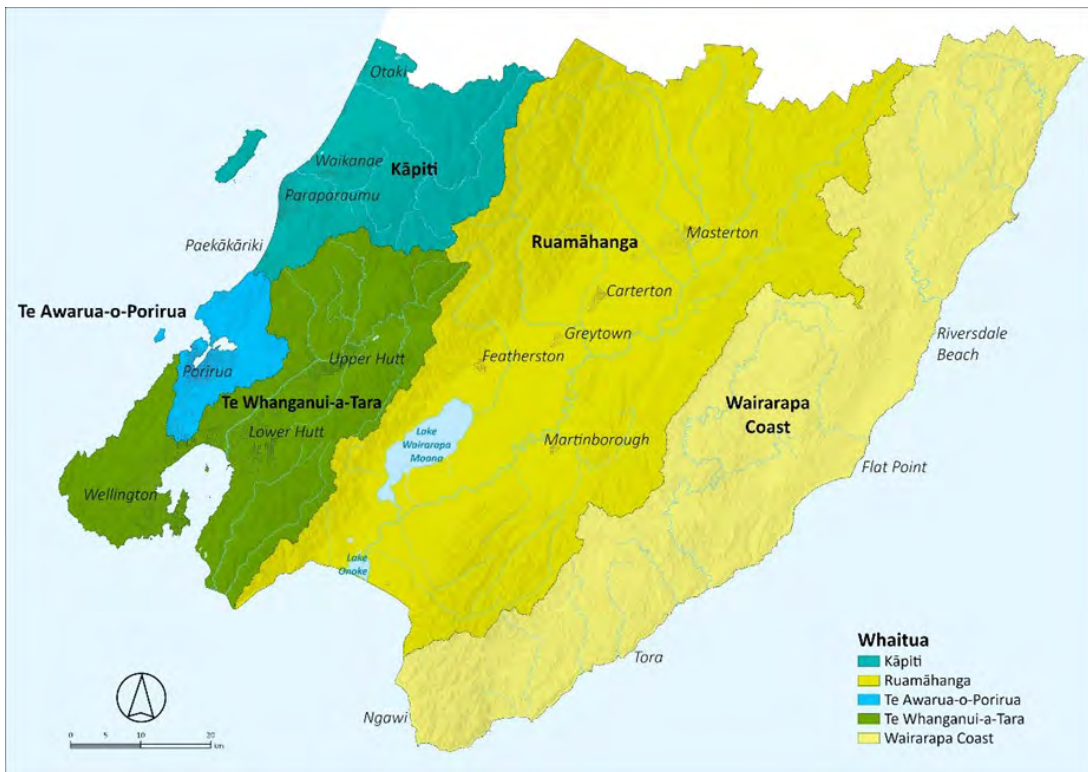


Figure 4: The five Whaitua in the Wellington region.

38. The internal Farm Environment Plan Steering Group has been focused on supporting farmers with Certified Farm Environment Plans (CFEP) and has undertaken some initial planning to deliver aspects of the FWFP system.
39. We are in the process of setting up a project management approach for the delivery of FWFPs and CFEPs.
40. Links with other councils, including those in the first and second rollout groups and with the wider regional sector will also be key to the successful implementation of FWFPs in the Wellington region. Greater Wellington is part of Te Uru Kahika, which has been set up by the regional sector to support collaboration. Te Uru Kahika has established a FWFP team to ensure collaboration, consistency, and efficiency on the implementation of FWFPs. They are committed to supporting FWFP implementation and are working with MfE to ensure implementation of FWFP regulations is well coordinated across the country and is as efficient as possible. Greater Wellington will be using these resources as much as possible.

Ngā hua ahumoni

Financial implications

41. Greater Wellington will have operational costs to rollout FWFPs in the region. While not fully scoped at this stage there will be costs related to:
 - a Staff time for project manager, farm plan team, workstream leads, workstream team members.
 - b The development of the CCCV and any training provided to certifiers and auditors.
 - c Communicating to the community on a variety of platforms.
 - d The AsureQuality certifier and auditor appointment process will cost approximately \$28,000 per year from 2026. This cost will also include turning Greater Wellington training content into online modules.
 - e The Integrated National Farm Data Platform (INFDP) costs will be shared between the government and the regional sector. Depending on the funding model we may have to pay between \$2,000 and \$6,000 in 2024 and between \$30,000 and \$100,000 for the following nine years.
 - f We are likely to require the INFDP 'bridge' and the cost would be approximately \$30,000.
 - g The development of a compliance, monitoring and enforcement (CME) strategy and the resourcing and implementation of that strategy.
42. There will be financial costs to farmers and growers as part of this process. These costs relate to the preparation of the plans and the certification and audit process, which will all be run independently of Greater Wellington.

Ngā Take e hāngai ana te iwi Māori
Implications for Māori

- 43. The FWFP system aligns with Te Mana o te Wai.
- 44. We will work alongside Te Hunga Whiriwhiri to explore opportunities to partner with mana whenua to co-design components of implementing the FWFP system. Key areas include:
 - a Contributing to the collation of catchment context information.
 - b Preparing and delivering certifier and auditor training.
- 45. Ecosystems and Community will offer \$150,000 in Kaupapa Funding for the six mana whenua partners participation in environment restoration (\$25,000 each). This budget is available to mana whenua to support mana whenua to develop, design and deliver.

Ngā tūāoma e whai ake nei
Next steps

- 46. We are waiting for the finalisation of our rollout plan which will come via an Order in Council. Timing of this is uncertain until the new government, ministers and cabinet is confirmed.
- 47. We are setting up our project management approach to implement FWFPs across the region.
- 48. We look forward to working with Te Hunga Whiriwhiri to build partnering opportunities with mana whenua for Taiao outcomes.

Ngā kaiwaitohu
Signatories

Writer	Richard Romijn – Team Leader, Environment Restoration
Approvers	David Boone – Manager, Ecosystems and Community Tania Parata – Director Tuhonohono Mana Whenua , Te Hunga Whiriwhiri Jack Mace – Director Delivery Lian Butcher – Group Manager Environment

<p>He whakarāpopoto i ngā huritaonga Summary of considerations</p>
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>This report supports the Environment Committee purpose to oversee the development, implementation, and review of Council's Environmental strategies, policies, plans, programmes, and initiatives to address environmental issues in the region (including issues relating to water and biodiversity) and regulatory systems, processes, and tools to meet Council's related legislative responsibilities.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>Implementation of the Freshwater Farm Plan system across the region contributes to the Long Term Plan overarching strategic priority to align with government direction. It will also contribute to achieving the following environment strategic priorities: (1) protect and restore freshwater quality and bluebelt, and (2) protect and restore indigenous biodiversity and ecosystem health.</p>
<p><i>Internal consultation</i></p> <p>Internal consultation involved Policy, Environment Regulation, Catchment and Te Hunga Whiriwhiri.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>There is the risk that the FWFP system may not be successful at delivering the intended freshwater outcomes. Through Greater Wellington's grant programmes, we can support farm operators with the implementation of their action plans to accelerate the undertaking of priority actions intended to improve water quality and ecosystem outcomes and meet NPS-FM/Whaitua targets.</p>

Environment Committee
23 November 2023
Report 23.543



For Information

SUCCESSFUL OUTCOMES OF THE CLIMATE RESILIENCE PROGRAMME

Te take mō te pūrongo

Purpose

1. To update the Environment Committee on the outcomes of the two and half year Climate Resilience Programme (CRP) which implemented the Te Awa Kairangi/Hutt River and Ruamāhanga Floodplain Management Plans.

Te tāhū kōrero

Background

Kānoa

2. To meet the burden of ongoing flood scheme maintenance and renewal, the River Managers Special Interest Group (a group of Regional Council Flood Risk Managers), sought on-going co-investment from government. The first tranche of funding was granted by Government in 2020 as part of a Covid-recovery support package.
3. The Government Covid recovery package had a focus on infrastructure improvement and was therefore channelled through the Crown entity Crown Infrastructure Partners (CIP). This entity then used Ministry of Business, Innovation and Employment (MBIE) as the delivery agent for the climate resilience component of the recovery package. Kānoa - Regional Economic Development and Investment Unit (Kānoa) was established in 2018 within the Ministry of Business, Innovation and Employment (MBIE) to support the delivery of government funding to enhance economic development opportunities in regional New Zealand. Kānoa works with other Government organisations and industry, communities, iwi, and local government to manage and deliver funds tailored to build regional economies.
4. Wanting to boost economic and social development in areas adversely affected by Covid-19 lockdowns, Kānoa provided \$217 million co-investment towards \$354 million worth of 'shovel ready' flood resilience projects across New Zealand. In addition to the flood resilience benefits and flood protection works construction, this work was to enable wider regional economic activity, including employment opportunities across the construction, civil engineering and support services sectors.

Greater Wellington's Climate Resilience Programme

5. Greater Wellington secured funding through this initiative for a programme of work within the Wellington region and the Climate Resilience Programme team was established in 2021.

6. In the first instance the Government set a number of core objectives it wanted to achieve through the CRP. This included projects that were able to be completed within 1-3 years of an infrastructure nature, and that would achieve broader cultural, social, economic and environmental outcomes. Based on these criteria, Greater Wellington selected projects from major project responses identified in Floodplain Management Plans (FMPs) and asset performance assessments, and through Greater Wellington workshops held prior to Covid19. The projects selected by Greater Wellington were then submitted to Government as part of a joint package under the Regional Government sector organisation. Kānoa granted Greater Wellington \$10.752 million for Greater Wellington’s programme of work within this initiative.

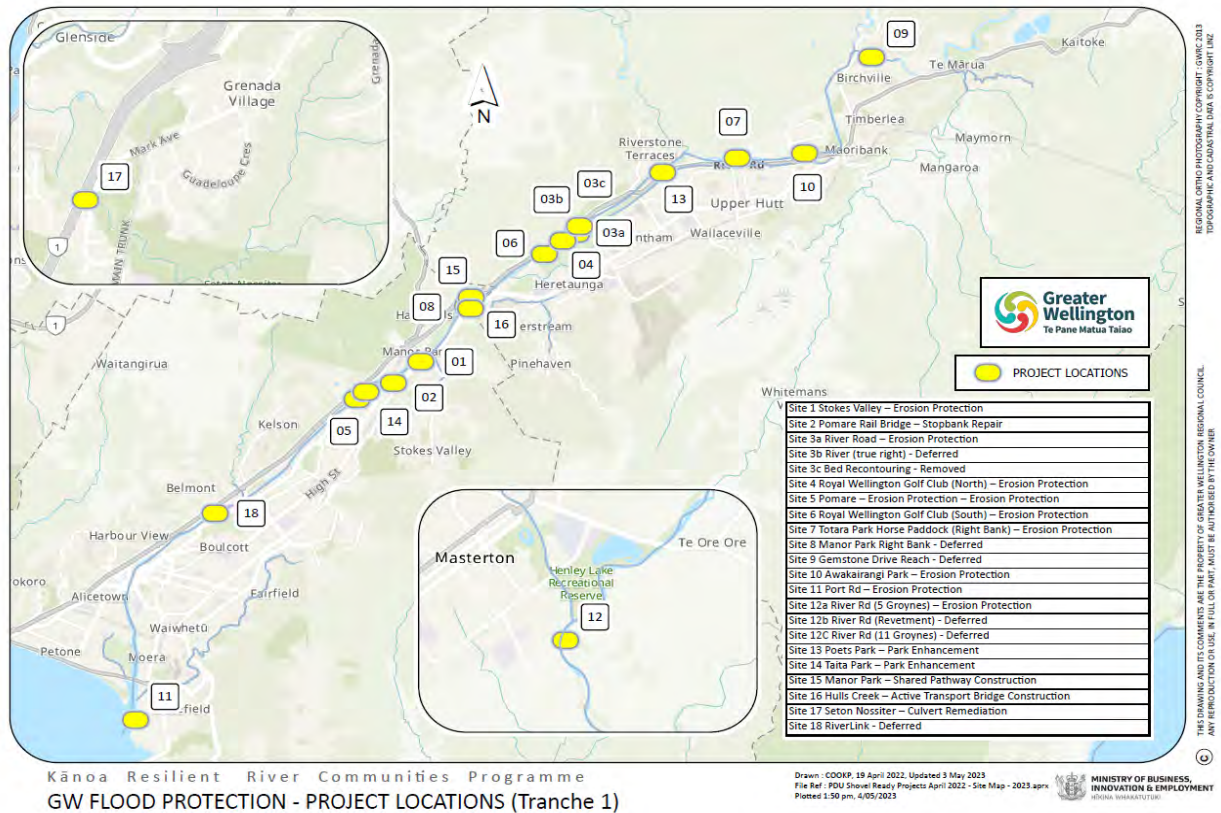
Te tātaritanga Analysis

Projects in the CRP

7. Projects prioritised for the CRP included:
 - a high-risk existing assets, which required maintenance beyond the capacity of operational expenditure; and
 - b projects from FMPs and environmental strategies - including structural and non-structural implementation measures, from groyne and revetment construction, to planting of the riparian margins.
8. The level of service requirements for flood risk management have been established through FMPs, developed in consultation with the community. Riverbank erosion protection projects carried out as part of the CRP were sites identified as being beyond the acceptable level of risk. They had significant encroachment beyond the design channel alignment (from the FMP), thereby posing further risk to the Greater Wellington river berm and stopbank assets, and a potential hazard to river users. These sites have been monitored through Greater Wellington’s asset inspection process.
9. The projects also enabled improved public recreational use and enjoyment of river corridors and contributed to the restoration of the natural and cultural values of the rivers, recognising and providing for mana whenua relationships to fresh water and their stewardship in relationship to rivers.
10. The list of projects sites within Greater Wellington Region that were included in the Climate Resilience Programme are listed below, and shown in Figure 1:
 - a *Site 1:* Stokes Valley Stream Weir Repair and Fish Passage Construction
 - b *Site 2:* Pomare Rail Bridge Stopbank Repair
 - c *Sites 3a-c:* River Road Erosion Repair (3a River Road, 3b River – true right bank, 3c Bed recontouring)
 - d *Site 4:* Wellington Golf Club Right Bank Erosion Repair (North)
 - e *Site 5:* Pomare Left Bank Erosion Repair
 - f *Site 6:* Royal Wellington Golf Club Left Bank Erosion Repair (South)
 - g *Site 7:* Totara Park Horse Paddock Right Bank

- h* Site 8: Manor Park Right Bank Erosion (Deferred)
- i* Site 9: Gemstone Drive Reach Erosion (Deferred)
- j* Site 10: Awakairangi Park Bed Recontouring (Right Bank)
- k* Site 11: Port Road Rock Revetment Construction
- l* Sites 12a-c: River Road Erosion Repair, River Road, Masterton (12a Groynes, 12b Rock Revetment, 12c Groynes)
- m* Site 13: Poets Park Planting and Enhancement
- n* Site 14: Taita Park Planting and Enhancement
- o* Site 15: Manor Park Shared Pathway Construction
- p* Site 16: Hulls Creek Pedestrian and Cycle Bridge
- q* Site 17: Seton Nossiter Culvert Remediation
- r* Site 18: RiverLink (Deferred)

Figure 1: Project Locations



11. While initially a 1-year programme, with a value of \$17.6 million, the programme was extended to a 2 ½ year timeframe, that included 22 separate projects at 19 different sites in 3 catchments with budget value \$23.6 million.

