

If calling, please ask for Democratic Services

Environment Committee

Thursday 8 August 2024, 9.30am

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

Quorum: Seven Members

Members

Councillors

Penny Gaylor (Chair)	Quentin Duthie (Deputy Chair)
David Bassett	Ros Connelly
Chris Kirk-Burnnand	Ken Laban
David Lee	Thomas Nash
Daran Ponter	Hikitia Ropata
Yadana Saw	Adrienne Staples
Simon Woolf	

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 priorities

and 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 8 August 2024, 9:30am

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

Public Business

No.	Item	Report	Page
1.	Apologies		
2.	Conflict of interest declarations		
3.	Public participation		
4.	<u>Confirmation of the Public minutes of the</u> <u>Environment Committee meeting on 13 June</u> <u>2024</u>	24.322	6
5.	Dangerous Dams Policy - Deliberations	24.385	9
6.	Crown Funding Contribution to Implementing Floodplain Management Plan Outcomes	24.384	33
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8.	<u>Te Rōpū Taiao Environment Group Update –</u> <u>August 2024</u>	24.375	57



Please note these minutes remain unconfirmed until the Environment Committee meeting on 8 August 2024

Report 24.322

Public minutes of the Environment Committee meeting on Thursday 13 June 2024

Taumata Kōrero – Council Chamber, Greater Wellington Regional Council 100 Cuba Street, Te Aro, Wellington at 9.31am

Members Present

Councillor Gaylor (Chair) Councillor Duthie (Deputy Chair) (from 9.31am until 10.37am) Councillor Bassett Councillor Connelly Councillor Kirk-Burnnand (from 9.59am) Councillor Laban Councillor Lee Councillor Nash Councillor Saw Councillor Staples Councillor Woolf

Councillors Lee and Staples participated at the meeting remotely via Microsoft Teams, and counted for the purpose of quorum in accordance with clause 25B of Schedule 7 to the Local Government Act 2002. Councillor Woolf participated at the meeting remotely via Microsoft Teams from 9.31am and in person from 9.40am.

Karakia timatanga

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

Public Business

1 Apologies

Moved: Cr Nash / Cr Laban

That the Committee accepts the apologies for absence from Councillor Ponter, Councillor Ropata and Barbie Barton, an apology for lateness from Councillor Kirk-Burnnand, and an apology for early departure from Councillor Duthie.

The motion was **carried**.

2 Declarations of conflicts of interest

There were no declarations of conflicts of interest.

3 Public participation

Dean Stanley, Sport NZ and Yachting NZ, and pupils from Worser Bay School and Wellington East Girls' College spoke to a presentation about their research into biodiversity at Worser Bay and a proposed blue belt site to protect marine life.

Councillor Woolf joined the meeting in person at 9.40am during the above item.

4 Confirmation of the Public minutes of the Environment Committee meeting on 9 May 2024 - Report 24.218

Moved: Cr Duthie / Cr Laban

That the Committee confirms the Public minutes of the Environment Committee meeting on 9 May 2024 – Report 24.218.

The motion was **carried**.

Councillor Kirk-Burnnand joined the meeting at 9.59am during the above item.

5 **Te Awarua-o-Porirua Whakaritenga – Porirua Harbour Accord – Report 24.236** [For Information]

Jimmy Young, Catchment Manager Te Awarua-o-Porirua, and Nicola Patrick, Director Catchment, spoke to the report.

6 Whaitua Implementation – June 2024 – Report 24.223 [For Information]

Nicola Patrick, Director Catchment, spoke to the report.

7 Monitoring Stocktake Overview – Report 24.308 [For Information]

James Luty, Manager Data and Monitoring, spoke to the report.

Councillor Duthie left the meeting at 10.37am during the above item and did not return.

8 Te Ropū Taiao | Environment Group Update – Report 24.241 [For Information]

Jack Mace, Director Delivery, spoke to the report.

Noted: The Committee asked officers to provide an assessment of whether Greater Wellington has any immediate use for the area at Pākuratahi that was leased by the Glider Club, rather than seeking to lease it to another party.

Karakia whakamutunga

The Committee Chair closed the meeting with a karakia whakamutunga.

The public meeting closed at 10.58am.

Councillor P Gaylor **Chair**

Date:

Environment Committee 8 August 2024 Report 24.385



For Decision

DANGEROUS DAM POLICY - DELIBERATIONS

Te take mō te pūrongo

Purpose

1. To consider the submission and recommended changes to the Policy on Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams 2024 (the Policy)

He tūtohu Recommendations

That the Committee:

- 1 **Considers** the submission received on the proposed Policy on Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams 2024.
- 2 Agrees to the changes advised by officers:
 - a include the phrase "and may work with the owners of identified" in paragraph 16, and
 - b entirely redrafted paragraph 25, and
 - c amendments to paragraphs 17 and 19, and
 - d reordering paragraphs 3, and 16-22.
- 3 **Recommends** that Council adopt the policy as amended.

Te tāhū kōrero

Background

- 2. Section 161 of the Building Act 2004 requires a regional authority¹ to adopt a policy on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams within its region. Section 162 of the Building Act 2004 stipulates that the policy must be adopted in accordance with the special consultative procedure in section 83 of the Local Government Act 2002.
- 3. Council first adopted a Dangerous Dams policy in 2006, which was updated in 2011. After many years of deferral, the Building (Dam Safety) Regulations 2022 ("the regulations") came into force on 13 May 2024, and therefore it is timely to update our policy. A draft of the policy was discussed at the Council workshop on 14 May 2024, and Council approved the proposed policy for consultation on 30 May 2024 (Report 24.242).
- ¹ The Building Act 2004 defines regional authority as "a regional council or a unitary authority".

Consultation

- 4. Consultation on the proposed policy was open from 4 June to 7 July 2024 on the "Have Your Say" platform. The policy consultation was advertised via public notices in The Post and the Wairarapa Times Age and using social media channels. Letters were sent to known dam owners in the region and 33 stakeholder organisations to inform them of the policy consultation.
- 5. There were 81 visits to the Have Your Say page, and 54 downloads of the consultation documents including 32 downloads of the proposed policy. One submission was received as follows:
 - Q8. Please provide your comments and suggestions on the Proposed Policy on Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams 2024 here:

Hi Greater Wellington Dam Safety Policy Consultation, I am a Dam Safety Recognised Engineer (PIC and DSAP), Rec Eng Practice Area Assessor, General Manager of Dam Safety Intelligence (a specialist dam safety business), and Previous Chair of NZ Society on Large Dams (NZSOLD). My submission is summarised in the 2 following points. I would be pleased to discuss the second point further in a follow up meeting. 1. The policy is mostly well written and mostly aligns with the intent of dam safety in the Building Act and Dam Safety Regulations 2. The policy appears to group actions for dangerous dams and prone dams together. Please consider more clearly identifying what actions apply to dangerous dams, and what actions apply to prone dams. This is because dangerous dams and prone dams, by definition, have different levels of deficiency, and therefore the respective required actions are different (as defined in the Act and Regs). In summary, dangerous dams are more deficient than prone dams, and more likely to fail, therefore dangerous dams require more severe and urgent action than prone dams. (Note 1: 'deficiency' is a measure of how far the dam's performance falls short of recommended practice design loads) Nga mihi, Dan Forster

Te tātaritanga Analysis

Consultation findings

- 6. Staff met with the submitter on two occasions to discuss the primary submission point "*Please consider more clearly identifying what actions apply to dangerous dams and what actions apply to prone dams.*"
- 7. The submitter seeks one specific change to the proposed policy:

Location	Amendment	Rationale	Officers' recommendation
Paragraph 16	Insert the phrase "and may work with the owners of identified" The Council will work with the owners of identified dangerous dams, and may work with the owners of identified earthquake-prone dams and flood-prone dams, to assist them to develop an action plan (with timeframes) with the goals of increasing the safety of the dam and eliminating or reducing the risks	Developing an action plan will always be an appropriate step if a dam is identified as a dangerous dam. Developing an action plan may be an appropriate step if a dam is identified as a prone dam - depending on the outcome of reviewing the dam's safety assurance programme. This wording aligns with the Waikato Regional Council policy.	Accept this insertion

8. As a result of discussing the Policy with the submitter, who is a leader in the field of dam safety engineering, officers gained greater understanding of the risks associated with the different classes of dams. The submitter and reporting officer together redrafted paragraph 25 to better reflect the council's priorities in implementing the policy – based on risk.