Programme changes

12. In granting the programme funding, Kānoa's initial request was that the projects put forward for the programme of work should be 'shovel ready'. In reality, this was difficult to achieve unless the projects were already well underway. Greater Wellington's initial programme of work comprised work at 13 sites, under 3 projects:
 - a *Project 1*: erosion protection at 11 sites on Te Awa Kairangi/Hutt River.
 - b *Project 2*: construction of a rock revetment in the large capital works RiverLink project, on Te Awa Kairangi/Hutt River.
 - c *Project 3*: the protection of the Masterton cemetery, rubbish dump and River Road properties from erosion on the Ruamāhanga River, Wairarapa.
13. Since signing the funding agreement with MBIE, the projects of work within the programme changed:
 - a The Riverlink Project Team requested the RiverLink edge protection works be removed from the CRP because they were not sufficiently progressed to be able to start construction in time to meet the CRP requirements.
 - b Two Te Awa Kairangi/Hutt River protection sites were removed from the programme as the planned erosion protection works were not sufficiently progressed to meet project programme timelines.
 - c Six sites within the programme had a significant change in their design and costings, as they were at a concept stage of design (meaning each site still required the process of design and acceptance, pricing, tendering and approval).
14. Kānoa enabled the removal of these project and the addition of new projects while keeping within the overall funding and time limits. Projects that have been added to the programme are:
 - a Four environmental projects: to fulfil the need to enhance the environment for our communities and to support the strong message from Mana Whenua, Department of Conversation, and Fish & Game to return native flora and fora to the awa (river). Additionally, these areas allowed the government's social procurement and environmental outcomes to be achieved through sourcing plants from Rimutaka Prison nursery, employing people, and planting for carbon sequestration.
 - b Seton Nossiter Culvert repair: repair of a 196-metre-long culvert that runs under State Highway 1 in Johnsonville's Seton Nossiter Park. The State Highway 1 embankment acts as flood detention dam, with culvert being its only outlet.
15. These programme changes were covered contractually by variation to the Kānoa contract. Further funding sources were also investigated and total co-funding commitment for the programme was able to be increased by adding commitment from KiwiRail (\$0.097 million), Hutt City Council (\$0.08 million) and Greater Wellington Biodiversity (\$0.215 million). This ability to make changes to the contract with Kānoa was critical in successful delivery of the objectives. The changes enabled the delivery of a greater range of objectives and securing additional funding from other sources. The resulting programme covered work at 22 different sites (although work at some sites did not progress or has been deferred) in 3 catchments over 2 ½ years, with budget

value \$23.6 million. Of the 22 projects, fifteen have been completed, and 7 deferred and removed from the programme, mainly for scope, cost and political reasons.

Completed Works

16. Completed works include:

Engineering works:

- a construction of rock structures: groynes and revetment
- b bank shaping and bed recontouring,
- c repair of structures: weir, stopbank, culvert and intake structure
- d fish passage, penguin home and fishing platform construction,
- e bridge construction,
- f footpath, access road and track construction

Environmental works:

- a willow and native planting
- b grass reinstatement
- c wetland construction to collect State Highway 2 runoff
- d ancillary works for vehicle and pedestrian/cycle control such as bollards, gates, concrete blocks, etc.

17. Summary Sheets outlining the work carried out for each completed project are included in **Attachment 1**.

Broader Outcomes

18. Achieving broader outcomes was a key component of Greater Wellington's contract with Kānoa for the CRP, and this was Greater Wellington's first programme to expressly set out to deliver broader cultural, social, economic and environmental benefits alongside 'Business as Usual' (BAU) flood protection projects. One of the initial challenges with the programme was establishing what 'broader outcomes' meant in terms of practical achievement.
19. To effectively establish broader outcomes initiatives and deliver them as part of the programme, Greater Wellington sought primarily to build enduring relationships with:
 - a Greater Wellington's main contractor, Mills Albert Limited (MAL). MAL is a Kāpiti-based, Māori-owned construction business. Collaborative working was undertaken to understand their needs and provide support needed to deliver wellbeing and career advancement benefits for their team members.
 - b The four iwi partners in areas where Greater Wellington delivered the CRP flood protection projects:
 - i. Ngāti Kahungunu Ki Wairarapa
 - ii. Ngāti Toa Rangatira
 - iii. Taranaki Whānui

- iv. Rangitāne o Wairarapa
 - c Iwi were invited to be directly involved in decision making on the design of individual projects, and to share any related opportunities they saw to improve wellbeing or economic outcomes for mana whenua. Key to the programme's success was understanding iwi's interest in being involved, capacity and aspirations, to be able to help achieve these through project implementation.
 - d The programme team also maintained relationships with 39 consultants and contractors, four Crown entities, four local councils and two utility providers.
- 20. The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilized to work with the programme's main construction contractor through programs aimed to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.
- 21. To develop a broader outcomes programme best-suited to our community's needs, we focused on four main initiatives for workers: wellness, career development, supporting underrepresented demographics, and providing support to build the capability of Māori-owned businesses. In addition to the clear flood protection benefits, the CRP delivered broader social, cultural, economic and environmental benefits. Specific programmes are outlined below.

Working with MAL to Fund the Implementation of Training Initiatives for their Workers

- 22. The Broader Outcome's contracts between MAL and Greater Wellington provided targeted funding to grow the capability of the business, to hire on workers of underrepresented demographics, and to progress career development of the contractor's workers. Specific achievements are as follows:
 - a Greater Wellington connected MAL with local iwi, Ngāti Toa. Since then, MAL has employed three people from Ngāti Toa: one engineer, and two spotters.
 - b One male worker was able to gain certification as a hydro-excavator operator, by receiving their licensing as a 'basic traffic controller' and in 'confined space and gas detection'.
 - c One youth, female worker was able to complete a course in 'Organisations and Management'.
 - d One male worker was able to gain certification as a 'Quarry Manager B-grade'.
 - e Ten workers have been able to start progressing their careers via in-vehicle training thus far. They were supported to do this through the partial funding of the hiring of a full-time vehicle/machine trainer. This role will continue to progress the careers of the contractor's youth/unskilled workers, long after the completion of this project.

Attracting and Retaining Youth in the Sector – Hui and Strategy Development

- 23. MAL outlined and brought to Greater Wellington's attention an issue in attracting and retaining youth workers to the sector. Hui took place with staff from MAL coming to Greater Wellington to work together in outlining the problem and developing a strategy. This initiative has potential to bring contractors together and work towards

better youth development in the civil contracting sector through more developed training programs.

24. MAL are now in the process of setting up this training programme and have obtained funding from Kāpiti Coast District Council and Central Government.

Creating sustainable employment opportunities

Using 'Positive Discrimination' to Procure Elevate the Capability of Māori-Owned Businesses

25. Through the contracts awarded for work at the CRP sites, Greater Wellington aimed to grow the capacity and capability of MAL, a Māori-owned business.
26. Funding was provided through the broader outcome contracts with Greater Wellington to elevate the capability of MAL and their business. It was determined the most effective way to do this was to have a business coach assist them to develop and implement a business strategy.
27. Mills Albert have since applied to transition into a higher category of work for prequalified Waka Kotahi contractors, which is for Category A works greater than \$20 million.

Cultural liaison contracts with Mana Whenua

28. Greater Wellington has signed Cultural Liaison contracts with Rangitāne, Kahungunu ki Wairarapa, Ngāti Toa, and Taranaki Whānui. Through these contracts, iwi were supported to be involved in project design, plant selection, signage, storyboards, art, cultural impact reports, knowledge exchanges, communications, and construction monitoring.

Plant Procurement

29. For the programme's planting program, more than 13,000 plants were procured from the local correctional facility (Rimutaka Prison). Procuring plants ensured a steady stream of work for the inmates, where important transferable skills such as responsibility, teamwork, and independence were fostered. It also introduced the workers to the horticulture industry, developing skilled sector-workers.

Support of Kahungunu ki Wairarapa's Tangata Whenua Idea

30. Through this program, Greater Wellington was able to align with Kahungunu ki Wairarapa to support the beginning steps of a Kahungunu led initiative to return their tangata back to their whenua. This initiative was developed over 20 months of hui between the two organisations as the strategy was developed and connections were strengthened, culminating in a hui at Te Ore Ore marae in Masterton, attended by Kahungunu ki Wairarapa, Greater Wellington, MBIE, Ara Poutama Aotearoa, and the Ahu Collective.
31. This initiative began with plans for representatives from the Ahu Collective with lived experiences of being incarcerated to connect with Kahungunu tāne within the Rimutaka Prison and take them on a journey of self-discovery through rites of passage, reconnecting them to their whakapapa, whenua, whanau, and marae. Possible inclusions now include the added prospects of halfway housing, employment support, and bringing this program to a more inclusive group of tāne throughout the lower north island of Aotearoa.

32. The Te-Wao-Nui Project continues to thrive under the leadership of the Ahu Collective, with 100% of all tāne participants returning and weaving into their weekly check-in space. They are now looking at a wahine Kaupapa. The Te-Wao-Nui Project September 2023 Pānui from the Ahu Collective is included as **Attachment 2**.

Improving work conditions/worker well being

MAL's Implementation of a Wellbeing Program for Workers

33. Mills Albert and Greater Wellington saw a need for training and understanding around mental wellbeing. Mills Albert initiated a comprehensive wellbeing program for their business, this has included:
- a Developing a wellbeing strategy
 - b Developing policies and procedures around wellbeing
 - c Developing an internal comms plan
 - d Training four workers as wellbeing champions with qualifications to provide wellbeing workshops to their peers
 - e Implementing wellbeing workshops at different locations across their region so that all workers (approximately ninety) could attend. These were led by the newly trained wellbeing champions and took place throughout a four-month period
 - f Holding a number of all-employee workshops/presentations on mental wellbeing
 - g Holding resiliency workshops
 - h Implementing their first-ever baseline survey on mental wellbeing and engagement
 - i Developing an evaluation plan to further progress supporting the wellbeing of their workers

Development of a Skin Cancer Check Program for MAL Workers

34. MAL saw a need for skin cancer testing for their workforce, the majority of which work outdoors, under Aotearoa's strong sun; especially since Aotearoa has some of the highest skin cancer rates in the world. Through this program, MAL has been able to offer fully funded skin checks for the majority of its workers.

Implementation of Employee Assistance Programmes for MAL Workers

35. MAL recognised the impact that Employee Assistance Programmes (EAP) can have on worker wellbeing. When considering ways they could enhance the wellbeing of their workers, this was an obvious first choice. MAL now has a relationship with an EAP provider, which is providing ongoing support services for workers, and counselling sessions are now available for workers who want support. The services available and info around EAP are being promoted throughout the workplace. Thus far, 3 employees have engaged with the services.

Wellbeing Training Provided to the Greater Wellington CRP Team

36. The same wellbeing workshops that were delivered to each of the main contractor's workers were also delivered to the Greater Wellington CRP team. The workshop was

held during a morning in May 2022 and was delivered by two of Greater Wellington's health, safety, and wellbeing advisors.

Ensuring Worker Wellbeing Through an Enhanced Quality Assessment Process for Suppliers

37. For each supplier with workers going on-site, Greater Wellington is ensuring worker health, safety, & wellness (HSW) is not only planned for, but consistently enacted on-site:
 - a Pre-construction:
 - i. HSW documents from contractor assessed
 - b During construction:
 - i. On-site evidence/metrics of Health, Safety and Wellbeing tracked and assessed
 - ii. Site visits completed, with frequency based on risk

Environmental Outcomes

38. Over 60,000 native plants planted, with 13,000 being procured from Rimutaka prison.
39. Completion of the final section of the Hutt River trail with the connection through Manor Park – achieving Rotary Hutt City's 30-year vision for a continuous trail up both banks of the Hutt River.
40. At Poets Park:
 - a 48,000 natives were planted, including two Rongoā (Māori medicinal plant) gardens.
 - b Wetland areas were constructed to collect contaminant runoff from State Highway 2.
 - c Cycle/pedestrian trails were widened and improved through the park.
 - d Improved carparking areas were provided at both ends of the park to improve access and safety.
41. At Taitā Park, close to 8,000 native plants were incorporated into the plant design for enhanced biodiversity as well to improve the park experience for local residents.

Penguin (Kororā) protocol and penguin 'motels'

42. The Port Road site (Site 11) in the Coastal Marine area at the mouth of Te Awa Kairangi/Hutt River, is a nesting site for little blue penguins (kororā). A 'penguin protocol' was followed for the works to ensure that no penguins were disturbed or harmed. This required confirming penguin presence by use of a 'sniffer dog', trained in penguin detection, and ensuring that any penguin locations were not disturbed during key penguin events such as hatching chicks and fledging. In both cases, penguin fatality can result if unfledged chicks or mid-moult penguins try to swim, as penguins without a full coat of feathers will sink and drown. The 'penguin protocol' being followed ensured that sufficient clearance was provided between any penguin burrows and the work face.
43. Penguin 'motels' were re-established in the revetment as part of the works. Advice about penguins was provided by an external penguin expert, and this person worked

with MAL to develop methodology to form the burrows. Forming the burrows from revetment rock placed to form a tunnel was unsuccessful, so MAL thought 'outside the square' and used precast drainage channel placed upside down, as shown in Figure 2. As well as forming a stable tunnel of sufficient length, this has the added advantage of allowing the base of the tunnel to be natural dirt, which penguins apparently like to have beneath their feet.

Figure 1: Port Road site penguin 'hotel' - being placed and showing entrance



Lessons Learned from the Programme

Project selection and resourcing

44. When the bid was first put forward for Kānoa funding, the Greater Wellington programme of work was scheduled to be completed within one year. In carrying out the work, and when considering future projects, time frames should be realistic. A one-year programme only allows for one construction season, as construction over winter is problematic due to high river flows and muddy berms. The length of time it takes to carry out detailed design, consultation and consenting are also important considerations.
45. Carrying out a large capital works programme on top of 'business as usual' places stress on many people who are expected to support the programme to ensure a good result. While extra resources were engaged to support the programme directly, it required support from at least 14 different teams within Council, as well as more direct and time-consuming input from the wider Flood Protection team, including for design and review, asset management, operations, financial etc.
46. For any future similar projects, it would be helpful to include allowance for design and operational team support during the programme, as this took considerably greater time

than originally estimated. Creating new assets also requires they are maintained, which puts further pressure on operational staff that needs to be resourced. While the hard infrastructure will not have a significant additional maintenance cost, the move to softer engineering solutions and ecological enhancement does have a greater maintenance cost that needs to be funded.

47. A 'Pipeline' of work would be able to be more efficiently delivered rather than one-off tranches of work. Greater Wellington has compiled a 40-year programme of work from FMPs and Environmental Strategies, Asset Management Plans, and annual asset inspections. The works are only developed to a concept phase in these plans because it could be decades before they are implemented, and changes occur from concept to implementation over that length of time.
48. If additional funding is made available to do these works more quickly, then time needs to be allowed to develop the concept plans to detailed design plans commensurate with the shorter implementation timeframe. Resourcing up for a short period of time is also expensive. If a longer, steadier programme of works was agreed to between Government and Councils, then Councils could increase resources to more effectively deliver an enhanced work programme. Greater Wellington would also be able to manage its funding through the Long Term Plan more effectively for communities, rather than having to bring forward expenditure quickly to meet Government time requirements.

The value of a programme approach

49. In carrying out the work, initial pressure was placed on the team to 'just start work'. However, with the complex programme comprising multiple projects, this approach was highly unlikely to succeed. Instead, the Greater Wellington programme team used programme management techniques, which identified time saving and compliance benefits.
50. The approach created a road map of all common and iterative processes for projects in the programme, irrespective of scale and complexity. Common elements were grouped into tranches or managed globally then processed in an identical manner.
51. This method achieved:
 - a increased compliance
 - b decreased construction cycle periods
 - c lower costs
52. Clear roles and responsibilities for team members were established early, with each CRP team member holding clearly defined responsibilities. All members came together weekly to report on progress and resolve any roadblocks.
53. The size of the work programme and lack of internal Council capacity meant that external Project Managers were engaged to assist with programme delivery. Having internal capacity for project management would be preferred however, as this allows for institutional knowledge to be retained, as well as providing opportunities for succession planning and training. Making this commitment to increased internal resourcing becomes possible with a more secure pipeline of work.

54. Processes from the programme are currently being documented so that future work programmes can take advantage of the learnings from this programme.
55. An additional iteration of these processes is also being documented to be used for post-disaster recovery, for example if an event such as Cyclone Gabrielle was to hit the Wellington Region.