Location	Amendment	Rationale	Officers
			recommendation
Paragraph 27	 Redraft paragraph 27 entirely: In performing its functions under the Building Act and Regulations, Council will prioritise removing or reducing danger informed by risk understanding (likelihood and consequence), to first ensure public safety, and then have regard to damage or loss of property, environment and economic welfare, followed by any heritage matters that might be present. Generally, Council will prioritise the following actions with consideration given commensurate to the nature of the risk(s): A. responding to a situation where immediate danger is present B. reducing the risks posed by dangerous dams C. reducing the risks posed by earthquake-prone and flood- prone dams D. working with dam owners, or intervening where necessary, where a dam does not have a dam safety assurance programme that complies with the regulations. 	Clarify the council's priorities by adopting a risk-based approach, and clearer language.	Accept this redrafting

9. The submitter originally indicated that they would like to speak to their submission at a hearing. However, after working with officers on the changes recommended above, they have withdrawn their request to be heard. As there was only one submitter, a hearing is therefore not required.

Changes recommended by officers

10. A review of the Policy by an internal dam safety expert recommends changes to paragraphs 18 and 20 to clarify the responsibilities on dam owners and Council in the development of action plans to reduce or remove danger. The drafting in the consultation version of the Policy assigned expertise and responsibility to Council that are unwarranted. Council (as regulator) does not have the expertise to know what actions are necessary to reduce the risks associated with the management and safe operation of dams – but are instead reliant on the expertise and advice of suitably qualified engineers. Use of the term "mutually acceptable" implied that Council had some responsibility for developing or agreeing the action plan, which

it does not. Redrafting paragraph 18 removes liability from Council in the event of dam failure during or after the implementation of an action plan.

11. Recommended changes to paragraph 18 are as follows:

Before exercising any of its powers under sections 154 to 159 of the Building Act 2004, the Council will, unless the circumstances dictate otherwise (such as where there is immediate danger to the safety of persons, property, or the environment), seek to discuss options for action with the owner of the dam, with a view to obtaining from the owner a mutually acceptable formal proposal for reducing or removing the danger.the owner of a dangerous dam, earthquake-prone dam or flood-prone dam is expected to provide Council with an action plan which reduces or removes the danger(s). It is the dam owner's responsibility to prove that the actions taken are commensurate with the danger(s) to people, property or the environment. The action plan is to be discussed with Council, and Council is to be satisfied that the dam owner is taking responsibility for the dam. The Council may have the action plan independently peer reviewed by a suitably qualified person, and any recommendations deemed appropriate by Council are to be adopted into the action plan.

12. Recommended changes to paragraph 20:

The whole or part of any agreement between the Council and an action plan submitted by the dam owner may be formalised in a Notice to Fix issued under section 164 of the Act. If agreement cannot be reached between the Council and the dam owner, the Council may exercise any of its statutory powers in sections 154 to 159 and section 164 of the Act.

- 13. The proposed Policy that Council approved for public consultation adhered closely to a template developed and shared between regional authorities. While there are advantages in the Policy being largely consistent across regions, officers consider that the clarity of the Policy could be improved by moving some sentences and paragraphs within the document.
- 14. Firstly, to move a sentence from paragraph 26 to the Introduction:

The dangerous dam provisions of the Building Act will be used by the Council as a mechanism to remedy an unsatisfactory situation that has developed in relation to classifiable dams in the Wellington region, rather than a means of responding to "emergencies" that arise in the future.

This sentence applies to the whole document, not just to the Council's priorities, and therefore sits best in the introduction. This sentence becomes paragraph 3, shown in <u>green underlined italics text</u> in <u>Attachment 1</u>.

15. Secondly, to remove duplication in the Policy regarding the parties Council will notify about a dangerous, earthquake-prone or flood-prone dam. Officers recommend combining the content of paragraphs 13 and 22 at paragraph 13 – as shown in **Attachment 1**.

Should the Council receive information about a dangerous, earthquake-prone or flood-prone dam in its regional boundary, <u>The Council will notify potentially</u> <u>affected communities downstream of a dangerous dam, earthquake-prone</u> <u>dam or flood-prone dam. The Council will do this by publishing information</u> about any dangerous, earthquake-prone or flood-prone dams in its region. The Council will notify <u>operators of critical infrastructure or lifeline utilities</u> <u>downstream</u>, the Wellington Region Emergency Management Office (WREMO), the relevant territorial authority and mana whenua entities.

16. <u>Attachment 2</u> shows the policy as it would read with all the recommended changes accepted.

Ngā hua ahumoni

Financial implications

- 17. There are no financial implications arising from the recommended changes to the Policy.
- 18. The Building Act 2004 allows regional authorities to impose fees or charges for performing functions under the Act. These charges are laid out in the Greater Wellington Resource Management Charging Policy (2024-2029). Dam owners will be invoiced for actual and reasonable time to process the documents they are required to submit under the new regulations, in following up non-compliance with the regulations, and for costs in the event of an emergency response.

Ngā Take e hāngai ana te iwi Māori Implications for Māori

19. There are no new or additional impacts to Māori arising following the consultation process and submissions and feedback analysis.

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

- 20. The matters requiring decision in this report were considered by officers in accordance with the process set out in Greater Wellington's Climate Change Consideration Guide 2020.
- 21. The proposed matters neither contributes to nor is at odds with Council's and Greater Wellington's policies and commitments relating to climate change.

Ngā tikanga whakatau

Decision-making process

22. The matters requiring decision in this report were considered by officers against the decision-making requirements of Part 6 of the Local Government Act 2002. Greater Wellington has consulted the public using the Special Consultative Procedure, as set out in section 83 of the Local Government Act 2002.

Te hiranga Significance

23. Officers considered the significance (as defined by Part 6 of the Local Government Act 2002) of these matters, taking into account Council's *Significance and Engagement Policy* and Greater Wellington's *Decision-making Guidelines*. The proposed adoption of the Policy will lead to Council making a decision of medium significance. This is because the matters are updating an existing Policy within

current principles outlined in that Policy, the matters impact on a small number of landowners, and the matters require the Council to establish a new regulatory programme.

Te whakatūtakitaki

Engagement

24. The policy consultation was advertised via public notices in The Post and the Wairarapa Times Age, and social media channels. Letters were sent to known dam owners in the Region, and 33 stakeholder organisations, to inform them of the policy consultation. Interest and the number of submissions received on the proposed changes are considered low given the numbers of persons notified.

Ngā tūāoma e whai ake nei

Next steps

- 25. Following deliberations at this meeting, any recommended changes to the Policy will be actioned by staff.
- 26. The final Policy on Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams 2024 will be submitted to Council for adoption at its meeting on 27 August 2024.

Ngā āpitihanga Attachments

Number	Title
1	Tracked changes to Dangerous Dams Policy
2	Recommended Dangerous Dams Policy

Ngā kaiwaitohu Signatories

Writer	Jo Frances – Lead Consenting Adviser, Environmental Regulation
Approvers	Shaun Andrewartha – Manager, Environmental Regulation
	Fathima Iftikar – Director, Strategy Policy Regulation
	Lian Butcher – Kaiwhakahaere Matua Taiao Group Manager, Environment

He whakarāpopoto i ngā huritaonga Summary of considerations

Fit with Council's roles or with Committee's terms of reference

The Policy fits within Environment Committee's remit of regulatory systems, processes and tools to meet Council's legislative responsibilities.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

There are no implications from recommended changes to the proposed Policy for Council's/Greater Wellington's strategies, policies and plans.

Internal consultation

Feedback was sought on the proposed Policy (prior to consultation) from the Delivery function of the Environment Group, Te Hunga Whiriwhiri, the Climate Change Team, Customer Engagement, Democratic Services, Finance, and WREMO. An internal dam expert, and Legal reviewed and commented on the recommended changes to the Policy.

Risks and impacts - legal / health and safety etc.

There are no identified risks relating to the content or recommendations of this report.

Attachment 1 to Report 24.385

Dangerous Dams Policy – track changed



Policy on Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams (2024)

under Section 161 of the Building Act 2004

Adopted by Council XX Month 2024

Attachment 1 to Report 24.385

Dangerous Dams Policy – track changed

A policy to provide for the identification and management of dams of concern in the Wellington Region, and the measures Greater Wellington will take (along with the dam owner) to reduce or remove the danger.