Design Standards

56. FMPs generally apply a risk-based design standard for flood protection measures, where the level of physical works for a local area has been determined by assessing the social, economic and environmental benefits and costs of providing this flood protection. For bank-edge and berm protection, FMP's generally advise a 1% Annual Exceedance Policy (AEP) design standard. As designs were carried out, modification to this standard was required to fit with site-specific constraints and budgets.
57. Greater Wellington developed concept designs for rock groynes, along with gravel armouring and reinstatement of the bank edge with riparian planting using a mix of willows at the front edge and native species of trees and shrubs behind.
58. The 1% AEP design standard for edge protection works (groynes and rock revetments) was investigated for river works on Te Awa Kairangi/Hutt River and Ruamāhanga River. However, for most of the river works, the volume of rock required to fit the design erosion depths and velocities meant that insufficient programme budget or rock quantities were available to complete the programme of work. The detailed design process updated and developed the design to fit within project budgets. For the erosion protection groynes and revetments, a 'maintenance level standard' design was used for crest levels and embedment depths, with these changed from the 1% AEP design to fit with site-specific constraints and opportunities.
59. As part of the design process, having a feedback loop for designers regarding project performance and practical experience was helpful in managing the risk involved with design standard changes to the 'maintenance standard'. A key to this was designers taking into account in the decision making the berm width and assets protected. The 1% AEP design event level of protection to key assets was able to be achieved by taking better account of the berm width, meaning the actual rock rip rap at the river edge was able to be designed to a lower standard.
60. The rock revetment work carried out at the Port Road site (Site 11) was the exception, to the 'maintenance level' design standard, in that this project was completed to a 1% AEP design.
61. Greater Wellington internal review of designs, and signoff process, was carried out to ensure that these were technically correct, and also 'fit for Greater Wellington purpose', especially regarding the Flood Protection system as a whole.

Broader Outcomes learnings

62. While initially being a challenging component of the programme, the broader outcomes work has developed into some of the most rewarding in terms of wider project value provided. In achieving broader outcomes, Greater Wellington has needed to be willing to engage and participate with iwi and contractors in exploring new ideas and ways of working.

63. Greater Wellington has contributed to this initiative by:
 - a Demonstrating ongoing commitment and investing time in the partnership;
 - b Providing funding and other support such as organising hui and facilitating connections with other public sector organisations.
64. Along with being willing to listen and engage, key resources were required specifically to achieve the CRP broader outcomes:
 - a People:
 - i. The CRP Programme Manager led CRP relationship-building with iwi;
 - ii. Te Hunga Whiriwhiri (Greater Wellington team responsible for promoting relationships with mana whenua partners) provided ongoing support and expertise.
 - b A Broader Outcomes Lead role was established to support MAL to deliver related initiatives.
 - c Budget: Approximately \$402,000 was invested in Broader Outcomes initiatives as part of the CRP.
65. Identifying the value of these key resources early in the programme has been essential to the success of the broader outcomes initiatives. Expecting parties outside Greater Wellington, such as Contractors and Iwi to carry out work that they are not resourced or funded for means that specific achievement is unlikely, and the project contractual conditions for broader outcomes would then have been unlikely to have been met.

Consents and Land Access

66. Resource consent processing timeframes were much lengthier than anticipated. Depending on the activity, consenting processes varied greatly from site-to-site. Consents were often required from both the territorial authority and the regional authority. Having a consenting advisor on the programme team was essential for visibility into the process (including the development of the application, understanding timeframes, and having realistic expectations) and post consent granting so that the conditions of consent were met through the construction phase.

Resource Management Act, Stakeholder and Partner communications.

67. Under the Resource Management Act (RMA) signed support was required from five organisations (stakeholders and iwi) for each consent application.
68. The CRP team developed a process to support communications and understanding for stakeholders and iwi. This started with providing an online publication with programme information, which was updated at least monthly. Each consent was also summarised in a one-page artefact to promote understanding of the consent issues and mitigations. Any feedback received from stakeholders or partners was also incorporated into the Consent. When the project was completed, a close out document was produced to demonstrate the project outcomes to stakeholders and partners, and the consent conditions were followed.

Asset maintenance and handover of completed works

69. Asset maintenance requirements were taken into account in the design of projects, and those involved in future maintenance provided input and feedback into design, as well as pre-construction sign-off.
70. Post-construction asset handover to our operational team included the assets built as part of the programme. Discussions regarding asset handover needed to be carried out early – even before construction – as the assets needed to be ‘set up’ within the asset management system. Also, in carrying out the CRP which, in effect, bought projects in Greater Wellington’s Long Term Plan work programme forward, assets were created which then need to be maintained. This creates additional pressure on the Operations team, who consequently need resources adjusted.

Climate Resilience Programme Success

71. Greater Wellington’s climate resilience programme has enabled developing and upgrading river management and flood protection works through a co-investment partnership approach with central government. It has enabled Greater Wellington to implement FMPs and Environmental Strategies, as agreed with the Community, to be delivered ahead of the current schedule in the Council’s Long-Term Plan and Infrastructure Strategy. It also enabled larger projects identified through asset performance assessments to be completed, with savings to the rate payer of \$10.9 million (Kānoa, Masterton District Council, Hutt City Council and KiwiRail funding).
72. The programme delivered new or improved structures to protect people, property and key infrastructure from flooding and erosion, as well as improvements to riverside spaces through planting and trail enhancements. In addition to the flood resilience benefits, this work has also enabled broader outcomes initiatives to be progressed (cultural, social, environmental and economic).
73. Through carrying out this work programme, Greater Wellington has gained experience in coping with a large increase in a programme of work, learnt different ways of working and gained lessons in how to improve such work programmes in the future. This will be of great assistance in being more resilience to, and recovering from, cyclone events such as Cyclone Gabrielle, should they hit the Wellington Region.
74. Government, through Kānoa, has been asked to fund a second tranche of proposed projects which will allow Greater Wellington to continue to build on existing collaborative frameworks and work toward instituting a genuine partnership with government for the essential longer-term programme of flood risk management work needed should it be successful.

External Recognition

75. The Greater Wellington Climate Resilience Programme team received ‘Highly Commended’ at the Taitaura Local Government Awards in recognition of our excellent work in broader outcomes. Feedback from Raymond Horan Chief Adviser Taituarā – Local Government Professionals Aotearoa 9 June 2023 to Greater Wellington Chief Executive Nigel Corry *“I write to congratulate Greater Wellington on the Highly Commended Citation that Climate Resilience Programme received at last night’s Awards ceremony.*

The judges said this project is a shining example of the kind of integrated approach to community wellbeing that Parliament had in mind when it restored wellbeing to the purpose of local government in 2019.

Congratulations again.”

76. The Greater Wellington Climate Resilience Programme team were finalists (one of three) in the 2023 Engineering New Zealand ENVI Awards, in the Engineering Impact Award Category.

Ngā hua ahumoni Financial implications

77. A \$23.6 million investment was made to deliver the full Climate Resilience Programme, by: Greater Wellington (\$12.5 million), Kānoa (\$10.7 million), Masterton District Council (\$340 thousand), Hutt City Council (\$80 thousand) and KiwiRail (\$96 thousand). Programme costs are given in Table 1, and as shown the costs were \$1 million under-budget at \$22.6 million.

Table 1: Programme Revenue and Costs at Completion

Project Revenue at Completion		
Funding Source	Forecast	Actuals received
Govt. Funded	\$ 10,752,000	\$ 10,752,000
Co-Funded	\$ 12,853,716	\$ 11,851,188
Total	\$ 23,605,716	\$ 22,603,188

Project Costs at Completion			
	Construction Costs	Programme Costs	Corporate Overheads
Actuals spent	\$ 18,089,820	\$ 2,558,028	\$ 1,955,340

78. Greater Wellington Long Term Plan funding has been brought forward to accommodate this work.

Ngā Take e hāngai ana te iwi Māori Implications for Māori

79. 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.
80. Implementation with mana whenua partners is guided by Te Whāriki – the new Māori Outcomes Framework as part of Council’s Long-Term Plan 2021–31.
81. Cultural liaison or co-design contracts were signed by Te Rūnanga o Toa Rangatira Inc., Rangitāne ō Wairarapa Inc., Ngati Kahungunu ki Wairarapa Charitable Trust and Port Nicholson Block Settlement Trust for enhanced involvement and collaboration on programme work for the Climate Resilience Projects.

82. The CRP purchased 13,000 plants from Department of Corrections. This initiated the relationship between Kahungunu and Corrections which has grown into Te Wao Nui. Te Wao Nui is the mahi led by Kahungunu to support tane, wahine, and rangatahi on release from Department of Corrections. The mahi has support from Police, MBIE, Department of Conservation, Ministry of Social Development (MSD) and Greater Wellington. Iwi are leading this programme and both Corrections and MSD think this will become a Programme at a National Level.

Figure 2: Wai-Rua sculpture at the komititanga of the Waipoua and Ruamāhanga Rivers



83. Figure 3 shown shows the sculpture installed through the CRP. Kahungunu korero: regarding this from Ra Smith is *“Wairua at the komititanga of the Waipoua and the Ruamāhanga rivers is a special place which we wish to recognise through unveiling our taonga. This sculpture represents the whakapapa connections of whanau, Hapu and the two Wairarapa iwi- Rangitane and Kahungunu. It is the first step towards the dream of both Kahungunu and Rangitane, to connect to our whenua through our whakapapa and matauranga through our pūrakau.”*
84. A one-hectare wetland restoration project was funded through the CRP, in consultation partnership with Kahungunu.
85. MBIE developed a relationship with iwi through the CRP, and now MBIE has started a commercial relationship with Ngāti Kahungunu.
86. Mills Albert Ltd, Māori-owned contractor developed a relationship with iwi, which has led to mana whenua employment.
87. Rangitāne have been coached through the procurement process and have been contracted to Greater Wellington to plant 3,000 plants at the Site 13, River Road Ruamāhanga River. The Rangitāne General Manager sees this as a way to directly support iwi.
88. Iwi selected plant species for Poet's Park.

89. Two rongoā gardens were built at Poets Park in consultation with Ngāti Toa and Taranaki Whānui to support Rongoā Māori
90. 1000 flax Plantings were included in Poets Park to support iwi future use of flax materials.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

91. This programme aligns with the 2015 Climate Change strategy, which states '*we will help the region adapt to climate change*'. The projects increase climate change adaptation and resilience to natural disasters in the region.
92. The greenhouse gas emissions from rock supply vary depending on the quarry source of the rock and transport to the work sites. Quarry sources for projects vary. The emissions from rock supply production and transport are not presently part of the organisation's greenhouse gas inventory.
93. Targeted planting has been carried out to mitigate CO₂ emissions for the Kānoa projects.
94. The carbon emissions for Poet and Taitā Park were calculated using available rock transportation information. Mills Albert Ltd and HiRock transportation was estimated at 265.7 metric tonnes CO₂e.
95. A factor of 2 accounted for other forms of transportation, yielding a total emissions estimate of 532 tonnes of CO₂e. The sequestration capacity over 50 years was 4579 tonnes for Poets Park, 1075 tonnes for Taitā Park, resulting in a combined capacity of 5654 tonnes of CO₂e over 50 years. This will offset calculated transport emissions by 2027. Over 50 years of growth, 5122 tonnes of CO₂e sequestration capacity will remain after offsetting transport emissions. The report 'Offsetting Transport Emissions for Kanoa GWRC Climate Resilience Project' is included as **Attachment 3**.
96. Greater Wellington currently assesses options to address flood risk based on the predicted impacts of climate change over the next 100 years. Unless specified differently for specific projects, these values are an increase in rainfall intensity of twenty percent, and a sea level rise of 1 metre for District Planning and 1.3 metres for infrastructure planning.

Ngā tūāoma e whai ake nei

Next steps

97. **Attachment 4** – Presentation: Successful Outcomes of the Climate Resilience Programme will be presented at the meeting.

**Ngā āpitihanga
Attachments**

Number	Title
1	Summary Sheets for Completed Projects
2	Te Wao Nui - September 2023 Pānui
3	Offsetting Transport Emissions for Kānoa GWRC Climate Resilience Project
4	Presentation: Successful Outcomes of the Climate Resilience Programme

**Ngā kaiwaitohu
Signatories**

Writers	Sharyn Westlake –Kaitohutohu Mātāmua Principal Engineer, Riverlink Michael Beagle – Kaiwhakahaere Matua Programme Manager, Climate Resilience Programme
Approvers	Jacky Cox - Kaiwhakahaere Whakaritenga me ngā Rawa Manager, Logistics and Resourcing Jack Mace – Hautū Whakatutuki Director Delivery Lian Butcher – Kaiwhakahaere Matua, Taiao Group Manager, Environment

He whakarāpopoto i ngā huritaonga Summary of considerations
<p><i>Fit with Council's roles or Committee's terms of reference</i></p> <p>The Environment Committee has responsibility to oversee the development, implementation and review of Council's environmental strategies, policies, plans, programmes, initiatives and indicators to improve environmental outcomes for the Wellington Region's land, water, air, biodiversity, natural resources, parks and reserves, and coastal marine area.</p>
<p><i>Contribution to Annual Plan / Long term Plan / Other key strategies and policies</i></p> <p>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. Development and implementation of related work programmes fall under the core activities of the 2021-2031 Long Term Plan.</p>
<p><i>Internal consultation</i></p> <p>Specific projects consult with groups and departments across Greater Wellington where relevant to a project.</p>
<p><i>Risks and impacts: legal / health and safety etc.</i></p> <p>The purpose of implementation of floodplain management plans is to reduce the risk to communities and improve the region's resilience.</p>



Summary Sheets for Completed Projects

Climate Resilience Programme

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Kaupapa: Site #1 – Stokes Valley Stream Weir Repair and Fish Passage Construction

<p>Background</p> <p>For this site, an assessment was undertaken of site-specific options to improve erosion protection at the Stokes Valley stream mouth and provide a passage for migrating fish. The decision was made to install a rock weir, provide new concrete capping to the base of the stream and install a 1:15 gradient fish passage.</p>
<p>Description of work undertaken</p> <p>The scope of works involves forming a temporary stream diversion during site work, re-shaping, installing a rock weir and new concrete capping to the base of the stream at the mouth, and installing a 1:15 gradient fish passage including resting pool and stone inserts. Ecological monitoring took place before and after construction.</p>
<p>Timeframe: Site mahi: April 2023 – August 2023</p>
<p>Location</p> <p>The site is located on Te Awa Kairangi at Stokes Valley. The coordinate of the site is approximately - 41.161229879542184, 174.97876493454706.</p>
<p>Cost Information: Total Actual Costs = \$1,431,233</p>
<p>Future Maintenance Plan</p> <p>Inspect work including fish passage on an annual basis and after flood events. Where necessary, reinstate work as per as-built documentation.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div>

Kaupapa: Site #2 – Pomare Rail Bridge Stopbank Repair, Upper Hutt

Background

The runnel erosion has been caused by stormwater runoff from the rail bridge. In addition, Kiwi Rail had dug out two potholes into the stopbank on both side of the bridge to investigate existing underground services. The potholes had been backfilled with a three-to-one bentonite mix which needed to be removed and the stopbank reinstated.

Description of work undertaken

The stopbank face erosion was fixed using concrete pads to reinforce the eroded area. L 1500mm x W 750mm cast in situ 30 MPa concrete edging formed from the top of the concrete block at 200mm high and tapering down to nil mm. The potholes were replaced with hard mix. The hard mix is made up of well graded aggregate, with slightly weathered to unweathered fragments of rock up to maximum 65 mm characteristic dimension and which is relatively free of fines and other mineral matter such that when compacted the rock fragments can achieve point-to-point contact. Steel bollards and topsoil were placed on site to reinstate the constructed area.

Timeframe: Site mahi: July 2021 – December 2021

Location

The site is located approximately on this coordinate: 174°58'15" E41°09'58"S

Cost Information: Total Actual Costs = \$247,999

Future Maintenance Plan

There is no additional maintenance required for the stop bank. The concrete pad built has a design life of 50 years. Bollards need to be quality-checked every 5 years. Bollard design life is 15-20 years.

Broader Outcomes

The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.