Policy owner	Wellington Regional Council
Date policy comes into effect	Date adopted by Council
Related policies, legislation, and documents	Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams Policy 2011 Resource Management Charging Policy 2024-2027 Building Act 2004 Building (Dam Safety) Regulations 2022
Policy review date	By August 2029
Policy history	The first Dangerous Dams policy was adopted in 2006. It was updated in 2011 to become the Policy on Dangerous dams, Earthquake-prone Dams, and Flood-prone dams. The Building Act requires the policy to be reviewed every 5 years.

Date of the Council's adoption: XX Month 2024

Introduction

- 1. This document sets out the policy on dangerous dams, earthquake-prone dams and flood-prone dams adopted by Wellington Regional Council ("the Council") in accordance with <u>sections 161</u> and <u>section 162</u> of the Building Act 2004.
- 2. The policy states the approach and priorities the Council will take in performing its functions in relation to dangerous dams, earthquake-prone dams and flood-prone dams in the Wellington region, and how the policy will apply to heritage dams.
- 3. <u>The dangerous dam provisions of the Building Act will be used by the Council as a</u> <u>mechanism to remedy an unsatisfactory situation that has developed in relation to</u> <u>classifiable dams in the Wellington region, rather than a means of responding to</u> <u>"emergencies" that arise in the future.</u>
- 4. The Council is committed to upholding Te Tiriti o Waitangi obligations when undertaking its functions in relation to dangerous dams, earthquake-prone dams and flood-prone dams.
- 5. This policy applies to dams defined in <u>section 7</u> of the Building Act 2004 ("the Act"). The dam safety provisions in <u>Subpart 7 of Part 2</u> of the Building Act, apply to:
 - A. Classifiable dams (defined in <u>regulation 5</u> of the Building (Dam Safety) Regulations 2022 ("the Regulations")¹
 - B. Referable dams as defined in the Regulations²
 - C. All dams but only for the purposes of <u>section 133B³</u> (height measurement of dams) and <u>sections157</u> and <u>section 158</u> (measures by a regional authority to avoid immediate danger).

Application of this policy

- 6. This policy applies to dams everywhere in the Wellington region, and irrespective of the age and intended life of the dam. Some parts of this policy may apply to all dams. Where required by the Act, this policy applies to all classifiable dams, which also includes "large dams" as defined in <u>Section 7</u> of the Act.
- The terms 'dangerous dam', 'earthquake-prone dam' and 'flood-prone dam' have the same meaning as provided in <u>section 153</u>, <u>section 153A</u> and <u>section 153AA</u> of the Act.⁴ This policy must be read alongside the Building (Dam Safety) Regulations 2022 ("the Regulations") which defines terms used in the Act in relation to "dangerous dams", "earthquake- prone dams" and "flood-prone dams".⁵

¹ At the time of drafting adopting this policy (May August 2024), the Regulations define a classifiable dam as being "4 or more metres high and storing 20,000 or more cubic metres volume of water or other fluid." Regulations are subject to change, which will impact the application of this policy. It is worth checking the regulations before following this policy to determine the definition at that point in time.

² The Regulations currently do not define a referable dam (as of May 2024).

³ When measuring the height of the dam under this section, the crest of the dam includes any freeboard – refer to section 133B of the Act for the definition.

⁴ This includes buildings in areas designated under subpart 6B as set out in section 153AA of the Act.

⁵ Section 19 of the Regulations defines moderate earthquake, moderate flood, earthquake threshold event and flood threshold event.

- 8. The Regulations and the Act can be accessed at <u>www.legislation.govt.nz</u>⁶.
- 9. The Regulations come into force on 13 May 2024. This policy will commence as soon as it is adopted by Council after following the special consultative procedure in <u>section 83</u> of the Local Government Act 2002.
- 10. This policy will be reviewed every five years or earlier as required. The policy remains in effect even though it is due for review or being reviewed.

Principles

- 11. The Council will apply the following principles to the exercise of its dangerous dams, earthquake-prone dams and flood-prone dams functions under the Building Act:
 - A. Dam owners have the primary responsibility for identifying, monitoring and reporting on dangerous, earthquake-prone and flood-prone dams and for reducing or removing the risk of harm to people, property and the environment in a timely and effective manner.
 - B. A recognised engineer who is engaged (by the owner) to provide a certificate for the purposes of sections 135(1)(b), 142(1)(b), or 150(2)(f) will notify Council and the dam owner if they believe that the dam is dangerous.
 - C. The state of all dangerous dams, earthquake-prone dams and flood-prone dams (as defined in the Act and the Regulations) must be known (noting that other dam safety provisions in the Act apply to all dams) and this information, if known to the Council, will be made readily available by the Council to all persons potentially affected by the safety risks of a dangerous dam, earthquake-prone dam or flood-prone dam.

Council's approach to performing these functions

Information on dam status

- 12. The Council will keep a register of all dams as required by <u>section 151</u> of the Act, recording the dangerous, earthquake-prone and flood-prone status of each classifiable dam. The Council will develop a monitoring procedure to maintain the register.
- 13. Should the Council receive information about a dangerous, earthquake-prone or flood-prone dam in its regional boundary, <u>The Council will notify potentially</u> <u>affected communities downstream of a dangerous dam, earthquake-prone dam or</u> <u>flood-prone dam. The Council will do this by publishing information about any</u> <u>dangerous, earthquake-prone or flood-prone dams in its region.</u> The Council will notify <u>operators of critical infrastructure or lifeline utilities downstream</u>, the Wellington Region Emergency Management Office (WREMO), the relevant territorial authority and mana whenua entities.

⁶ The Regulations: <u>https://www.legislation.govt.nz/regulation/public/2022/0133/latest/whole.html</u> and The Act: <u>https://www.legislation.govt.nz/act/public/2004/0072/latest/whole.html</u>

Working with dam owners

- 14. The Regulations require owners of all classifiable dams to know whether their dam is dangerous, earthquake-prone or flood-prone. They also require these owners to take the necessary steps, in a timely manner, to comply with the Act and the Regulations. The Act requires dam owners to immediately notify the Council if they have reasonable grounds for believing their dam is dangerous. This applies to dams that are either a high potential impact dam or a medium potential impact dam and are likely to fail in the ordinary course of events, or in a "moderate earthquake" or a "moderate flood" (as defined in the Regulations).
- 15. The Act also requires a recognised engineer (engaged by the owner) to provide documentation for the purposes of <u>sections 135(1)(b)</u>, <u>section 142(1)(b)</u>, or <u>section 150(2)(f)</u>, and to notify Council and the owner of the dam if they believe that the dam is dangerous.
- 16. The Council will work with the owners of identified dangerous dams, and may work with the owners of identified earthquake-prone dams and flood-prone dams, to assist them to develop an action plan (with timeframes) with the goals of increasing the safety of the dam and eliminating or reducing the risks of the dam to people, property and the environment. It is not realistic to specify a timeframe in this policy for achieving this goal because timeframes will be dictated by the circumstances of each case. When setting a timeframe for action, the Council will consider the state of the dam, and the likelihood and consequences of dam failure.

Directing and taking action

- 17. The Council may intervene:
 - A. For dangerous dams, earthquake-prone dams and flood-prone dams
 - i. if the owner of any dam is not acting in accordance with an agreed action plan, or
 - ii. where there is no agreed action plan, or
 - iii. where it considers that the agreed action plan requires review or amendment, or
 - iv. where ownership is not known or is disputed; or
 - B. for all dams, where there is or is likely to be a risk of immediate danger.
- 18. Before exercising any of its powers under sections 154 to 159 of the Building Act, the Council will, unless the circumstances dictate otherwise (such as where there is immediate danger to the safety of persons, property, or the environment), seek to discuss options for action with the owner of the dam, with a view to obtaining from the owner a mutually acceptable formal proposal for reducing or removing the danger. the owner of a dangerous dam, earthquake-prone dam or flood-prone dam is expected to provide Council with an action plan which reduces or removes the danger(s). It is the dam owner's responsibility to prove that the actions taken are commensurate with the danger(s) to people, property or the environment. The action plan is to be discussed with Council, and Council is to be satisfied that the dam owner is taking responsibility for the dam. Council may have the action plan

independently peer reviewed by a suitably qualified person, and any recommendations deemed appropriate by Council are to be adopted into the action plan.