Photos






Before





After

Kaupapa: Site #3a – River Road, Upper Hutt

<p>Background</p> <p>The decision was made to install three 350T class C rock groynes by the riverbank. The key potential benefits are that this provides improvements to meander patterns and reduces the scour risk to the existing rock lines, which were being undercut.</p>
<p>Description of work undertaken</p> <p>The scope of works involves re-shaping/profiling the river channel to allow for a work platform, excavation for groyne construction, gravel bund construction, construction of groynes and ecological monitoring before, during and after construction.</p>
<p>Timeframe: Site mahi: May 2022 – August 2022</p>
<p>Location</p> <p>The site is located on the left bank of the river at the northern end of the Royal Wellington Golf Club. The coordinate of the site is approximately 41°07'54.7"S 175°01'18.5"E, in between Lower Hutt & Upper Hutt.</p>
<p>Cost Information: Total Actual Costs = \$690,947</p>
<p>Future Maintenance Plan</p> <p>Inspect rock work after flood events. Where necessary, reinstate work as per as-built documentation.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme's main construction contractor through programme's aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>After</p> </div>

Kaupapa: Site #4 – Wellington Golf Club Right Bank Erosion Repair (North), Upper Hutt

<p>Background</p> <p>The work is required to manage the erosion risk in this area and to create greater habitat diversity in this straight reach of river channel. A preliminary stage of works was completed by GW to shift the river and to provide a “dry” working area for the groyne works.</p>
<p>Description of work undertaken</p> <p>Three 350T rock groynes were installed by the riverbank for the purpose of flood protection and erosion control. The scope of works involves re-shaping/profiling the river channel to allow for a work platform, excavation for groyne construction, gravel bund construction, construction of groynes and ecological monitoring before, during and after construction.</p>
<p>Timeframe: Site mahi: June 2022 – September 2022</p>
<p>Location</p> <p>The site is located on the right bank of the river next to River Road SH2. The coordinates of the site are approximately 41°08'01.8"S 175°01'03.6"E, in between Upper Hutt & Lower Hutt.</p>
<p>Cost Information: Total Actual Costs = \$1,650,430</p>
<p>Future Maintenance Plan</p> <p>Inspect rock work after flood events. Where necessary, reinstate work as per as-built documentation.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div>

Kaupapa: Site #5 – Pomare, Taita Drive

Background

Work at Te Awa Kairangi/Hutt River Site 5: Pomare Left Bank Erosion Protection was required to repair end erosion for a rock revetment to protect a gas pipeline, as per Flood Protection letter to Environmental Regulation on 27 August 2021. The works were initiated under 'Urgent Works'. Close to 200 m of riverbank along the Taita Drive site was washed out by river flood events in 2021.

Description of work undertaken

Project works carried out at the site were two 750 tonne rock groynes, and a 170-metre rock revetment (18 tonnes per linear metre). Rock groynes and revetments were built for the purpose of flood protection and erosion control.

Timeframe: Site mahi: January 2022 – April 2022

Location

The site is located in Taita, Pomare, Lower Hutt approximately 1km West of Pomare train station. The coordinates of this site are 41°10'08.2"S 174°57'42.1"E.

Cost Information: Total Actual Costs = \$1,650,430

Future Maintenance Plan

Inspect rock work after flood events. Where necessary, reinstate work as per as-built documentation. The existing gas pipe belongs to Chorus. It is located below the berm at the southern end of the rock revetment. Lateral bank erosion may affect the gas pipeline.

Broader Outcomes

The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme's main construction contractor through programme's aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.

Photos





Before



After

Kaupapa: Site #6 – Royal Wellington Golf Club Left Bank Erosion Repair (South)

<p>Background</p> <p>Groynes and revetments were installed by the riverbank next to the Royal Wellington Golf Club (South) for the purpose of flood protection and erosion control, and to reinstate the Hutt River Trail.</p>
<p>Description of work undertaken</p> <p>The project involves offsite supply of 5,500 tonnes of engineering graded rock riprap, re-shaping/profiling of river channel back to the western side of the active channel where the existing rock line is, construction of a 70m 15t/1m class B rock lining from existing upstream rock line to tie in with the new 750t rock groyne, construction of a 750t class C and B rock groyne to direct flows to the western side of the active channel, construction of a 250m 15t/1m class B rock lining from the new 750t rock groyne to tie in with the existing stream outlet pipe, reconstruction of the stream outlet pipe including the concrete headwall and rock for erosion protection, reinstatement of the Hutt River trail, ecological monitoring before, during and after the works.</p>
<p>Timeframe: Site mahi: July 2021 – December 2021</p>
<p>Location</p> <p>The site is located southwest of the Royal Wellington Golf Club. In between Upper Hutt and Stokes Valley</p>
<p>Cost Information Total Actual Costs = \$1,882,850</p>
<p>Future Maintenance Plan</p> <p>Inspect rock work after flood events. Where necessary, reinstate work as per as-built documentation.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div>

Kaupapa: Site #7 – Totara Park Horse Paddock Groyne Repair

Background

One 350T class C rock was repaired on this site for the purpose of flood protection and erosion control. The original scope of work for this site included new willow poles and debris fences. However, this work was removed from the scope of this project. It is to either be carried out at the site at a future date after the beach has been lowered or reworked, or the site will need future groynes after erosion. This will also need to be looked at with review of the Hutt River Floodplain Management Plan (HRFMP) with regards to the location of the design lines and buffer.

Description of work undertaken

The scope of works involves removing existing damaged rock groyne, reinstalling a new rock groyne and ecological monitoring before, during and after construction.

Timeframe: Site mahi: July 2022 – September 2022

Location

The site is located on the right bank of the river at the northern end of the Royal Wellington Golf Club. The coordinates of the site are approximately 41°06'53.0"S 175°03'55.6"E, in between Lower Hutt & Upper Hutt.

Cost Information: Total Actual Costs = \$309,294

Future Maintenance Plan

Inspect rock work after flood events. Where necessary, reinstate work as per as-built documentation.

Broader Outcomes

The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme's main construction contractor through programme's aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.

Photos





Before






After



Kaupapa: Site #10 – Awakairangi Park Bed Recontouring (Right Bank)

<p>Background</p> <p>The decision was made to widen the channel to the current channel design line and bed recontouring to form lowered berms and manage Awakairangi Park bank erosion.</p>
<p>Description of work undertaken</p> <p>The scope of works involves removing existing concrete blocks, rock and rail irons in the river, and pushing gravel up into the eroded embankment to form lowered berm approximately 2m above riverbed levels to line up with the existing vegetation. Ecological monitoring was undertaken before, during and after construction.</p>
<p>Timeframe: Site mahi: November 2022 – April 2023</p>
<p>Location</p> <p>The site is located on the right bank of the river on the northern side of the Totara Park bridge. The coordinates of the site are approximately 41°06'48.2"S 175°05'04.1"E, in Upper Hutt.</p>
<p>Cost Information: Total Actual Costs: \$234,465</p>
<p>Future Maintenance Plan</p> <p>Bed recontouring to river only. No additional maintenance requirement</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div>



Kaupapa: Site #11 – Port Road Rock Revetment Construction

<p>Background</p> <p>The foreshore along the eastern side of the Hutt River as it enters Wellington Harbour is susceptible to overtopping and damage during storm events. To improve the protection of infrastructure and public land adjacent to the river foreshore, the decision was made to repair the existing 440m long embankment with an engineered rock revetment. This includes a heavily engineered option for the repair of the stopbank. This can be added to as the effects of existing and future climate change and sea-level rise are felt. The design solution has also considered the post major earthquake event and the ability to recover and to continue to provide ongoing protection to key industries following a major earthquake and or a major river flood.</p>
<p>Description of work undertaken</p> <p>The scope of works involves; Removal of concrete mass blocks and broken concrete and regrading the bank edge. Placement of a geotextile and geogrid to assist with the retention of riprap during a major earthquake, Placement of a riprap filter layer (rocks 150 mm to 350 mm diameter), and Placement of a riprap armour layer (rocks 400 mm to 900 mm diameter).</p>
<p>Timeframe: Site mahi: October 2022 – June 2023</p>
<p>Location</p> <p>The site is located on the left bank of the river at Seaview. The coordinate of the site is approximately 41°14'06.3"S 174°54'03.6"E.</p>
<p>Cost Information: Total Actual Costs = \$5,066,838</p>
<p>Future Maintenance Plan</p> <p>Following each major weather event whether flood, or ocean storm or a combination there will be potential damage to this asset. We recommend a damage assessment be undertaken and a system of maintenance, top ups, replacement and re-arranging of the riprap armour layer. The damage assessment should also include an assessment flowing a major flood to ascertain the depth and extent of future scour at the site.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business. After talks with community members, the addition of fishing platforms was installed in the site design for social benefit to the community. After the discovery of little blue penguins discovered on the site, penguin home tunnels were designed and installed within the rock revetment to continue to facilitate their nesting for environmental benefits. Pohutukawa trees were replaced on the site for environmental benefit.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> <div style="text-align: center;">  <p>Penguin home</p> </div> </div>



Kaupapa: Site #12a – River Road Erosion Repair, Ruamāhanga River, Masterton

<p>Background</p> <p>This site encompasses the implementation of erosion protection works to protect the Ruamāhanga River from potential landfill contamination.</p>
<p>Description of work undertaken</p> <p>To pre-empt the risk of erosion, six 1000 tonne Rock Groynes have been installed over a 200m stretch of riverbank.</p>
<p>Timeframe: Site mahi: April 2023 – June 2023</p>
<p>Location</p> <p>The site is located at 1 Nursery Road, Homebush, Masterton. The NZTM coordinate of the site is approximately X:1825191.6, Y:5461733.5.</p>
<p>Cost Information: Total Actual Costs = \$3,186,748</p>
<p>Future Maintenance Plan</p> <p>Inspect Rock Groynes on an annual basis and after flood events (as required). Where necessary, reinstate work as per as-built documentation.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business. Rangitāne have been coached through the procurement process and have been contracted to Greater Wellington to plant 3,000 plants at the Site 13, River Road Ruamāhanga River.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div>

Kaupapa: Site #13 – Poets Park Planting and Enhancement

<p>Background</p> <p>The design development for the Poets Park is one of the actions identified in the draft Hutt River Environmental Strategy Action Plan. The intention was to develop the area to become an attractive destination space with mature specimen trees to create a series of smaller spaces, with areas of mown grass and meadow areas, gentle mounding allowing picnicking, informal sports and community events to occur. The aim was to transform the character of the area to create interesting walking/cycling/dog walking spaces and introducing specimen and groups of trees and providing gaps in the willows to enable views to the river’s edge.</p>
<p>Description of work undertaken</p> <p>New assets brought to the site include; 52,394 Native plants, Track culverts and ripped piping, Chipseal Carparks, Concrete Blocks, Riprap rocks, Two Brolga bollards, Gravel trail (including timber edging), and Pipe gates x 4. Note the removal of the following assets; Three trees, One old seat in northern section, and five bollards.</p>
<p>Timeframe: Site mahi: October 2022 – April 2023</p>
<p>Location</p> <p>The site is located along Te Awa Kairangi (Hutt River), Upper Hutt. It is situated along State Highway two beside the Whakatiki Street intersection.</p>
<p>Cost Information: Total Actual Costs = \$2,963,101</p>
<p>Future Maintenance Plan</p> <p>A Maintenance agreement with the contractor is put into place for the year-long defects period. After the defects period, in addition to routine maintenance; planting should be monitored, and responsive maintenance and plant replacement implemented as necessary. This includes repairs following a storm event, after prolonged dry or wet periods, and damage from animal pests.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aim to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p> <p>To meet the social Procurement outcomes, plantings also target the requirements of minimising carbon impact of the wider project. Transport emissions were used as an estimate of the total project emissions, as transport is likely to be the greatest factor. The potential sequestration capacity for Poets Park is 4579 tonnes over a 50-year timeframe. Between Poets Park and Taitā Park carbon sequestration, offset will be achieved by 2027, which is in five years.</p> <p>Community planting events took place with local intermediary schools for social benefits. Iwi selected plant species for Poet’s Park. Two rongoā gardens were built in consultation with Ngāti Toa and Taranaki Whānui to support Rongoā Māori and 1000 flax Plantings were included in to support iwi future use of flax materials.</p>
<p>Photos</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div>

Kaupapa: Site #14 – Taita Park Planting and Enhancement

<p>Background</p> <p>The design development for the Taita-Park is one of the actions identified in the draft Hutt River Environmental Strategy Action Plan. This project addressed issues around a stretch of the river corridor, which is very open, windswept, and relatively barren. Car access and litter dumping was also an issue. The intention was to develop the area to become an attractive destination space with node parking, mature specimen trees to create a series of smaller spaces, areas of mown grass and meadow areas, and gentle mounding allowing picnicking, informal sports and community events to occur. The aim was to transform the character of the area to create interesting walking/cycling/dog walking spaces and introducing specimen and groups of trees and providing gaps in the willows to enable views to the river's edge</p>	
<p>Description of work undertaken</p> <p>New assets brought to the site include: Mulched planted area (715 m3 of mulch), 7,159 native plants (1L), 5 native plants (3L), 164 poplar poles (3m), node parking and barriers, stormwater reticulation. Note the removal of the following assets; Exotic and woody vegetation removed (2,458 m2).</p>	
<p>Timeframe: Site mahi: August 2022 – October 2022</p>	
<p>Location</p> <p>The 2.09 km long site in Taita-Pomare is located on the left bank (eastern side) of the Hutt River. It is bounded to the south by Harcourt Werry Drive with Fraser Park adjacent and to the southeast by the stopbank and by Taita Drive, a major vehicle route with residential properties on one side.</p>	
<p>Cost Information Total Actual Costs = \$367,109</p>	
<p>Future Maintenance Plan</p> <p>A Maintenance agreement with the contractor is put into place for the year-long defects period. After the defects period, in addition to routine maintenance; planting be monitored, and responsive maintenance and plant replacement implemented as necessary. This includes repairs following a storm event, after prolonged dry or wet periods, and damage from animal pests.</p>	
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme's main construction contractor through programme's aim to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p> <p>Between Poets Park and Taitā Park carbon sequestration, offset will be achieved by 2027, which is in five years. Community planting events took place with local intermediary schools for social benefits.</p>	
<p>Photos</p> <p>Before</p>	  <p>Community Planting</p>

Kaupapa: Site #15 – Manor Park Shared Pathway Construction

Background

Since its humble beginnings almost 30 years ago as a joint Rotary/GWRCHCC/UHCC project, the Hutt River Trail began with the laying of short sections of gravel tracks connecting the existing service roads forming an all-weather walking/cycling surface on the Eastern side of Te Awa Kairangi/Hutt River from Seaview to Birchville. Collectively, all the joint partners have continued to gradually upgrade and establish new sections of trail on both sides of the river all the way to Birchville.

Description of work undertaken

Path project components: Section A: Sections 0 m - 640 m and 680 m – 895 m are asphalt surface pathway, 3 m wide with shoulder and side drains, Section 640 m – 680 m (40 m long section) is aggregate surface, 3 m wide, Concrete blocks installed to retain edge of stream, 190 m long x 3 m high fence installed, 75 m long x 2 m high fence installed, 70 m long x 2 m high fence installed, 145 m long timber retaining wall installed, 4.5 m long x 3 m wide timber bridge installed behind existing culvert with barrier both sides, 1 x 300 mm dia culvert with sump under oath installed, 675 x 450 x 1650 concrete cesspit and steel grate installed to connect to existing 150 mm dia pipe discharge, 1 x 600 mm dia concrete culvert installed, and 1 x 300 mm dia existing concrete culvert extended. Section B: 800 m of aggregate pathway, 1.6m wide with side drains, 2m high x 55 m long fencing installed, 3 x 300 mm dia concrete culverts installed, 2 x 450 mm dia concrete culverts installed, and 3.5 m long x 1.6 m wide timber bridge installed. Landscaping project components: ~ 1,000 native plants planted along the pathway.

Timeframe: Site mahi: September 2021 – August 2022

Location

The site is located within the Manor Park Golf Sanctuary in Lower Hutt. It is situated between State Highway 2 and Te Awa Kairangi, just south of the Silverstream Road. This land is owned by GWRC and leased to the Manor Park Golf Sanctuary.

Cost Information: Total Actual Costs = \$190,003

Future Maintenance Plan

A maintenance plan between partners is still in progress to determine specific maintenance responsibilities of assets. This is being discussed along with the RiverLink project asset agreement

Broader Outcomes

The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aim to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.

Photos



Before



After



Kaupapa: Site #16 – Hulls Creek Pedestrian and Cycle Bridge

<p>Background</p> <p>The decision was made to upgrade the existing Hutt River Trail by constructing a new timber bridge crossing Hulls Creek. This project would also include the reconstruction of the existing pathway, relocation and protection of existing trees, and extensive native planting.</p>
<p>Description of work undertaken</p> <p>Bridge work included; Installation of bridge foundation piles (250mm SED piles in concrete filled 600 dia holes, and including bearer and fixing), Installation of bridge (15m long x 3m wide single span bridge including end boards, glulam beams, tie bars, blocking, fixings/brackets, decking and non-slip mesh), Installation of 1.2m high barrier with timber infill on each side of the bridge structure and approaches, and including sloping end rail, Installation of retaining wall, and Creation of sloping track approaches to the bridge. Landscaping work included; Tree felling and tree transplanting, Installing timber edging along planting areas, Install Basecourse and Top course, Grassing, and Installation of wire fencing.</p>
<p>Timeframe: Site mahi: August 2022 – October 2022</p>
<p>Location</p> <p>The bridge is located on road reserve land between the Eastern Hutt Road bridge over Hulls Creek Silverstream, Upper Hutt 5019, and the confluence of Hulls Creek with the Hutt River. The NZTM2000 co-ordinates of the site are: E1767335,N5442828.</p>
<p>Cost Information: Total Actual Costs = \$450,295</p>
<p>Future Maintenance Plan</p> <p>Bridge maintenance and inspection plans are set out for 2 years, 6 years, 25 years, and following flood & shake events. A landscape maintenance agreement with the contractor is put into place for the year-long defects period. After the defects period, in addition to routine maintenance; planting be monitored, and responsive maintenance and plant replacement implemented as necessary. This includes repairs following a storm event, after prolonged dry or wet periods, and damage from animal pests.</p>
<p>Broader Outcomes</p> <p>The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aim to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.</p>
<p>Photos</p> <p>Installed Bridge</p> <div style="display: flex; justify-content: space-around;">   </div>

Kaupapa: Site #17 – Seton Nossiter Culvert Remediation

Background

The decision was made to remediate the culvert invert by removing loose and degraded aluminium panels from within the culvert and re-profiling the invert using concrete. This was considered the most effective and achievable option. It was also decided to replace the concrete screen at the culvert intake with a new steel screen similar to that recently installed at Stebbings Rd in Churton Park.

Description of work undertaken

This project is remediation of the culvert at Seton Nossiter in Johnsonville. This is a 196-metre-long culvert that runs under State Highway 1.

Timeframe: Site mahi: June 2022 – May 2023

Location

The site is located at Seton Nossiter Park in Johnsonville. The coordinate of the site is approximately NZTM X:1752344.3, Y:5436278.7.

Cost Information: Total Actual Costs = \$3,011,236

Future Maintenance Plan

Inspect steel inlet screen on an annual basis and after flood events. Where necessary, reinstate work as per as-built documentation.

Broader Outcomes

The Programme invested approximately \$402,000 of its budget into Broader Outcomes. \$175,000 of that budget was utilised to work with the programme’s main construction contractor through programme’s aims to improve mental wellness, physical wellness, and career development and to uplift a Māori-owned business.

Photos



Before



After



Te-Wao-Nui Project



September 2023 Pānui:



Te-Wao-Nui Project: September 2023

It's been another transformative month within our kaupapa, as we continue to dive further into the hard-to-reach parts of our communities.

Since our August wānanga, our succession rate has been incredible, with 100% of all tāne participants returning and weaving in to our weekly check-in space.

An astounding 40+ new tāne enquired about the ngāhere-o-tāne programme, wove into our weekly check-in and/or registered for our upcoming September wānanga.

This month our Kāhāhū (nurturers) have been reassessing our wānanga venue and processes, as our group is growing rapidly.

With this growth comes a great opportunity to develop the pukenga (skills) of our tāne, and allow them to apply the mātauranga (wisdom) and tools they learnt last month - as tuākana for the new Men who have registered for our September wānanga.

It's been an empowering and inspirational journey to watch!

Vol. 02 Newsletter

Wahine kaupapa:

Our wahine kaupapa continues to develop and take shape.

This month a weekly check-in space was added, so our wahine could continue to weave better relationships and begin exploring te-ao-wahine.

We are excited to announce that our first ngāhere-o-hine wānanga will take place this coming November.



August 2023 Pānui:

Attachment 2 to Report 23.543



September wānanga:

This September we held just our second public wānanga at the serene and beautiful Te Kopi Lodge, Ngawi (Wairarapa).

Our last wānanga captured a lot of attention, and it was prevalent in the amount of enquiries and registrations we received from tāne, whānau and services across the lower North Island.

Incredibly, we had 20 tāne attend this month's wānanga, the vast majority coming from Wairarapa and a few from Wellington.

During this wānanga, we embarked on an incredible hikoi of self-discovery, from the womb into manhood. Our tāne were given the opportunity to safely explore their darkest shelves, that have been suppressed under the layers of trauma.

Then, through powerful processes of transformation, awareness and empowerment - so that they may return home as pillars for themselves, their whānau and their communities.

Tupuranga-tāne: (weekly hui)

Another space within Te-Wao-Nui that has grown immensely is our tupuranga-tāne weekly engagement.

During September 100% of our tāne who attended our August wānanga have been engaging, and recently we have woven in 10+ new Men.

Tupuranga-tāne is a space to continue to nurture and grow great Men. It's an opportunity for our tāne to reflect, connect, share kai and release any unwanted energy that has come forth during the week.

Vol .02 Newsletter

Kei te mihi:

This month we want to celebrate the resilience, commitment and hard work of Hash Hemi.

Hash has had a life full of chaos and trauma - immersed in addictions, gangs, crime and violence.

Hash completed our August wānanga, and since returning home, has not re-offended, drunk alcohol or used methamphetamine.

He has been engaging in all our weekly check-in's and has been a great pillar for other tāne when they need support.



Ngāhere-o-tāne wānanga

September 2023



Pitau ira
Woven within your DNA is the imprint of the
Universe

For more info: Anaru@ahucollective.com

Offsetting Transport Emissions for Kānoa GWRC Climate Resilience Project

Executive summary

The carbon emissions for Poet and Taitā Park were calculated using available rock transportation information. Mills Albert Ltd and HiRock transportation was estimated at 265.7 metric tonnes CO₂e. A factor of 2 accounted for other forms of transportation, yielding a total emissions estimate of 532 tonnes of CO₂e.

The sequestration capacity over 50 years was 4579 tonnes for Poets Park, 1075 tonnes for Taitā Park, resulting in a combined capacity of 5654 tonnes of CO₂e over 50 years. This will offset calculated transport emissions by 2027. Over 50 years of growth, 5122 tonnes of CO₂e sequestration capacity will remain after offsetting transport emissions.

Introduction

To meet the Social Procurement Outcomes, this report outlines how the project aims to meet the Environmental Responsibility outcomes.

The tree planting targets the requirement of protecting and enhancing the ecosystem and biodiversity, and minimising carbon impact to support the transition to net zero. The carbon emissions and sequestration data are detailed below. Transport emissions was used as an estimate the total project emissions as transport is likely to be the greatest factor. Other Environmental Responsibilities include using sustainable materials, minimising and reusing, and being efficient with resource use.

Results

Emissions calculations:

- Transport of rock for Mills Albert and HiRock was estimated to be 265.7 metric tonnes CO₂e (CO₂ equivalents accounts for other gases such as methane, nitrous oxide and fluorocarbons).
- **Total transport emissions** with a 2 times factor to allow for other transport is **532 tonnes of CO₂e**.

Sequestration calculations:

- Poets Park has 47,507 trees/shrubs.
- Poets Park has the capacity to sequester 4579 tonnes of CO₂e over 50 years.
- Taitā Park has 7,328 trees/shrubs.
- Taitā Park has the capacity to sequester 1075 tonnes of CO₂e over 50 years.
- These two Parks have the **combined capacity to sequester 5654 tonnes of CO₂e over 50 years**.

Discussion

Emissions

The main transport emissions were from two companies, Mills Albert Ltd and HiRock. Other transport emissions were not able to be calculated. They were not recorded at the time and are not easily quantifiable. Examples include contractors driving or flying to sites, driving around the site, and the transport of plants. To create a conservative estimate, two times the calculated transport emissions was used, resulting in a total of 532 tonnes of CO₂e.

Sequestration

The sequestration to offset the emissions was made up from Poet and Taitā Parks. There was a total of 4590 other trees/shrubs across several other sites. The assumption was made that all other sites (tree planting or wetlands) did not significantly impact the capacity for sequestration compared to these two parks containing 54,835 trees/shrubs with the capacity to sequester 5654 tonnes of CO₂e.

As displayed in Appendix B, the sequestration rate over 50 years produced for GW based on the number of particular species in each park. Therefore, interpolation from a linear equation was used.

Supporting net zero

From the above values, the total transport emissions of **532 Tonnes of CO₂e** will be completely **offset by 2027**, which is **in 5 years**.

After subtracting total transport emissions, the remaining amount of sequestration capacity by **2050** will be **2677 Tonnes of CO₂e**. Over a **50-year period** (2072) there will be an excess of **5122 Tonnes of CO₂e** sequestered.

Future recommendations

- If carbon accounting is required, it is imperative that work outsourced to contractors must include tracking emissions. This should be clearly stated in contracts. Keeping track of emissions (or noting required values such as weight of load and distances driven) would allow carbon accounting to be easier and more accurate.
- Determine whether any carbon mitigation options are currently being employed. Ask and confirm this with contractors.
- GW should be encouraging and supporting companies that use carbon monitoring and certification initiatives such as Toitū.
- Have pre-set general guidelines of what carbon emissions GW wants contractors to track. Recommendations for tracking other forms of emissions not considered in this report could include:
 - Ongoing maintenance that results in people travelling to site, watering trees, or any other activities that require carbon.
 - Electricity uses throughout construction and estimating carbon from non-sustainable energy sources.
 - The whole process of sourcing rock at a quarry including extraction, breaking up rocks, and any machinery.
- Perform an emission assessment prior to planting trees to ensure sequestration is greater than emissions but not excessive.

Conclusion

The Kānoa GWRC Climate Resilience Project to offset transport emissions can be considered relatively successful. All transport emissions will be **offset within 5 years** which is well within the 2050 timeframe for carbon net-zero across the region. **2677 tonnes of CO₂e** sequestration is remaining after offsetting transport emissions. On top of this, there is a remaining **5122 tonnes of CO₂e** to be sequestered within 50 years. Key lessons learned is if carbon accounting is required it is imperative that contractors are explicitly told that they must keep track of them throughout any operation. If a contractor does not currently account for emissions, then GW should encourage them through programs like Toitū. Lastly, emission assessment should be conducted prior to planting to ensure sequestration is greater than emissions but not excessive.

Appendix A - Emissions

For the two companies that supplied rocks (HiRock and Mills Albert Ltd), the Vehicle type, kg per load, and vehicle age were used to look up the amount of CO₂e per km. Values were looked up in Tables 16 to 19 in Measuring Emissions Detailed Guide August 2022 (Ministry for the Environment). A summary is shown in Table A1.

Table A1: Vehicle and load information were used to estimate emissions per km.

Quarry	Vehicle Type	Kg/load	Vehicle Age	Kg CO ₂ e/km
HiRock	Diesel	26500	Post 2015	1.492
MAL	Diesel	26000	2010-2015	1.495

Using the below equation, the total CO₂e was calculated in Table A2:

$$\text{Kg CO}_2\text{e per load} = (\text{km to site}) * (\text{kg CO}_2\text{e/km})$$

Table A2: Total rock loads are used to estimate total emissions for each site.

The total carbon equivalents sum to 265,670 kg or 265.7 tonnes across the sites. To account for potential flights, driving around the sites, transport of trees, and extra commuting without rock loads, a factor of 2 is included. This provides the final transport emissions as 531.3 tonnes of CO₂e.

Appendix B – Sequestration

Figure B1 was created by adding the two graphs for the two parks. For a given year, the sequestration capacity was added and plotted. As a linear trendline fit the data well in the first 50 years of sequestration, the equation of a linear line was used. Linear interpolation was used to find the year corresponding with 531.3 tonnes of CO₂e.

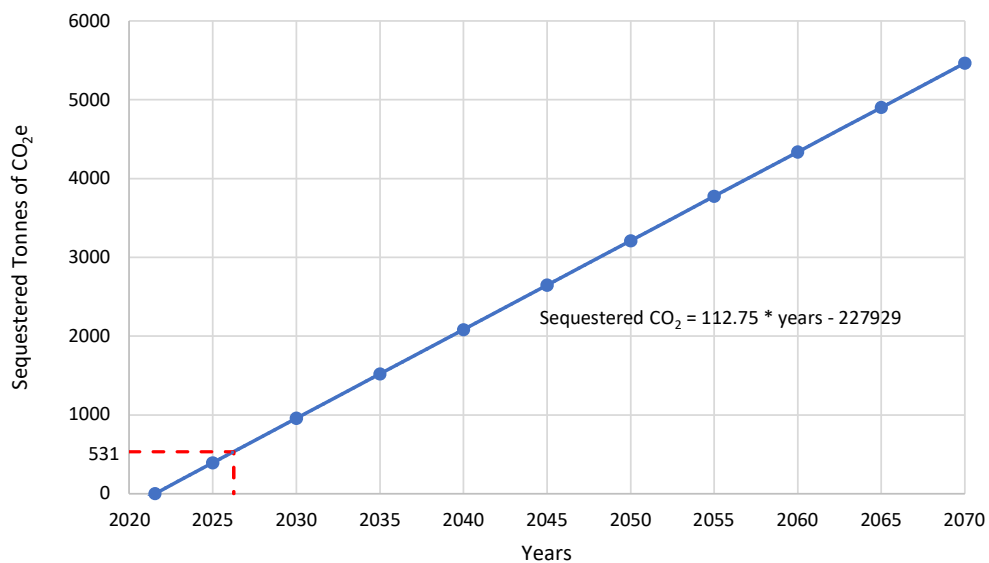


Figure B1. Linear interpolation of combined carbon sequestration from Poet and Taitā Park.



N/A
years to positive

Climate Positive Design Scorecard

Project Name **Poets Park**
Type of project **Park**

Net Impact over 50 years

Total Material Emissions (Embodied Carbon)
Total Plant Sequestration
Total Operational Emissions

-4,579 Metric Tons

0 kg CO₂-eq
4,658,407 kg CO₂-eq
79,398 kg CO₂-eq

Total Area

Planted area
Emissions per area
Sequestration per area

156,488 sq metres

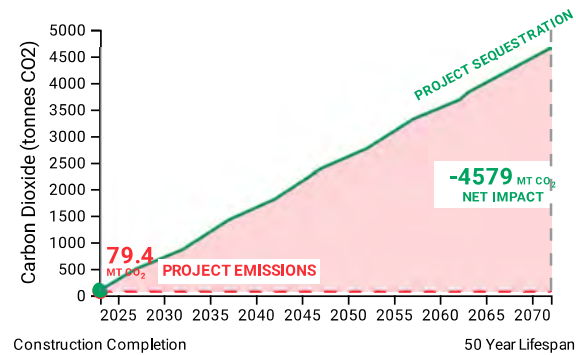
38,670 sq metres
0.5 kg per m²
29.8 kg per m²

16 hectares

25% of total area

Net Project Impact

Project Emissions





N/A
years to positive

Climate Positive Design Scorecard

Project Name **Poets Park**
Type of project **Park**

Plants

Element	Total impact
Evergreen Large shrubs	3,789,047 kg
Evergreen Small shrubs	405,322 kg
Evergreen Large trees	464,022 kg
Subtotal	4,658,391 kg
Net Impact over 50 Years	4,658,391 kg CO2-eq



N/A
years to positive

Climate Positive Design Scorecard

Project Name **Taitā Park**
Type of project **Park**

Net Impact over 50 years

Total Material Emissions (Embodied Carbon)
Total Plant Sequestration
Total Operational Emissions