- 19. Acceptable actions by the dam owner may include, but are not limited to, one or more of the following:
 - A. Operational changes such as reducing the volume of impounded fluid or completely emptying the reservoir.
 - B. Reconfiguring an existing spillway or creating a new or supplementary spillway to limit the maximum impounded volume and/or to safely route flood flows.
 - C. Increased surveillance and monitoring.
 - D. Development of emergency preparedness and response plans.
 - E. Review of the dam safety assurance programme.
 - F. Engage a dam specialist to investigate and make recommendations, with any report provided to the Council.
 - G. Implementing measures to enable controlled, rapid emptying of the impounded fluid.
 - H. Undertaking measures downstream to mitigate the impact of dam failure.
 - I. Physical works including reconstruction or partial demolition of the dam.
 - J. Decommissioning and/or removal of the dam.
- 20. The whole or part of <u>any agreement between the Council and an action plan</u> <u>submitted by</u> the dam owner may be formalised in a Notice to Fix issued under <u>section 164</u> of the Act. If agreement cannot be reached between the Council and the dam owner, the Council may exercise any of its statutory powers in <u>sections</u> <u>154 to 159</u> and <u>section 164</u> of the Act.
- 21. For the purposes of <u>section 164</u> of the Act, the term 'dam warrant of fitness' in section 164(1)(b) is taken to mean 'annual dam compliance certificate' as set out in the <u>section 26</u> of the Regulations.
- 22. The Council will notify potentially affected communities downstream of a dangerous dam, earthquake-prone dam or flood-prone dam. The Council will do this by publishing information about any dangerous dams, earthquake-prone dams or flood-prone dams in its region. The Council will notify operators of critical infrastructure or lifeline utilities downstream of a dangerous, earthquake-prone or flood-prone dam. The Council will also work with WREMO.
- 23. The Council may at any time require the dam owner to review the dam safety assurance programme if the dam is an earthquake-prone dam or flood-prone dam.
- 24. In a situation where a dam is a dangerous dam, or immediate danger is present, the Council may (amongst other actions):
 - A. Erect a hoarding or fence to prevent people from approaching the dam nearer than is safe.
 - B. Attach a notice on or near the dam (or affected downstream areas) that warns people not to approach.

- C. Give written notice to the owner requiring work to be carried out on the dam, and within the time stated in the notice to remove or reduce the danger.
- 25. In a situation where the Chief Executive of the Council considers that, because of the state of the dam, immediate danger to the safety of persons, property, or the environment is likely, then the Chief Executive of the Council may:
 - A. Cause any action to be taken to that is necessary to remove that danger, and
 - B. Recover the costs of taking any action from the dam owner.

Council's priorities in performing these functions

- <u>26.</u> The Council's approach to dangerous dams is tailored toward achieving a reduction in the pre-existing risk whilst still being able to deal with risks that emerge in the future. *The dangerous dam provisions of the Building Act will be used by the Council as a mechanism to remedy an unsatisfactory situation that has developed in relation to classifiable dams in the Wellington region, rather than a means of responding to "emergencies" that arise in the future.*
- 27. In performing its functions under the Building Act and Regulations, Council will prioritise removing or reducing danger informed by risk understanding (likelihood and consequence), to first ensure public safety, and then have regard to damage or loss of property, environment and economic welfare, followed by any heritage matters that might be present. Generally, Council will prioritise the following actions with consideration given commensurate with to the nature of the risk(s):
 - A. responding to a situation where immediate danger is present
 - B. reducing the risks posed by dangerous dams
 - C. reducing the risks posed by earthquake-prone dam and, or flood-prone dams
 - D. working with dam owners, or intervening where necessary, where a dam does not have a dam safety assurance programme that complies with the regulations.
- 26.—The priorities for classifiable dams, where 1 is the highest priority and 5 is the lowest priority, are as follows.
 - 1.-Dams that, upon commencement of the Regulations, are dangerous and/or earthquake-prone and/or flood-prone due to their pre-existing condition (and not an actual change in risk), and <u>do not</u> have a Dam Safety Assurance Programme (DSAP) that complies with the Regulations. This priority would first consider classifiable high potential impact dams followed by medium potential impact dams.
 - 2.-Dams that are dangerous and/or earthquake-prone and/or flood-prone due to their pre-existing condition (and not an actual change in risk) and <u>do</u> have a Dam Safety Assurance Programme that complies with the Regulations. This priority would first consider classifiable high potential impact dams followed by medium potential impact dams.
 - 3.-Dams that, due to deterioration or damage (e.g., reduction in structural integrity), or identification of previously unobserved defects, are regarded as

a dangerous dam and/or earthquake-prone and/or flood-prone (i.e. a change in likelihood of failure). This priority would first consider classifiable high potential impact dams followed by medium potential impact dams.

- 4.-Dams that, because of new or improved information (or their exposure or their setting e.g., change in assessment of whether the dam constitutes a "moderate flood" or "moderate earthquake" for that site) are regarded as a dangerous dam and/or earthquake-prone and/or flood-prone. This priority would first consider classifiable high potential impact dams followed by medium potential impact dams.
- 5.-Dams that, due to the potential impact classification for the dam increasing from low to medium or high or from medium to high are regarded as dangerous and/or earthquake-prone and/or flood-prone (i.e. a change in consequence of failure). This priority would first consider classifiable high potential impact dams followed by medium potential impact dams.
- 27. In the event of there being a dangerous dam, earthquake-prone dam or floodprone dam the Council will always give precedence to the requirement to remove or reduce the danger by, first, ensuring public safety at all times, and then having regard to damage or loss of property, environment and economic welfare, followed by any heritage matters that might be present.

Application to heritage dams

- 28. Heritage dams as defined in <u>section 7</u> of the Act means a dam that is included on:
 - A. the New Zealand Heritage List/Rārangi Kōrero maintained under<u>section 65</u> of the Heritage New Zealand Pouhere Taonga Act 2014; or
 - B. the National Historic Landmarks/Ngā Manawhenua o Aotearoa me ona Korero Tuturu list maintained under <u>section 81</u> of the Heritage New Zealand Pouhere Taonga Act 2014.
- 29. <u>Section 4(2)(l)</u> of the Building Act recognises "the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value".
- 30. The Council recognises the need to retain heritage values of the dam itself, but also the need to reduce or remove any risk posed by a heritage dam which has been classified as dangerous, flood-prone or earthquake-prone. When considering heritage dams under this policy, account will be taken of the need to facilitate the preservation of parts of the dams with significant heritage value.
- 31. When dealing with heritage dangerous dams, the Council will seek advice from the Heritage New Zealand/Pouhere Taonga before any actions are undertaken by the Council under sections <u>153 to section 160</u> of the Act.
- 32. The Council may also engage suitably qualified professionals with engineering expertise and heritage expertise to advise and recommend actions. When considering any recommendations, the Council will have regard to the priorities set out in clause 27 of this policy. Copies of all served notices for heritage dangerous dams, earthquake-prone dams and flood-prone dams will be provided to Heritage New Zealand/Pouhere Taonga.

33. The Council will record the heritage listing of all dangerous, earthquake-prone and flood-prone dams it is made aware of in its register of dams and a record of that will also be made available on the relevant property file for inclusion on any relevant Land Information Memorandum.

Attachment 2 to Report 24.385

Recommended Dangerous Dams Policy



Policy on Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams (2024)

under Section 161 of the Building Act 2004

Adopted by Council XX Month 2024

Attachment 2 to Report 24.385

Recommended Dangerous Dams Policy

A policy to provide for the identification and management of dams of concern in the Wellington Region, and the measures Greater Wellington will take (along with the dam owner) to reduce or remove the danger.

Policy owner	Wellington Regional Council
Date policy comes into effect	Date adopted by Council
Related policies, legislation, and documents	Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams Policy 2011 Resource Management Charging Policy 2024-2027 Building Act 2004 Building (Dam Safety) Regulations 2022
Policy review date	By August 2029
Policy history	The first Dangerous Dams policy was adopted in 2006. It was updated in 2011 to become the Policy on Dangerous dams, Earthquake-prone Dams, and Flood-prone dams. The Building Act requires the policy to be reviewed every 5 years.