-1,074 Metric Tons

0 kg CO₂-eq
1,082,894 kg CO₂-eq
8,420 kg CO₂-eq

Total Area

Planted area
Emissions per area
Sequestration per area

215,296 sq metres

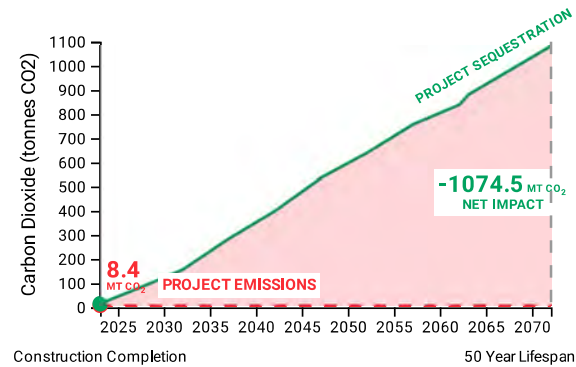
5,184 sq metres
0 kg per m²
5 kg per m²

22 hectares

2% of total area

Net Project Impact

Project Emissions





N/A
years to positive

Climate Positive Design Scorecard

Project Name **Taitā Park**
Type of project **Park**

Plants

Element	Total impact
Evergreen Large shrubs	562,276 kg
Evergreen Medium trees	4,783 kg
Evergreen Large trees	93,759 kg
Deciduous Large trees	422,115 kg
Subtotal	1,082,933 kg
Net Impact over 50 Years	1,082,933 kg CO2-eq

Successful Outcomes of the Climate Resilience Programme

Presented by: Sharyn Westlake

Environment Committee November 2023

New Zealand's Resilient River Communities Programme



55 Projects | \$354M

\$217M Government funding

\$137M Co-fund

Programme Aim

To help protect lives and livelihoods by making river communities more resilient to the effects of climate change

For more information

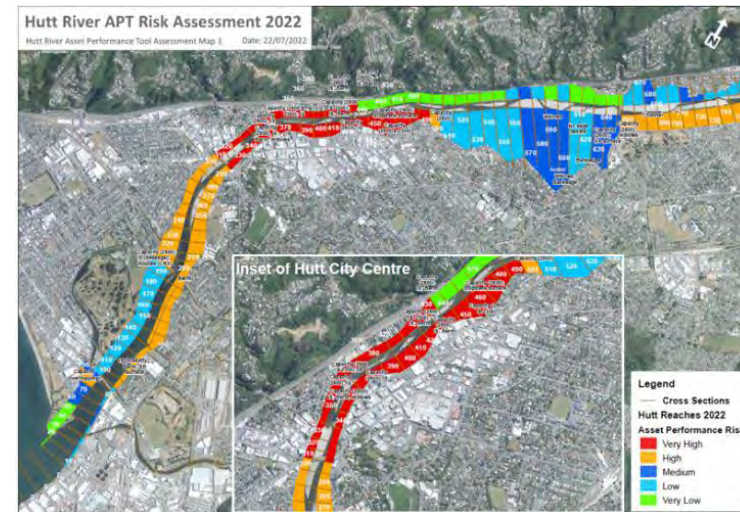
Visit: resilientrivers.nz

Climate Resilience Programme Project Selection

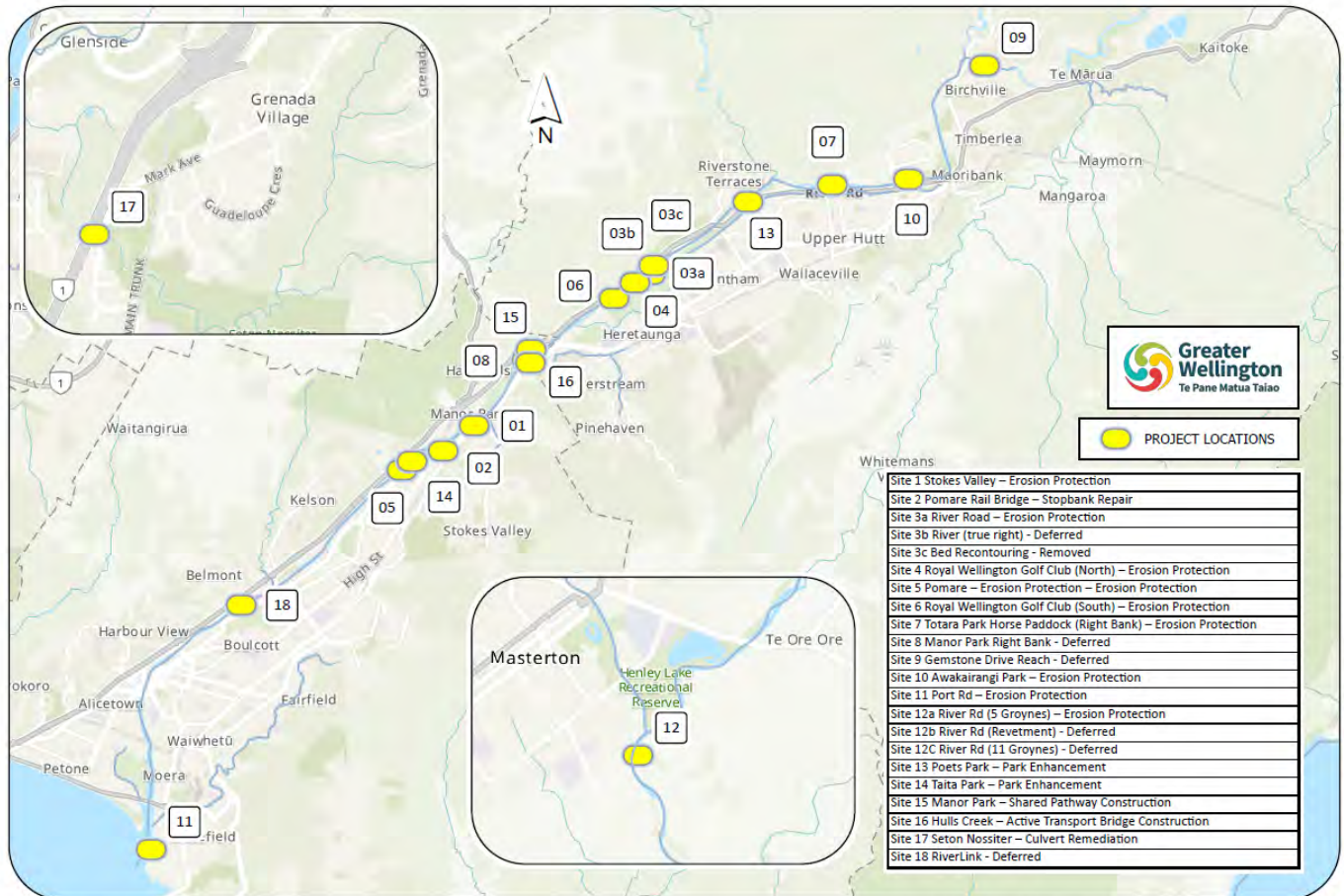
- Government criteria
 - Infrastructure projects
 - Completed within 1-3 years
 - Achieve broader cultural, social, economic and environmental outcomes.

- GW selected projects from major project responses identified in the FMPs and asset performance assessment and through workshops held prior to Covid19

FIGURE 11



Climate Resilience Programme



Kānoa Resilient River Communities Programme
GW FLOOD PROTECTION - PROJECT LOCATIONS (Tranche 1)

Drawn : COOKP, 19 April 2022, Updated 3 May 2023
File Ref : PDU Show Ready Projects April 2022 - Site Map - 2023 apr
Plotted 1:50 pm, 4/05/2023



Initially

1.5 year duration
Value \$17.6M - funded:
Kānoa \$10.7M / GW
\$5.7M / MDC \$0.34M

Finally

2.5 years duration
Value \$23.6M – funded:
Kānoa \$10.7M / GW
\$12.5M / Other co-
funders \$0.4M

Engineering Works



Stopbank repair



Riverbed recontouring



Weir repair and fish passage construction



Culvert and outlet remediation



Groyne construction



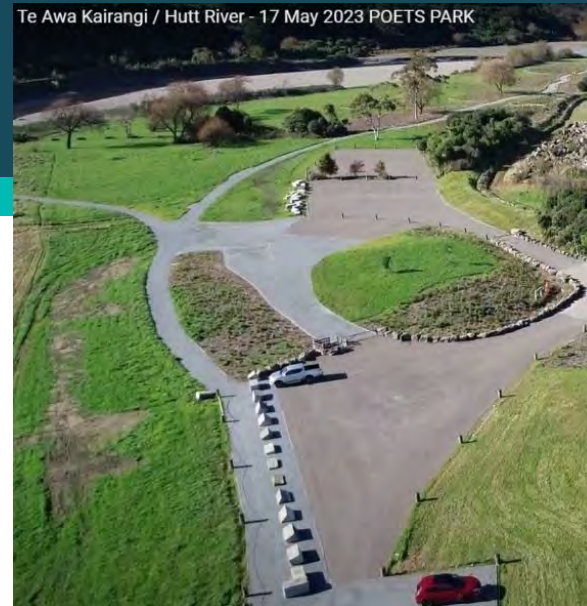
Revetment construction

Environmental Outcomes

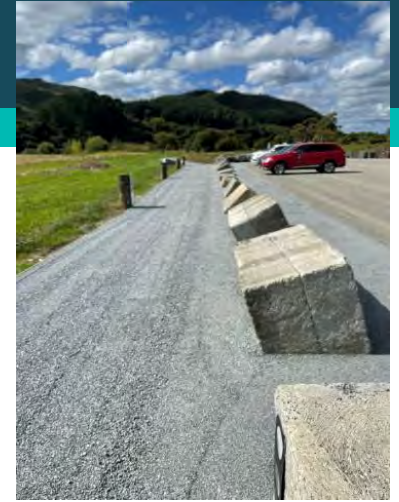
Te Awa Kairangi / Hutt River - 17 May 2023 POETS PARK



Te Awa Kairangi / Hutt River - 17 May 2023 POETS PARK



Attachment 4 to Report 23.543



Te Awa Kairangi / Hutt River - 17 May 2023 POETS PARK



Poets Park



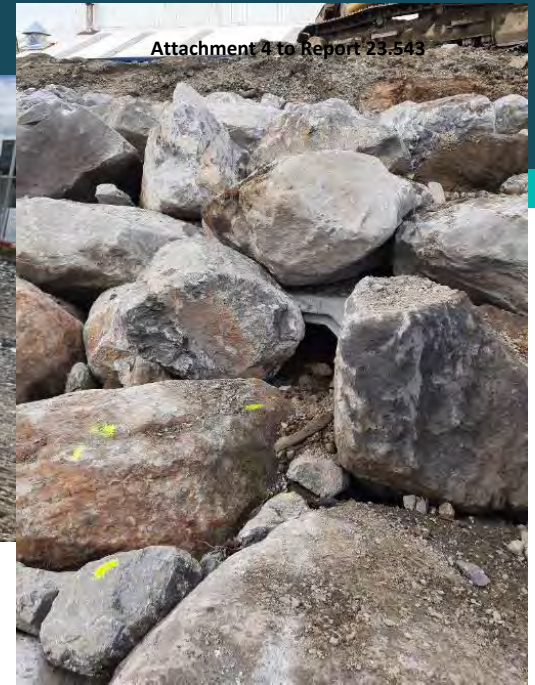
Environmental Outcomes 2



Hulls Creek Bridge



Port Road fishing platform



Port Road penguin motel



Manor Park trail



Taita Park enhancement

Broader Outcomes Achievements

Objective	What's been achieved – key highlights
Deliver social wellbeing outcomes	<ul style="list-style-type: none"> 90+ people have benefitted from wellbeing training 4 wellbeing leaders trained 120 people have access to EAP services 30+ people employed from under-represented demographic groups 53 skin cancer vouchers provided
Expanding career opportunities for construction workforce	<ul style="list-style-type: none"> 34 of MAL team trained to support career advancement <ul style="list-style-type: none"> 12 of these have new machine operator skills
Support Māori-owned business / workforce	<ul style="list-style-type: none"> 10,000+ MAL worker hours Two people from Ngāti Toa hired by MAL
Te-wao-nui	<ul style="list-style-type: none"> over 18,700 trees sourced from Rimutaka Prison 30+ hui 5 groups now involved Programme commenced Matariki 2023



Attachment 4 to Report 23_543



Broader Outcomes Success

- Engage
- Listen
- Explore new ideas
- Build relationships
- Support iwi-led initiative
- People
- Budget

Restoring the tangata to the whenua

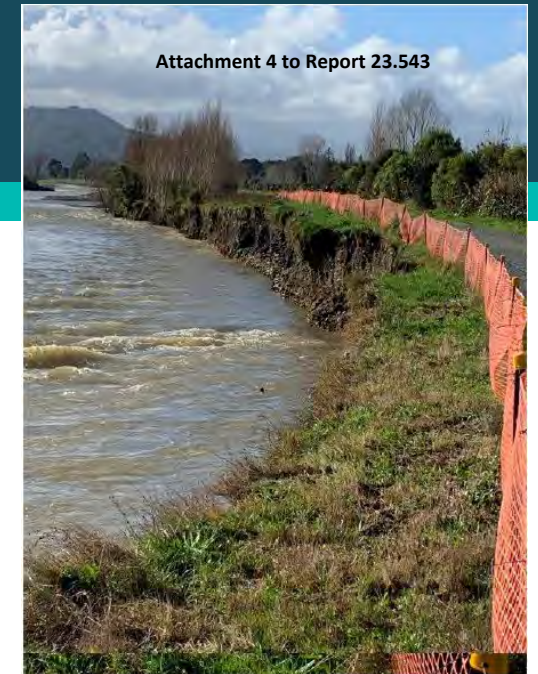


Lessons Learned

- Realistic timeframes for projects
- Required resources – on top of BAU
- Maintenance requirements – in design and following completion
- ‘Pipelines’ of work needed
- Changes from concept to design – especially over years of FMP implementation
- Communication essential – especially with stakeholders and partners



Seton Nossiter Park culvert improvements advancing well



Climate Resilience Programme Success

- Enabled developing and upgrading river management and flood protection works through a co-investment partnership approach with central government.
- FMPs and Environmental Strategies, as agreed with the Community, delivered ahead of the current schedule in the Council's Long-Term Plan and Infrastructure Strategy.
- Larger projects identified through asset performance assessments completed
- Savings to the rate payer of \$10.9M (Kānoa, MDC and KiwiRail funding).
- Programme came in under budget
- Improved climate resilience protecting people, property and key infrastructure from flooding and erosion
- Improvements to riverside spaces through wetlands, planting and trail enhancements.

Climate Resilience Programme Success and What's Next

- Enabled broader outcomes initiatives to be progressed (cultural, social, environmental and economic).
- Lessons for the future – helping us be more resilient to unprecedented weather events and flooding
- Government, through Kānoa, has been asked to fund a second tranche of proposed projects based on the success of the first tranche, to:
 - Continue to build on existing collaborative frameworks
 - Work toward instituting a genuine partnership with government
 - Carry on with the essential longer-term programme of flood risk management work needed.

Questions?

Environment Committee
23 November 2023
Report 23.8



For Information

TE RŌPŪ TAI AO | ENVIRONMENT GROUP UPDATE

Te take mō te pūrongo

Purpose

1. To inform the Environment Committee (the Committee) on:
 - a the strategic direction and priorities of the Environment Group
 - b the work underway, across the region and within each Catchment.

Te horopaki

Context

2. Action items from previous Environment Committee meetings are being progressed. For an update on specific action items, please refer to **Attachment 1**.
3. Our Intergenerational Strategy is being developed to guide te Rōpū Taiao | Environment Group to improve and protect our land, air, water, and people outcomes for years to come. Our outputs (action we take every day) deliver on outcomes (long-term goals we lead and contribute to). Our intergenerational strategy spans 100 years, with four objectives to focus the actions we take every day towards those long-term goals. These four objectives we are invested in are:
 - a Nature-based solutions: increasing nature-based solutions to environmental challenges and the challenges of our partners and communities.
 - b Safeguarding what we have: protecting our environment with and for our partners and communities for future generations by preventing deterioration, and minimising restoration requirements.
 - c Tools and techniques: making the most of tools and technology and creating new ways of working to deliver our work more effectively.
 - d People and partners: investing in the capability of our kaimahi, partners, and communities so we can collectively participate and contribute to a flourishing region.
4. Examples of how we are bringing the intergenerational strategy to life through our work are as follows:

Planting for intergenerational outcomes

5. This winter, Greater Wellington sowed over 932,000 seedlings in parks, wetlands, rivers and erosion prone land across the region, with the help of mana whenua, keen landowners, schools and community groups. Around 750,000, were native species.
6. Planting numbers have grown significantly over the last few years, in fact, three-four times the amount we put in the ground five years ago. The percentage of native trees has also grown significantly.
7. This work is strongly aligned to the four objectives of our intergenerational strategy in the following ways:

Nature-based solutions

8. Recloaking previously de-vegetated land and thus reducing flooding and erosion risk.
9. Installing bioengineered river corridors to maintain river alignment and provide protection from flooding.