Date of the Council's adoption: XX Month 2024

Introduction

- 1. This document sets out the policy on dangerous dams, earthquake-prone dams and flood-prone dams adopted by Wellington Regional Council ("the Council") in accordance with <u>sections 161</u> and <u>section 162</u> of the Building Act 2004.
- 2. The policy states the approach and priorities the Council will take in performing its functions in relation to dangerous dams, earthquake-prone dams and flood-prone dams in the Wellington region, and how the policy will apply to heritage dams.
- 3. The dangerous dam provisions of the Building Act will be used by the Council as a mechanism to remedy an unsatisfactory situation that has developed in relation to classifiable dams in the Wellington region, rather than a means of responding to "emergencies" that arise in the future.
- 4. The Council is committed to upholding Te Tiriti o Waitangi obligations when undertaking its functions in relation to dangerous dams, earthquake-prone dams and flood-prone dams.
- 5. This policy applies to dams defined in <u>section 7</u> of the Building Act 2004 ("the Act"). The dam safety provisions in <u>Subpart 7 of Part 2</u> of the Building Act, apply to:
 - A. Classifiable dams (defined in <u>regulation 5</u> of the Building (Dam Safety) Regulations 2022 ("the Regulations")¹
 - B. Referable dams as defined in the Regulations²
 - C. All dams but only for the purposes of <u>section 133B³</u> (height measurement of dams) and <u>sections157</u> and <u>section 158</u> (measures by a regional authority to avoid immediate danger).

Application of this policy

- 6. This policy applies to dams everywhere in the Wellington region, and irrespective of the age and intended life of the dam. Some parts of this policy may apply to all dams. Where required by the Act, this policy applies to all classifiable dams, which also includes "large dams" as defined in <u>Section 7</u> of the Act.
- The terms 'dangerous dam', 'earthquake-prone dam' and 'flood-prone dam' have the same meaning as provided in <u>section 153</u>, <u>section 153A</u> and <u>section 153AA</u> of the Act.⁴ This policy must be read alongside the Building (Dam Safety) Regulations 2022 ("the Regulations") which defines terms used in the Act in relation to "dangerous dams", "earthquake- prone dams" and "flood-prone dams".⁵

¹ At the time of adopting this policy (August 2024), the Regulations define a classifiable dam as being "4 or more metres high and storing 20,000 or more cubic metres volume of water or other fluid." Regulations are subject to change, which will impact the application of this policy. It is worth checking the regulations before following this policy to determine the definition at that point in time.

² The Regulations currently do not define a referable dam (as of May 2024).

³ When measuring the height of the dam under this section, the crest of the dam includes any freeboard – refer to section 133B of the Act for the definition.

⁴ This includes buildings in areas designated under subpart 6B as set out in section 153AA of the Act.

⁵ Section 19 of the Regulations defines moderate earthquake, moderate flood, earthquake threshold event and flood threshold event.

- 8. The Regulations and the Act can be accessed at <u>www.legislation.govt.nz</u>⁶.
- 9. The Regulations come into force on 13 May 2024. This policy will commence as soon as it is adopted by Council after following the special consultative procedure in <u>section 83</u> of the Local Government Act 2002.
- 10. This policy will be reviewed every five years or earlier as required. The policy remains in effect even though it is due for review or being reviewed.

Principles

- 11. The Council will apply the following principles to the exercise of its dangerous dams, earthquake-prone dams and flood-prone dams functions under the Building Act:
 - A. Dam owners have the primary responsibility for identifying, monitoring and reporting on dangerous, earthquake-prone and flood-prone dams and for reducing or removing the risk of harm to people, property and the environment in a timely and effective manner.
 - B. A recognised engineer who is engaged (by the owner) to provide a certificate for the purposes of <u>sections 135(1)(b)</u>, <u>142(1)(b)</u>, or <u>150(2)(f)</u> will notify Council and the dam owner if they believe that the dam is dangerous.
 - C. The state of all dangerous dams, earthquake-prone dams and flood-prone dams (as defined in the Act and the Regulations) must be known (noting that other dam safety provisions in the Act apply to all dams) and this information, if known to the Council, will be made readily available by the Council to all persons potentially affected by the safety risks of a dangerous dam, earthquake-prone dam or flood-prone dam.

Council's approach to performing these functions

Information on dam status

- 12. The Council will keep a register of all dams as required by <u>section 151</u> of the Act, recording the dangerous, earthquake-prone and flood-prone status of each classifiable dam. The Council will develop a monitoring procedure to maintain the register.
- 13. The Council will notify potentially affected communities downstream of a dangerous dam, earthquake-prone dam or flood-prone dam. The Council will do this by publishing information about any dangerous, earthquake-prone or flood-prone dams in its region. The Council will notify operators of critical infrastructure or lifeline utilities downstream, the Wellington Region Emergency Management Office (WREMO), the relevant territorial authority and mana whenua entities.

⁶ The Regulations: <u>https://www.legislation.govt.nz/regulation/public/2022/0133/latest/whole.html</u> and The Act: <u>https://www.legislation.govt.nz/act/public/2004/0072/latest/whole.html</u>

Working with dam owners

- 14. The Regulations require owners of all classifiable dams to know whether their dam is dangerous, earthquake-prone or flood-prone. They also require these owners to take the necessary steps, in a timely manner, to comply with the Act and the Regulations. The Act requires dam owners to immediately notify the Council if they have reasonable grounds for believing their dam is dangerous. This applies to dams that are either a high potential impact dam or a medium potential impact dam and are likely to fail in the ordinary course of events, or a "moderate earthquake" or "moderate flood" (as defined in the Regulations).
- 15. The Act also requires a recognised engineer (engaged by the owner) to provide documentation for the purposes of <u>section 135(1)(b)</u>, <u>section 142(1)(b)</u>, or <u>section 150(2)(f)</u>, and to notify Council and the owner of the dam if they believe that the dam is dangerous.
- 16. The Council will work with the owners of identified dangerous dams, and may work with the owners of identified earthquake-prone dams and flood-prone dams, to assist them to develop an action plan (with timeframes) with the goals of increasing the safety of the dam and eliminating or reducing the risks of the dam to people, property and the environment. It is not realistic to specify a timeframe in this policy for achieving this goal because timeframes will be dictated by the circumstances of each case. When setting a timeframe for action, the Council will consider the state of the dam, and the likelihood and consequences of dam failure.

Directing and taking action

- 17. The Council may intervene:
 - A. For dangerous dams, earthquake-prone dams and flood-prone dams
 - i. if the owner of any dam is not acting in accordance with an agreed action plan, or
 - ii. where there is no agreed action plan, or
 - iii. where it considers that the agreed action plan requires review or amendment, or
 - iv. where ownership is not known or is disputed; or
 - B. for all dams, where there is or is likely to be a risk of immediate danger.
- 18. Before exercising any of its powers under sections 154 to 159 of the Building Act, unless the circumstances dictate otherwise (such as where there is immediate danger to the safety of persons, property, or the environment), the owner of a dangerous dam, earthquake-prone dam or flood-prone dam is expected to provide Council with an action plan which reduces or removes the danger(s). It is the dam owner's responsibility to prove that the actions taken are commensurate with the danger(s) to people, property or the environment. The action plan is to be discussed with Council, and Council is to be satisfied that the dam owner is taking responsibility for the dam. Council may have the action plan independently peer reviewed by a suitably qualified person, and any recommendations deemed appropriate by Council are to be adopted into the action plan.