Safeguarding what we have:

10. Soil conservation and maintaining land productivity sustainably.
11. Maintaining river alignment, flood management corridors that have taken decades to establish.

Tools and techniques

12. Continuous improvement in eco-source seed collection and plant distribution into appropriate ecozones.
13. Trialling new methods of revegetation to improve plant survival and reduce cost.

People and partners

14. Building a capable contractor base to deliver large-scale planting programmes. Our planting programmes have tripled in size in recent years, each year enabling growth of service providers and capability in the market to provide plants and skilled labour to get them in ground.
15. Enabling community and marae-based nurseries.

The fight against pests – a lesson in building our capacity and capability in Wellington and beyond

16. The Predator Free Wellington Project has achieved a significant milestone in eliminating rats, mustelids and possums across 1,000 hectares on the Miramar Peninsula and bringing our native birdlife back. The project's objective is pest elimination; do it once and do it right.
17. This work is strongly aligned to the four objectives of our intergenerational strategy, in the following ways:

Nature-based solutions

18. Many invasive weeds present an ideal habitat for rats, in particular Cape Ivy. Where you find Cape Ivy, you find rats. At times we have removed invasive weeds to disperse and catch rats not keen on leaving their ideal habitat. We plan to do more of this type of

activity (weed control) as the work continues. The project also needs to consider supporting restoration planting, which is an ideal opportunity to further engage the community, build capability and engender greater support and leadership in achieving nature-based outcomes for te Taiao.

Safeguarding what we have

19. Once elimination is achieved, the need to use the toxins and traps in our toolkit is minimised. Once we move into “safeguarding” mode, it’s critical to sustain a high degree of vigilance and manage incursions should they occur. This phase is largely run by community volunteers.
20. We can also use natural landscapes and urban landscapes to help protect the gains made. We pick our boundaries of elimination zones with boundaries that provide less chance of reinvasion, including roads, urban spaces, rivers, open fields etc. It’s about using the landscape to your advantage.

Tools and techniques

21. The Predator Free Wellington work has provided an opportunity to test innovation in the field and pilot new tools and techniques to maximise our resources and impact. We are currently planning a large-scale trial of a new trap, which uses a new type of trigger technology and is more reliable than other traps.
22. The trap encloses the animal inside, releases CO₂ and puts it to sleep. The traps will remotely send an alert if it has been activated, directing resources to the traps that need to be cleared (or serviced), minimising the need for widespread physical monitoring of the trap network. The trigger is calibrated to reduce the chance of catching non-target animals.
23. The insights and intelligence we capture through trialling this new tool and technique will help determine the benefits of wider application, across the region and beyond. We have the opportunity to develop/strengthen world leading tools and techniques to eliminate predators in a highly urbanised space. This work is leading the way for great environmental outcomes across New Zealand.

People and partners

24. Outcomes achieved through this work are amplified through the partnership with Greater Wellington, Wellington City Council, Predator Free Wellington Limited, Next Foundation, PF2050 Ltd and the community volunteer network. Predator Free Wellington Ltd and Greater Wellington have a close and fruitful relationship and are a great example of how local government and private sector organisations can work effectively in collaboration.
25. The project invests significantly in building capability in pest control management and enabling the community to undertake the work. This project has over 200 trained volunteers.
26. Zealandia has been an incredible nursery for endangered wildlife and an extra haven for birds in a predator free city. Wellington is one of the only cities in the world where biodiversity is increasing, and through working together we expect to see that trajectory continue.

Mauri Tūhono ki te Upoko o te Ika – the voice of te Taiao in our intergenerational context

27. The framework provides a lens and guide for Greater Wellington and the wider region in relation to each of the four intergenerational strategy objectives. It will continue to challenge us to deliver on these objectives in a way that honours our Te Tiriti partnerships and weaves an increasingly stronger korowai of trusting relationships with the wider community, expressed through the shifts it promotes.
28. The working group is close to launching the completed version of the Kaipupuri Taonga ki te Ao Whānui framework. All Councillors and senior Greater Wellington leaders have been invited to the dawn ceremony on 28 November 2023. Following the launch, the work of the group will be largely complete, and the focus will shift to designing the pathway to implementation.
29. The purpose of the framework is to inspire some big shifts in how we care for te taiao across the Region. It calls for te taiao to be at the heart of our decision making and for us to restore our relationships as we do this. It provides guidance for how this could happen, pointing towards a vision of te taiao flourishing in Te Upoko o te Ika a Maui, but with the challenge that, for us to see positive changes in te taiao first we must change ourselves.

Regional Overview

Greater Wellington’s winter planting works completed

30. As mentioned above, this winter, Greater Wellington sowed over 932,000 seedlings in parks, wetlands, rivers and erosion prone land across the region, with the help of mana whenua, keen landowners, schools and community groups. 80% of these young trees, around 750,000, were native species. This mahi delivered:
 - a 362,000 native plants in regional parks
 - b 34,850 native plants in and around the Wairarapa Moana wetlands
 - c 282,400 native plants and exotics preventing hill country erosion across the region.
 - d 64,000 native plants enhancing our river management and flood protection systems.
 - e 135,700 native plants on private land complementing river care, biodiversity and stock exclusion land retirement initiatives led by landowners.

Implementing Toitū Te Whenua Parks Network Plan 2020-30

31. A progress update report was presented to Council on 12 October 2023. Key planning and delivery work since then has included:
 - a Recloaking Papatūānuku late season wetland restoration plantings, in Queen Elizabeth Park/ Whareroa near the McKay’s Crossing entrance.
 - b Practical works to prepare the first two park cottages for visitor overnight accommodation at Baring Head/Ōrua-pouanui, East Harbour Regional Park and Belmont Regional Park.
 - c A new service standard will guide operations. A partnership model for servicing with a nearby Māori land trust is being worked through. The availability of park

cottages for bookings will deliver benefits for people and partners. Both are expected to be popular with bike and potentially horse riders (Belmont). Other cottages will progressively come online as restoration and renovation works are completed.

- d Preparation of a fire threat management plan for Eastern Belmont Park will provide guidance for restoration plantings, access road and track upgrades. It will ensure risks are documented and managed as much as possible during the transition period post major grazing activity, before natives are well established.
 - e In western Belmont Regional Park, pine tree felling has been completed as a part of Fire Threat Management Plan implementation work, and the park ranger reports increasing park use by the Porirua community, particularly dog walkers. Two thirds of west Belmont Park have now either been planted in natives or are naturally restoring, assisted by pest plant and animal management works. These are significant and positive changes in the short time since stock grazing ended in 2022 and the main entry was opened to public access.
32. The Key Native Ecosystem programme manages 56 sites across the Region, and the work has been established for this financial year, including maintenance and protection work. Of the 56 sites, we have seven sites where we are strengthening pest animal control networks. The routine five-year review of 13 site operational plans is also progressing this year.
33. As part of our regional wetland programme, 26 sites across the region have had follow-up pest plant control, which is helping to support, protect and enhance our wetland work.
34. Environment Restoration funding applications and supporting site visits for the next funding round of programmes are underway. These face-to-face planning sessions on private land are invaluable relationship investments, where Greater Wellington can provide a range of advice, including land use changes, farming good management practices, regulation or policy interpretation, etc.
35. The Environment Restoration's hill country erosion programme has retired 664 hectares of erosion prone land from grazing this year, including:
- a 376 hectares reverted to native scrub
 - b 136 hectares of radiata pine
 - c 152 hectares of native and alternative exotics.
36. Greater Wellington staff have been working with the Region's current and aspiring seed collectors as part of our eco-source seed collection work. A workshop was held to build the capacity and capability to collect seed. The workshop was a huge success, with seed collectors from all over the region attending. The interest is due to the increasing demand for eco-sourced seed to deliver on the various programmes that Greater Wellington delivers.

Regional Policy Statement Change 1

37. The Regional Policy Statement (RPS) is a strategic planning document which sits above and directs lower order plans (both for territorial authorities (TAs) and Greater

Wellington). RPS Change 1 seeks to give effect to the National Policy direction in an integrated and holistic manner.

38. RPS Change 1 continues through the hearings process. The hearing streams for Overarching matters; Integrated Management; Climate Change and Urban Development have now finished. Hearing stream 5 (Freshwater) starts on 20 November 2023.
39. Variation 1, which will bring Te Mana o Te Wai/Freshwater visions into the process has been notified and is currently out for submissions.
40. There is a strong focus on identifying, promoting and supporting Nature Based Solutions, this was covered in the Climate Change hearing stream and links closely with the new Indigenous Ecosystems provisions. The need to safeguard our environment and prevent deterioration is a consistent theme throughout, and working with our mana whenua partners and community forms a significant part of the non-regulatory methods.

Terrestrial ecology monitoring programmes – field season has started

41. The field season has begun across the region-wide terrestrial monitoring programmes. The tier 1 State of the Environment programme monitors the health of terrestrial biodiversity across a variety of land-uses in the Wellington Region at a broad scale.
42. The programme measures the state and trend of terrestrial ecological integrity at sites sampled on an 8km x 8km grid over a five-year cycle. This year's surveying will complete the 10th year (second monitoring cycle) of monitoring.
43. Our Tier II Forest, Wetland, Soils and Duneland Health programmes have also commenced which monitor selected sites in the region to determine the effectiveness of Greater Wellington's policies and management programmes.
44. Past reports and annual results are available published to Greater Wellington's website¹. Data is also provided to national monitoring programmes.

Regional Harbourmaster update

45. We attended the launch of this year's safer boating week. The theme for the season is "Come Home Safe".
46. Greater Wellington took part in the safer boating forum. This forum involves working together with a broad range of parties involved in boating and water safety.
47. Water patrols have started for the summer and lifejacket compliance was weak. As a result of our "No Excuses" day, six infringements were given out for lifejacket breaches.
48. There was an oil spill exercise held at Mana marina on 14 November 2023. This included staff from across Greater Wellington, industry and Ngāti Toa. Maritime NZ attended to carry out revalidation and assessment of trained spill responders.

¹ <https://www.gw.govt.nz/your-region/plans-policies-and-bylaws/plans-and-reports/annual-reports/>

Catchment overview

Te Whanganui-a-Tara

49. At Akatarawa Forest, the diversion for Cannon point walkway has opened in partnership with the nearby developer and has received positive public feedback.
50. A park-specific fire activity controls system and staff training are being developed to assist rangers in reducing fire risks across our parks this summer. Park activity controls may be implemented this summer to avoid high risk activities during dry site conditions. This may involve recreational access limitations by user type and will specify controls for contractor and staff operations.
51. Southern Landfill Expansion Piggyback Option (SLEPO) - Submissions for the publicly notified resource consent for the Southern Landfill expansion have closed. A total of fourteen submissions were received and included submissions in support and opposition. The hearing will be held the week beginning 11 December 2023 at Wellington City Council offices and will be heard by an Independent Hearing Panel.

Predator Free Wellington

52. The Predator Free Wellington (PFW) Project is a complete elimination of all rats, mustelids and possums across Wellington City. The total operational area of the project scope is approximately 30,000 ha and engages approximately 200 trained volunteers in the mahi.
53. The PFW team have just celebrated a milestone by achieving zero detectable rats and all other target species for Phase 1 – The Miramar peninsula, across 1000 hectares.
54. The team are well into the second phase of the project, from the central business district of Wellington to Owhiro Bay, covering approximately 1400 hectares.
55. Most recent bird counts have shown a 71% increase of native birdlife of the Miramar Peninsula since the project started.

Natural Resources Plan Change 1

56. Natural Resources Plan (NRP) Change 1 implements the National Policy Statement for Freshwater Management and solidifies the regulatory recommendations from the Te Whanganui-a-Tara WIP in a planning instrument, resulting in significant changes to the operative NRP. It has now been notified and is open to submissions.
57. Engagement is currently the focus: webinars will be held in the coming weeks with key stakeholder groups and a presentation will be given to the Wellington branch of the New Zealand Planning Institute.
58. NRP Plan Change 1 is designed to improve, long-term, the quality of freshwater in the region. It was developed in conjunction with mana whenua partners and community groups through the Te Whanganui-a-Tara Whaitua process.

Te Awarua-o-Porirua

Transmission Gully Updates

59. Transmission Gully recreation access is expected to be open for public use by the end of the year. This track will need Monday to Friday closures during the summer months as construction work ramps up again around Bridge 20.

60. Mitigation planting work is continuing in park areas adjacent to Transmission Gully. This includes infill work, emergent species planting, maintenance of already planted areas and pest control of rabbits, hares, possums, pigs and goats.
61. Waka Kotahi NZ Transport Agency (Waka Kotahi) is in the process of releasing land holdings and making them available to interested parties where this land is now surplus to requirements for road construction and maintenance. Staff are involved in a number of these parcels and considering a range of interests for Greater Wellington needs.
62. A range of outstanding work remains where Greater Wellington is working closely with the road constructor to ensure positive outcomes for the affected parks: Belmont and Battle Hill. Examples of this work include improvements to fish passage barriers in the Duck Creek catchment, and removal of a temporary culvert to improve stream health and fish passage in the Cannons Creek catchment.
63. Consideration of appropriate regulatory action to ensure ongoing compliance with all requirements of the various consents remains ongoing. We should be able to report more fully on this issue in the next update report.

Te Awarua-o-Porirua Whakritenga – the Porirua Harbour Accord

64. Restoring the health of Te Awarua o Porirua is a priority for the partner organisations Porirua City Council, Te Rūnanga o Toa Rangatira, Greater Wellington, Wellington City Council, Wellington Water Limited and the many stakeholders, community groups and other organisations that wish to see the health of the harbour restored.
65. The intention of the Accord is to provide the partners, stakeholders, community groups and other organisations with a clear focus to help prioritise and drive actions which will improve harbour health. The Accord will also assist and support the various organisations to work together to achieve the shared vision.
66. The Accord helps give effect to the Ngāti Toa Statement and Te Awarua o Porirua Whaitua Implementation Plan.
67. The draft Accord documents will likely be shared with the respective partner Executive Leadership Teams prior to Christmas for comment.
68. Collaborative riparian restoration - in collaboration, Porirua City Council and Greater Wellington's respective riparian programmes have delivered 8 riparian restoration projects, covering 6.7 hectares of private land. Porirua City Council's and Greater Wellington's programmes work together to exclude stock and restore stream riparian zone throughout the catchment.
69. A Forestry Behaviour Change project was commissioned in August 2023. Consultant forestry experts are engaging with key forestry stakeholders in the Porirua catchment seeking to educate and enable good practice to reduce sediment loss to a higher standard than typically achieved by national regulation, bottom-line harvest practices.
70. At Battle Hill Regional Park a new bridge has been installed for public and forestry usage in partnership with the forestry right holder. This structure reduces the risk of sediment entering the Horokiri stream (Porirua Whaitua) and increases recreational access.

Te Awarua-o-Porirua Community Environment Fund

71. We have received 14 applications to the Te Awarua o Porirua Community Environment Fund this year, all of which are likely to receive financial support.
72. This is a fund designed to support community groups working on restoration projects on public land in the Te Awarua o Porirua whaitua area. The fund is co-managed with our mana whenua partner, Te Rūnanga o Toa Rangatira. The 14 applications include planting projects, pest animal and plant control, community plant nurseries and school restoration projects. The fund already supports 21 ongoing projects in the area, and several of the new applications are existing groups seeking further support from Greater Wellington after already delivering good outcomes in the past.
73. Baring Head Lizard surveys - Baring Head has the most important population of native lizard species on the mainland in the Wellington Region. Greater Wellington has been monitoring the lizard population in the park since 2012 in response to land-use changes. We have engaged a qualified contractor to lead the lizard surveys for the next 3 summer seasons commencing 5 December 2023 (weather permitting). Greater Wellington monitoring staff are currently installing field monitoring equipment across the site ahead of the surveys. Staff have been provided the development opportunity to train in lizard handling and partake in the surveying as part of the delivery of this project.