- 19. Acceptable actions by the dam owner may include, but are not limited to, one or more of the following:
 - A. Operational changes such as reducing the volume of impounded fluid or completely emptying the reservoir.
 - B. Reconfiguring an existing spillway or creating a new or supplementary spillway to limit the maximum impounded volume and/or to safely route flood flows.
 - C. Increased surveillance and monitoring.
 - D. Development of emergency preparedness and response plans.
 - E. Review of the dam safety assurance programme.
 - F. Engage a dam specialist to investigate and make recommendations, with any report provided to the Council.
 - G. Implementing measures to enable controlled, rapid emptying of the impounded fluid.
 - H. Undertaking measures downstream to mitigate the impact of dam failure.
 - I. Physical works including reconstruction or partial demolition of the dam.
 - J. Decommissioning and/or removal of the dam.
- 20. The whole or part of an action plan submitted by the dam owner may be formalised in a Notice to Fix issued under <u>section 164</u> of the Act. If agreement cannot be reached between the Council and the dam owner, the Council may exercise any of its statutory powers in sections <u>154 to section 159</u> and <u>section 164</u> of the Act.
- 21. For the purposes of <u>section 164</u> of the Act, the term 'dam warrant of fitness' in section 164(1)(b) is taken to mean 'annual dam compliance certificate' as set out in the <u>section 26</u> of the Regulations.
- 22. The Council may at any time require the dam owner to review the dam safety assurance programme if the dam is an earthquake-prone dam or flood-prone dam.
- 23. In a situation where a dam is a dangerous dam, or immediate danger is present, the Council may (amongst other actions):
 - A. Erect a hoarding or fence to prevent people from approaching the dam nearer than is safe.
 - B. Attach a notice on or near the dam (or affected downstream areas) that warns people not to approach.
 - C. Give written notice to the owner requiring work to be carried out on the dam, and within the time stated in the notice to remove or reduce the danger.
- 24. In a situation where the Chief Executive of the Council considers that, because of the state of the dam, immediate danger to the safety of persons, property, or the environment is likely, then the Chief Executive of the Council may:
 - A. Cause any action to be taken to that is necessary to remove that danger, and
 - B. Recover the costs of taking any action from the dam owner.

Council's priorities in performing these functions

- 26. The Council's approach to dangerous dams is tailored toward achieving a reduction in the pre-existing risk whilst still being able to deal with risks that emerge in the future.
- 27. In performing its functions under the Building Act and Regulations, Council will prioritise removing or reducing danger informed by risk understanding (likelihood and consequence), to first ensure public safety, and then have regard to damage or loss of property, environment and economic welfare, followed by any heritage matters that might be present. Generally, Council will prioritise the following actions with consideration given commensurate to the nature of the risk(s):
 - A. responding to a situation where immediate danger is present
 - B. reducing the risks posed by dangerous dams
 - C. reducing the risks posed by earthquake-prone and flood-prone dams
 - D. working with dam owners, or intervening where necessary, where a dam does not have a dam safety assurance programme that complies with the regulations.

Application to heritage dams

- 28. Heritage dams as defined in <u>section 7</u> of the Act means a dam that is included on:
 - A. the New Zealand Heritage List/Rārangi Kōrero maintained under <u>section 65</u> of the Heritage New Zealand Pouhere Taonga Act 2014; or
 - B. the National Historic Landmarks/Ngā Manawhenua o Aotearoa me ona Korero Tuturu list maintained under <u>section 81</u> of the Heritage New Zealand Pouhere Taonga Act 2014.
- 29. <u>Section 4(2)(l)</u> of the Building Act recognises "the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value".
- 30. The Council recognises the need to retain heritage values of the dam itself, but also the need to reduce or remove any risk posed by a heritage dam which has been classified as dangerous, flood-prone or earthquake-prone. When considering heritage dams under this policy, account will be taken of the need to facilitate the preservation of parts of the dams with significant heritage value.
- 31. When dealing with heritage dangerous dams, the Council will seek advice from the Heritage New Zealand/Pouhere Taonga before any actions are undertaken by the Council under <u>sections 153 to section 160</u> of the Act.
- 32. The Council may also engage suitably qualified professionals with engineering expertise and heritage expertise to advise and recommend actions. When considering any recommendations, the Council will have regard to the priorities set out in clause 27 of this policy. Copies of all served notices for heritage dangerous dams, earthquake-prone dams and flood-prone dams will be provided to Heritage New Zealand/Pouhere Taonga.
- 33. The Council will record the heritage listing of all dangerous, earthquake-prone and

flood-prone dams it is made aware of in its register of dams and a record of that will also be made available on the relevant property file for inclusion on any relevant Land Information Memorandum.

Environment Committee 8 August 2024 Report 24.384



For Information

CROWN FUNDING CONTRIBUTIONS TO IMPLEMENTING FLOODPLAIN MANAGEMENT PLAN OUTCOMES

Te take mō te pūrongo Purpose

 To advise the Environment Committee (the Committee) of potential funding from the Ministry of Business, Innovation and Employment's Kānoa business unit (Kānoa) for 'Before the Deluge 2.0 – Stage 1' that will enable projects from the Te Kāuru Floodplain Management Plan, Waiōhine Living River plan and the Lower Wairarapa Valley Development Scheme to be implemented more quickly.

Te tāhū kōrero Background

- 2. The regional sector of New Zealand's Local Government is governed by the Mayors and Chairs of Regional and unitary councils, directed by the Regional Chief Executive Officers' group, and supported by 26 Special Interest Groups made up of subject-matter experts from around the country. Their role is to facilitate deep partnerships between communities, local government, and central government, focusing on the things that matter to our communities. The shared objective is to provide stability, grow economic prosperity, improve the environment, and boost social cohesion.
- 3. In late 2022, councils, under the signature of Greater Wellington's Chair Daran Ponter and Doug Leader forwarded the 'Before the Deluge' business case to Government Ministers. The case sought further co-investment from Government on critical flood protection works across New Zealand. This landed with Government only weeks before the devastation of Cyclones Hale and Gabrielle and attention was diverted to recovering from these events. In November 2023, Councils were invited to present a 'refreshed' co-investment business case ('Before the Deluge 2.0') that considered the effects of the cyclones and the Government response to them.
- 4. 'Before the Deluge 2.0' shows how co-investment in flood protection and control works will improve New Zealand-wide community resilience against extreme weather events. Councils sought Government co-investment of \$197 million in the construction of 80 ready-to-go flood protection and control infrastructure projects throughout New Zealand, with councils providing their \$131 million contribution to

these projects. These are set to be completed by 2026/27, provided Government chooses to make the co-investment decision.

- 5. This co-investment reflects that flood protection and control infrastructure is a matter of national interest, protecting other key infrastructure such as roads, railway lines, power and communications, schools, and hospitals, along with local and regional communities, businesses, public facilities, and marae. More than that, upgrading flood protection and control infrastructure to be fit for the future is the fiscally responsible approach and a sound public investment, and will encourage business investment in the regions. The works also have the potential to mitigate the risk of insurance sector withdrawal or retreat and avoid significant cost to the public and the Crown.
- 6. In 2020, post-Covid recovery funding of \$217 million through the Climate Resilience programme of works, enabled a three-year joint Crown and Council programme to complete 55 flood protection and control projects. This investment saved billions of dollars in flood damage, particularly in Kaitāia, Tairāwhiti and Taradale/Napier. This achievement also gave rise to a substantial improvement in capacity and capability within local and central government and the private sector. Greater Wellington completed its programme of works in December 2023.
- 7. The following is the link to the full business case: <u>https://www.gw.govt.nz/document/21784/before-the-deluge-2-0/</u>.

Te tātaritanga Analysis

8. Minister Jones announced the establishment of a Regional Infrastructure Fund as part of Budget 2024. and within that dedicated an initial \$200 million for flood protection and control works across the country. Of this funding, \$101million was committed for the first 40 projects set out in Before the Deluge 2.0, which include 16 in the Wellington region. The specific projects for Greater Wellington are:

Project Number	Project Name
1	River Rd, Masterton Stage 2
2	River Rd, Masterton Stage 3
3	Waipoua SH2 left bank protection
4	Waipoua Industrial Site - Akura Road
5	Fullers Bend Protections, Greytown
6	Awaroa Floodway Sill Upgrade
7	Masterton Water Supply Protection
8	Hood Aerodrome, Masterton
9	Otaki Cliffs River Bank Protection
10	Tawaha Floodway Sill
11	Pukio East Stopbank Upgrade
12	Flood Gates - Fish Passage upgrades
13	South Masterton Stopbank
14	Homebush Wastewater Treatment Plan resilience works
15	Upper Ruamāhanga Buffer establishment

Project Number	Project Name
16	Whakawhiriwhiri Stream

- 9. A detailed description of the projects, including those across the rest of New Zealand is contained in <u>Attachment 1</u>.
- 10. These projects will be implemented over a three-year period with construction starting this coming summer. We are anticipating significant pressure from the Crown to demonstrate rapid mobilisation and delivery, and there may be clawbacks or other penalties if we fall behind on project schedules.
- 11. Greater Wellington's 40% share of the cost of these projects will be funded in the usual way, with half that cost rated across the region and half from the scheme areas as per the capital programme in 2024-34 Long Term Plan (LTP).
- 12. We are currently awaiting Government confirmation of the funding but have initiated the planning for the works. This planning is essential to ensure we can finish the works within the three-year period.
- 13. Greater Wellington can either accept or reject the Crown offer. The Chief Executive holds the authority/delegation to enter a contract with the Crown. Accepting the 60% Crown funding and the early implementation of the works already identified as being required in the respective floodplain management plans will result in a net benefit to Greater Wellington ratepayers, provided the terms of the agreement are acceptable. If the final terms of the agreement for co-funding are not acceptable, the Chief Executive can reject the offer.