Natural Resources Plan Change 1

74. NRP Plan Change 1 implements the National Policy Statement for Freshwater Management and solidifies the regulatory recommendations from the Te Awarua o Porirua WIP in a planning instrument, resulting in significant changes to the operative NRP. It has now been notified and is open to submissions.
75. Engagement is currently the focus: webinars will be held in the coming weeks with key stakeholder groups and a presentation will be given to the Wellington branch of the New Zealand Planning Institute.
76. NRP Plan Change 1 is designed to improve, long-term, the quality of freshwater in the region. It was developed in conjunction with mana whenua partners and community groups through the Te Awarua o Porirua Whaitua process.

Wairarapa Coast

77. Key Native Ecosystem staff servicing predator traps, are seeing multiple nesting pairs of banded and black fronted Dotterels over the whole site in the Opouawe key native ecosystem, including on the coastal shore. The Pied Stilt is also being seen regularly. Predator control in this site has trapped 37 pest cats and 233 hedgehogs in the last year. Riversdale key native ecosystem has seen a return of the New Zealand dotterel. This is really positive after a period of coastal erosion effecting the habitat.
78. Wairarapa Coast Catchment Schemes - work has commenced to deliver on the objectives of protecting communities from the effects of erosion and flooding. The Homewood and Mataikona/Whakataki catchments will be delivered initially, with the four other catchments being staggered throughout the summer months when the waterways have lower flows. The Whareama catchment was particularly affected by Cyclone Gabrielle. Additional funding has been applied for through the Flood Resilience Fund.

Ruamāhanga

79. The Environment Restoration - riparian programme supported 49 landowners in the Wairarapa to protect waterways this year, with 19km stock exclusion fencing and native planting stream restoration.
80. Environment Restoration staff hosted two drop-in sessions in the Parkvale catchment, targeting landowners needing support with the mapping component of their certified farm environment plans. Parkvale is the first area where Certified Farm Environment Plans are required under our NRP at the end of this year.
81. Crown funded programme of major river riparian enhancements - Maintenance activities will start in November across the Wairarapa's major rivers previously planted. Plants have been establishing and growing well. The planting sites will be monitored over the summer period to gauge the impact of the coming El Niño and potential replacements.
82. Wairarapa Moana Community Fund - Five applications were received for the Wairarapa Moana Community Fund with two being successful in receiving funding. This year the decision-making process was collaborative, working with iwi partners. The two successful recipients are a riparian restoration project and making improvements to Kohunui Marae plant nursery.

Regional Pest Management Plan

83. Rooks are an eradication species in our Regional Pest Management Plan (RPMP). The annual baiting of rooks nests across the Wairarapa was completed (albeit behind schedule due to gale winds) on 29 October 2023. This work treated eight active rookeries which were mostly still active, with active nests still present despite the weather. No crop damage has been reported for a number of years now and the downward trend in the number of active nests is a positive sign.
84. Regional Predator Control programme (RPCP) is underway with Predator control on the Ruamāhanga and Waingawa Rivers to protect nesting river birds. Possum control has moved to the Whangaehu area, with Mauriceville due to start in the next couple of weeks.
85. Wairarapa moana - Onoke Spit pest animal control work to protect new plantings and control predators using night shooting/trapping has been very effective. Numerous Matuku/Australasian Bittern have been seen during night and day pest control work at Tauanui confluence. 108 possums were controlled in the last few months.

Te Kāuru Upper Ruamāhanga Floodplain Management Plan (2019)

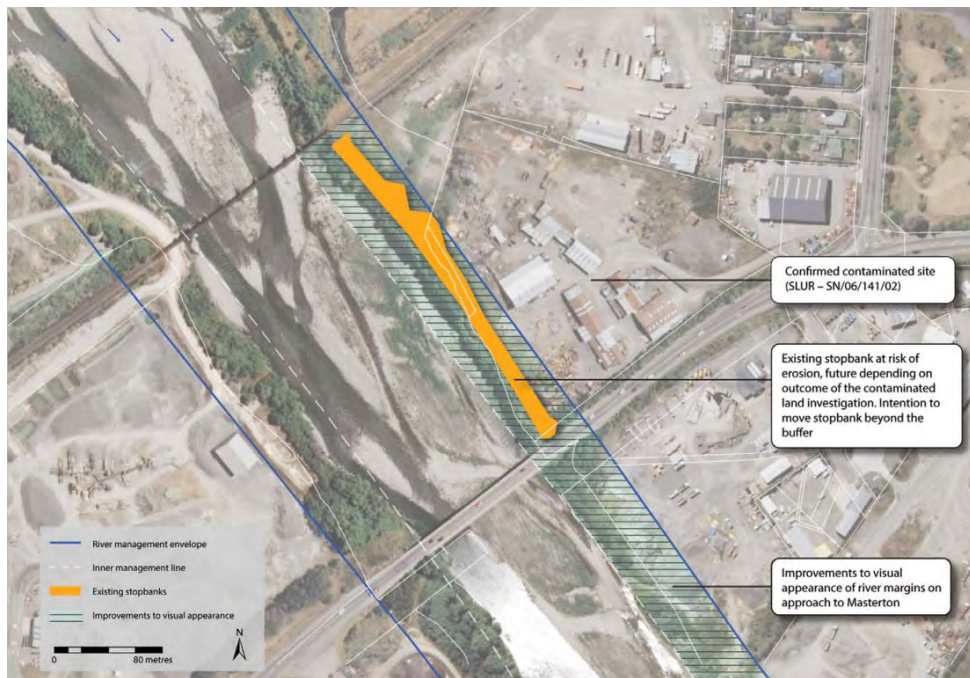
86. Native planting at Site 12, River Road Ruamāhanga River will be completed by mid-November. The 3,000 native plants have been planted by Rangitāne o Wairarapa, providing erosion protection to the Ruamāhanga River near the old Masterton landfill.

Figure 1: River Road – Stage One – Native Planting (3,000 native plants)



87. Erosion project works continue at River Road, Masterton. This summer we will be constructing a 150m rock revetment (wall) at the Waipoua and Ruamāhanga River confluence. This work will protect several homes from continued bank erosion. This work is outlined in the Te Kāuru Upper Ruamāhanga Floodplain Management Plan (2019).
88. Discussions with mana whenua regarding Stage 3 works of the River Road project are continuing. The proposal is to install eleven, 1,000 tonne rock groyne between stages one and two.
89. The south Masterton stopbank located on the true left bank of the Waingawa River is in poor condition and is at risk of erosion. With the potential of ground contamination due to historical land use; this project is considered a major response as outlined in the Te Kāuru Upper Ruamāhanga Floodplain Management Plan (2019). Procurement for the required site investigations has commenced to determine the level of ground contamination and the next steps. The current proposal is to retreat the stopbank to allow the river more room.

Figure 2: South Masterton Stopbank

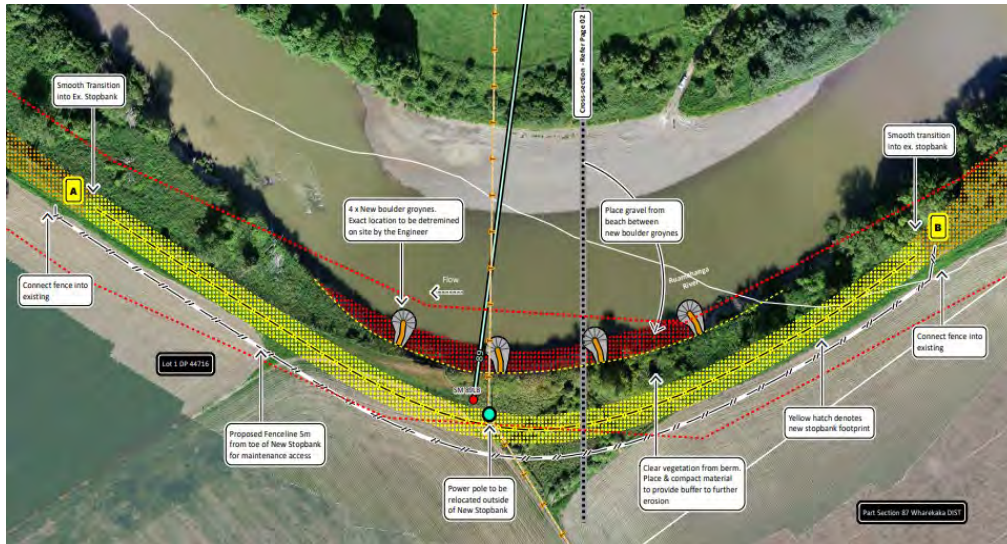


90. The eastern rivers known as the Kopuaranga, Whangaehu and Taueru Rivers have been dominated by crack willow trees for decades. During recent events such as Cyclone Gabrielle, the crack willow trees (through blockages) have caused flooding throughout the eastern rivers which has affected farms, homes, and several rural roads. With the assistance of Government funding, a Crack Willow Removal Programme can now be established. A local steering group (to be formed) will aid and provide direction for the project. The focus will start on removing current blockages, followed by the eradication of crack willows and then a heavy focus on habitat rehabilitation.
91. The implementation of the Waiōhine River Plan (2022) continues with the first meeting of the governance group, Waiōhine River Plan Advisory Committee, scheduled for 21 November 2023. During this meeting we will discuss the work required for the two inland stopbanks outlined in the river plan.

Lower Wairarapa Valley Development Scheme

92. Works are required on Mahaki Road to mitigate erosion on the Ruamāhanga River which is impacting a stopbank. To enable this to occur, Powerco are required to retreat their power pole, and this work is expected to begin around mid-November 2023. Our related work will be to realign the existing stopbank, re-forming the river bank and moving and placing rock to form erosion protection.

Figure 3: Mahaki Stopbank and groyne design



Flood operations maintenance work – Te Kāuru

- 93. Beach recontouring in the Waipoua river took place to protect an at risk stopbank from erosion.
- 94. Vegetation maintenance in the urban reach of the Waipoua river has also taken place removing dead willow from the river berm, windblown trees from the river channel and layering willow trees to protect the banks from erosion.

Flood operations maintenance work – Waiōhine River Plan

- 95. Beach vegetation clearing has been undertaken on the Waiohine River to clear pest plants and maintain channel capacity for flood events.
- 96. Willow tethering into an erosion hole at the lower reach of the Waipoua river has been completed.
- 97. River berm vegetation clearing has been completed in preparation for native planting in August 2024.
- 98. Stopbank and berm vegetation maintenance has been completed below SH2 road bridge in preparation for native planting in August 2024.
- 99. Stopbank weed spraying maintenance on the Mangatarere River has recently been completed.

Flood operations maintenance work – Lower Wairarapa Development Schem

- 100. Two gravel extraction sites are underway between the Waiōhine confluence and Martinborough, and one below Martinborough, to remove aggrading gravel beaches to maintain flood capacity in the Ruamāhanga River.
- 101. Willow and native planting programmes have been completed in the Ruamāhanga, Tauanui, Turanganui and Western Lake Stream.
- 102. Emergency work has been undertaken in the upper reaches of the Turanganui River to prevent flood damage to a rural gravel road through ongoing erosion.

103. Mahaki stopbank erosion repair has been completed to reduce the risk of failure in the short term. This is linked to a capital project.

Kāpiti

104. The Environment Court Hearing for Ōtaki to North Levin Expressway (O2NL) has concluded and the decision-making panel has issued further information required before they close the hearing. The reporting was undertaken jointly with Horizons. Remaining matters of contention include certification requirements for stormwater structures and matters relating to hydrology and flooding.
105. RPMP mustelid control in Ōtaki has commenced again for the year, with a focus on trialling new techniques to maximise trap availability for ferrets (avoiding hedgehogs) to avoid hedgehogs occupying traps so they are more available to catch ferrets, including raising trap boxes 100mm off the ground. Again, no rooks have been detected in the Kāpiti area.
106. The Environment Restoration riparian programme has supported 15 landowners in Kāpiti, Porirua and Te Whanganui-a-Tara catchments this year with stock exclusion and native planting stream restoration.
107. New Surfbee for flow measurements - one of the primary tasks the water resilience team is to measure the river's flow (gauging). These ratings support our decision making during a flood event. Measuring flow has been a time consuming and sometimes dangerous task for our monitoring officers, including wadding into the river, kayaking, or setting up a slackline to measure the flow. The recent purchase of a remote control "surfbee" boat will reduce the associated health and safety risk, the need for permanent infrastructure for some rivers and will enable us to gauge more rivers due to the time and safety efficiencies.

Figure 4: New Surfbee in action



Flood operations maintenance work

- 108. In the upper reach of the Ōtaki River, gravel redistribution work has been completed. Gravel has been taken from a large beach and redeposited into an erosion site to maintain access to the cliffs for operational purposes.
- 109. The removal of old willow from mature native planting has also progressed on both the Ōtaki and Waikanae Rivers and will continue into the new year.
- 110. Routine stopbank and berm mowing is continuing.
- 111. Site preparation for both the Ōtaki and Waikanae friend groups to continue with their planting plans are ongoing.
- 112. Mouth cuts at both the Waitahu and Waimeha streams have been performed by excavators using a local contractor.

**Ngā āpitihanga
Attachment**

Number	Title
1	Action items from previous Environment Committee meetings

**Ngā kaiwaitohu
Signatories**

Approver	Lian Butcher – Kaiwhakahaere Matua Taiao Group Manager Environment
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<p style="text-align: center;">He whakarāpopoto i ngā huritaonga Summary of considerations</p>
<p><i>Fit with Council's roles or with Committee's terms of reference</i></p> <p>The Environment Committee has responsibility to consider all matters across the development and implementation of the work programmes of Greater Wellington's Environment Group.</p>
<p><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></p> <p>Development and implementation of related work programmes fall under the core activities of the 2021-2031 Long Term Plan.</p>
<p><i>Internal consultation</i></p> <p>Internal consultation was limited to officers of Greater Wellington's Environment Group.</p>
<p><i>Risks and impacts - legal / health and safety etc.</i></p> <p>This 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.</p>

Action items from previous Environment Committee meetings

Date	Action item	Status and comment
27 April 2023	<p>Environment/Catchment Update – Report 23.2</p> <p>Noted:</p> <p>The Committee requested that an update on Transmission Gully and the wetlands in Queen Elizabeth Park in future reports</p>	<p>Status: Underway</p> <p>Comment: Staff will coordinate an update on Transmission Gully for the 23 November 2023 Environment Group update.</p> <p>Greater Wellington’s public website has recently been updated with information about wetland restoration at Queen Elizabeth Park.</p> <p>https://www.gw.govt.nz/parks/queen-elizabeth-park/whats-happening-in-queen-elizabeth-park/</p>
15 June 2023	<p>Environment Update – Report 23.3</p> <p>Noted:</p> <p>The Committee requested a timeline on the programme of Te Reo on signage at Greater Wellington’s parks</p>	<p>Status: Complete</p> <p>Comment: An email was sent to Councillor Connelly on 1 July 2023 outlining our work with Te Reo in Park signage. A summary of this information was included in the October Environment Group update.</p>
10 August 2023	<p>Developing a Marine Biosecurity Programme for the Wellington Region – Report 23.347</p> <p>Noted:</p> <p>The Committee requested:</p>	
	<p>A report to a future Environment Committee meeting outlining what powers Greater Wellington has currently in</p>	<p>Status: Complete</p> <p>Comment: This information was sent as an email response on 2 November 2023. It has been determined that email</p>

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	managing marine incursions and the options for including marine pests into the Regional Pest Management Plan.	communication is suitable for effective transfer of this information.
	That officers liaise with the three other councils in the Partnership and arrange a joint workshop.	Status: Complete Comment: The business case for joining TOS MBP has been approved. The Partnership has finalised the new contract with GW becoming financial members from 1 November.
12 October 2023	Toitū Te Whenua Parks Network Plan 2020-30 – Report 23.456 Noted: The Committee requested a report to a future Committee meeting, detailing the history of the development of Toitū Te Whenua Parks Network Plan 2020-30, what has been done in implementing Toitū Te Whenua, and the challenges and opportunities for parks (and wetlands) restoration work.	Status: Complete Comment: An update report was presented to the Committee on 12 October. No further action was requested.
12 October 2023	Pest Management Report – Report 23.467 Noted: The Committee requested that it receive an annual pest management report. The Committee requested that this report cover: a Overall pest management work in the Wellington Region b Community pest management work	Status: Underway Comment: This is being considered as part of the broader work on enhanced reporting options for councillors

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	c Greater Wellington pest control work on Greater Wellington controlled land, including regional parks.	
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