Ngā hua ahumoni Financial implications

- 14. The 'Before the Deluge 2.0 Stage 1' projects are already contained within the 30-year Infrastructure Strategy and anticipated as part of the 2024-34 LTP.
- 15. Funding was allowed for based on the Government contribution being a grant. We have recently been advised by Kānoa, that the Crown is considering loan funding its share. This may have some impact on the nature of the funding agreements between Greater Wellington and the Government but is not anticipated to have any financial impact of the 60/40% share arrangement.

Ngā Take e hāngai ana te iwi Māori Implications for Māori

- 16. Over the 16 sites, Greater Wellington will engage with our Partners:
 - a Ngā Hapū o Ōtaki
 - b Kahungunu ki Wairarapa
 - c Rangitāne o Wairarapa
- 17. Kahungunu ki Wairarapa has approached the Project Team for early engagement and Partnership with the following agenda:
 - a Moana Whare mātauranga pūtaiao

- b Sharing of data
- c Involvement of the University
- d Plantings & Nurseries at Wairarapa Moana
- e Corrections and the continued purchasing of plants
- f Employment/training
- g Contracted planting and support structure
- h Governance/leadership roles
- 18. Of the 16 sites proposed in the 'Before the Deluge 2.0 Stage 1' Greater Wellington knows of three sites of significance
 - a Site 1: Ruamāhanga River River Road Stage 2 Rock Revetment and Rock Groyne. This site is a traditional baptismal site for Kahungunu ki Wairarapa
 - b Site 2: Ruamāhanga River River Road Stage 3 Rock Groynes. This site is adjacent: Rangitāne o Wairarapa urupā and Pa (which is understood to be named Potaerau Pa) site, noting that this urupā is under the Masterton landfill
 - c Site 6: Ruamāhanga River Awaroa Sill remedial works. This site is part of a parcel of land returned to iwi under settlement

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

- 19. The projects themselves are a practical step in climate adaptation, taking into account the predicted impact of climate change increasing the intensity and frequency of severe weather events. In addition to this, the projects will produce a net zero carbon footprint within five years (2028) for this first stage of projects from before the Deluge 2.0.
- 20. Discussions with the Greater Wellington's Climate Change Team have been held, and we will build on the success of the first tranche of crown co investment work that comprised the Climate Resilience Programme.
- 21. As a guide, the project will produce approximately 600 t CO2e.
- 22. The Programme Team expects to have offset the total production of CO2e for both tranches of the Programme by 2031.
- 23. The Programmes are expected to sequester 7,000 t CO2-eq over 50 years.

Te whakatūtakitaki Engagement

24. A stakeholder management strategy is currently being developed alongside a comms and engagement plan.
Ngā tūāoma e whai ake nei Next steps

25. The Crown's offer is expected in August 2024. When the formal offer is made to Greater Wellington a decision will be made to proceed or reject the offer. The key points will be in the Terms and Conditions of the offer.

Ngā āpitihanga Attachment

Number	Title
1	Before the Deluge 2.0 Table of Projects.pdf

Ngā kaiwaitohu

Signatories

Writers	Michael Beagle – Programme Manager					
	Graeme Campbell - Strategic Advisor Flood Resilience					
Approvers	ina Love - Team Leader Infrastructure Projects					
	Jack Mace – Director Delivery					
	Lian Butcher – Kaiwhakahaere Matua Taiao Group Manager Environment					

He whakarāpopoto i ngā huritaonga Summary of considerations

Fit with Council's roles or with Committee's terms of reference

The Committee oversees the development, implementation and review of Council's regional resilience priorities in the delivery of plans, programmes, initiatives an activities for flood protection.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

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.

All projects discussed here are included in the LTP.

Internal consultation

Specific projects consult with groups and departments across Greater Wellington where relevant to a project.

Risks and impacts - legal / health and safety etc.

The purpose of implementation floodplain management plans in implementing asset management procedures is to reduce the risk to communities and improve the region's resilience. Greater Wellington has adopted procedures and processes to minimise risks. Working with community committees enables a wider understanding of the risks before adoption of work programmes.

Attachment 1 to Report 24.384

List of 80 proposed projects.



Attachment 1 to Report 24.384

Refreshed co-investment case

Appendix 1. Detailed project listings

Council	Territorial Authority (TA)	Priority	Project Name	Project Description	Project Total Cost \$m	Project Start	Duration (years)
Northland Regional Council	Far North District	1	Kawakawa Deflection Bank	Deflection Bank and raising bridge deck on the northern side of Kawakawa township to divert floodwaters from Waiomio Stream to spill water onto the rural flood plain area away from the CBD area that currently is regularly flooded. Will include provision of flood protection to the famous Hunderwaaser artist facilities including the Te Hononga Hunderwaaser Museum, Kawakawa Public Library and the new tourist centre.	\$0.60	2024	2
	Far North District	2	Matangirau Flood Risk Reduction Phase 2	Restoring the flow of the Towai Stream that has been blocked by Wainui Road Causeway. This will significantly reduce the currently significant flood risk to upstream marae and houses. Northland Regional Council is actively working with local marae and other communities to develop longer term flood resilience solutions.	\$0.50	2024	2
Kaipara District Council	Kaipara District	1	Dargaville to Te Kopuru Stopbank Upgrade	Reconstructing the existing 11km of stopbank between Dargaville and Te Kopuru to protect against a 1 in 100 year flood event. The full length of the stopbank is part of the Kaipara District Council total flood management programme to protect both Dargaville township and the residential and farming properties on the northern Pouto Peninsula, including Oturei Marae, the settlement of Aratapu and the only sealed road on and off the peninsular. Design and consenting completed to achieve an acceptable design height of 3.5m including accounting to adapt for a 1.5m of sea level rise.	\$13.00	2024	2
	Kaipara District	2	Raupo Floodgate Canal K	Installation of a new floodgate structure at the mouth of K canal, supporting the G canal floodgate project funded in the current tranche of the climate resilience programme. This flood gate will optimise the operation of canal K in its role to provide flood protection for residential and farming properties on the eastern side of the Waiora River, including the township of Ruawai. Design and consenting is leveraging the work already done on Canal G with a similar design. Fish passage is included in the design. The new flood gate will reduce the need for machine cleaning of the canals thus reducing carbon footprint and reduce disturbance to the ecology within the canal. The area being protected includes most of NZ's kumara production, and the Kānoa funded Kaipara Kai Project.	\$5.40	2024	2
Auckland Council			No projects put forward				
Waikato Regional Council	Waikato District	1	Lower Waikato Stopbank Upgrade	Work involves stopbank raising to accomodate cliamte change, through increasing crest level height to new design standard across Lower Waikato zone. Working closely with Waikato District Council to align District Plan with flood protection strategies and tools to avoid flood risk. Stopbanks incorporate scheme review outcomes (including modelling determining future climate requirements).	\$8.70	2024	3
	Hauraki District	2	Mid Piako River Emergency Flood Ponding Zones Upgrade Hauraki Plains	Upgrade of 16km stopbanks as part of a multi-year overall package to provide security from flooding for communities such as Ngatea and infrastructure such as State Highway 2. Provides for accommodation and storage of flood waters on designated farmland upstream of Ngatea township. Includes earthworks construction of stopbanks back to design height to ensure stopbank lifecycle maintenance.	\$5.40	2024	3
	Waikato District	3	Island Block pumps	Upgrade of flood protection pump station (including pumps) to maintain level of service including for climate change and to meet national guidelines for fish passage, within a priority catchment for tuna. This is a continuation of the next stage of the MBIE Kānoa funded Climate Resilience Fish Passage Project.	\$2.80	2024	2

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Refreshed co-investment case

Waikato Regional Council	Hauraki District	4	Pipiroa Stopbank Piping Failures Repairs	Prevention of catastrophic failure of existing flood protection infrastructure and maintaining current level of flood mitigation service on an at risk/compromised asset experiencing piping. Ngatea, Patetonga and Kerepehi townships protected and connecting infrastructure including SH27 protected.	\$1.10	2024	3
	Hauraki District	5	Kirikiri Stopbank Upgrade - Kopu Thames Connection	Upgrade of stopbanks to maintain level of service due to subsidence. Multi-agency project involving input from NZTA to upgrade the SH26 bridge to the Scheme flood risk level, and protection of iwi owned land and archaelogical sites including to protect the communities around Kirikiri stream just south of Kopu and SH26 near Thames. Material for stopbank upgrade is sourced from sediment build up (caused by tidal back flow from the Waihou River) removed from Kirikiri Stream. Removal of sediment from the stream maintains the hydraulic capacity and availability of ecological habitat.	\$5.10	2024	3
	Hauraki District	6	Thames Valley Diversion Channel Planting upgrades	Channel planting to achieve sustainable asset management and diversion channel management practices that accommodate and provide for flood mitigation. Programme includes fencing, drain shaping, and planting of smaller drainage channels to reduce maintenance requirements and enhance instream and riparian ecological values. The benefits are wide in terms of environmental outcomes and downstream support for flood mitigation. Supports sustainable low maintenance drain management adding reslience including reduced future costs into the network future.	\$1.80	2024	3
	Hauraki District	7	Piako River Ngatea right stopbank	Improving the capacity of the highest risk stopbank in the Piako River Scheme and reducing the need for future stopbank upgrades. This will be achieved by providing greater room for the river and decreased pressure on remaining assets. This project ties in to support Hauraki District Council's Pathways Plan for Climate Change development and may become the first stage of retreat for future long term management and sustainability of the Scheme.	\$0.58	2024	3
	Thames- Coromandel District	8	Coromandel River Catchments - Flood Resilience Improvements	Removing obstructions and reducing sediment loss from eroding banks to minimise the flood risk to properties and infrastucture including SH's and bridges. Proactively enable waterways to 'move' and educating landowners and wider community on benefits of accommodating rivers. Note that this project work is additional, with no overlap to a Waikato Regional Council Local Government Flood Resilience "Coromandel Flood Resilience – storm damaged tree removal" project.	\$2.80	2024	3
	Waikato District	9	Mangatawhiri Pump Station Infrastructure	Replacing dual inlet at the pump station and the construction of an isolation gate enabling access to the pump for maintenance. Provides improved resilence to increased frequency and severity climatic event and safety requirements for operational maintance activities. Working closely with Waikato District Council in aligning the District Plan with flood protection strategies ensure new development avoids flood risk.	\$0.54	2024	1
	Waitomo District	10	Waipa and West Coast River Flood Resilience Improvements	Removing obstructions and reducing sediment loss from eroding banks to minimise the flood risk to properties and infrastructure including roads and bridges. Proactively enable waterways to 'move' and educating landowners and wider community on benefits of accommodating rivers. Value to iwi and communities - including Te Kuiti, Huntly, Taupiri and Tokoroa communities. Many in high deprivation areas. Local infrastructure and land protected. Note that this planned 3 year programme of project upgrade work is additional to the cyclone damage recovery work of a Waikato Regional Council Local Government Flood Resilience "Improving resilience of rivers in vulnerable areas of the Waikato, Waipā and West Coast catchments project" that is within the wider project regional area.	\$5.00	2024	3
	Waikato District	11	Lower Waikato Floodgate Upgrade Programme	Initial flood mitigation projects will be for assets to the east of Huntly in the Mangawara catchment, providing critical upgrade to ongoing flood protection. Working closely with Waikato District Council in aligning the District Plan with flood protection strategies and tools to avoid flood risk. Emergency response preparedness and response is incorporated in the Lower Waikato Flood Protection Response Plan.	\$2.00	2024	3

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Refreshed co-investment case

Waikato Regional Council	Hauraki District	12	Firth of Thames and Waihou Sediment Trap Digs - Sediment Removal	Sourcing material from in channel sediment traps in preparation for critical future stopbank upgrades (material requires 3 years of drying before it is useable for construction). Removes substantive sediment going into the Hauraki Gulf. Supports protection afforded by the Waihou Valley Scheme. Cost effective and culturally acceptable means of material sourcing and continuing to support flood protection systems that protect vulnerable communities and national infrastructure (state highways) from tidal and river flooding.	\$3.00	2024	3
Bay of Plenty Regional Council	Ōpōtiki District	1	Waioeka Otara Rivers Scheme Stopbank Upgrades	Upgrade existing stopbanks to meet 1 in 100 year event levels of service and provide for climate change. This work is linked to the River Scheme Sustainability Strategy work being undertaken for the Waioeka-Otara Rivers Scheme which looks at long term sustainable flood management practices for the scheme. Room for the River philosophies will inform this work, objectives and operations are being developed and delivered in collaboration with our communities and landowners. Upstream adaptation, room for the river techniques and other options in some upper river catchments will support downstream Opotiki flood protection works. From a whole of catchment approach the River Scheme Sustainability Project (RSSP) will continue to be Council's key strategic project that explores implementation of Room for the Rivers as part of our adaptation to climate change. This stopbank upgrade work informs the work BOPRC is currently doing with Opotiki District Council and Bay of Plenty Emergency Management to develop evacuation triggers and protocols for the Township, along with scenario planning.	\$2.00	2024	2
	Whakatāne District	2	Project Future Proof 2023-26 Whakatane-Tauranga Rivers Stopbanks and Floodwalls Upgrade	Upgrade 1.4km of existing stopbanks and floodwalls to meet 1 in 100 year levels of service and provide for climate change. Protects Whakatāne urban township and CBD. This work is linked to the River Scheme Sustainability Strategy work being undertaken for the Whakatāne-Tauranga Rivers Scheme which looks at long term sustainable flood management practices for the scheme. Upstream adaptation, room for the river techniques and other options in some upper river catchments will support downstream Whakatāne flood protection works." BOPRC has developed evacuation triggers and protocols for the Whakatāne in conjunction with Whakatāne District Council and Bay of Plenty Emergency Management. Ongoing flood management and monitoring support local response planning and actions.	\$17.82	2024	3
	Whakatāne District	3	Whakatane Canals Stopbank & Trident Stopbank Upgrade	Upgrades of Whakatāne Canals and 1km of Trident stopbanks to maintain levels of service allowing for climate change. Part of this project involves retreating land use of public land. The removal of encroachments, repairing stopbanks and restricting future use (Safeguarding our Stopbanks). Significant communications and engagement with the community to be implemented to raise awareness of flood protection assets and bylaws and avoid future issues. Room for the River philosophies will inform this work, objectives and operations are being developed and delivered in collaboration with our communities and landowners. Upstream adaptation, room for the river techniques and other options in some upper river catchments will support downstream Whakatāne flood protection works. BOPRC has developed evacuation triggers and protocols for the Whakatāne in conjunction with Whakatāne District Council and Bay of Plenty Emergency Management. Ongoing flood management and monitoring support local response planning and actions.	\$6.37	2024	3

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Refreshed co-investment case

Refreshed co-investment case

Bay of Plenty 4 Rangitaikī Tarawera Rivers Tarawera River, Rangitäiki River and Rangitäiki Drainage Schemes Stopbank Upgrades. \$3.67 2024 Taupō District 3 **Regional Council** Scheme Stopbank Upgrades Supports the investment of existing flood protection measures. Room for the River philosophies will inform this work, objectives and operations are being developed and delivered in collaboration with our communities and landowners. Upstream adaptation, room for the river techniques and other options are being investigated to support these flood protection works. 3 Western Bay of 5 Kaituna Catchment Control Upgrade flood protection for Te Puke Township and wider Kaituna catchment with upgrades \$14.04 2024 Scheme Floodpumps and Plenty and installation of permanent pump stations as well as stopbank upgrades. Stopbank Upgrades New Ford Road pump station accounts for climate change effects and fixes safety concerns of the existing pump station. Te Puke Stormwater Pump Stations formalise an existing trial pump arrangement that has proven benefits. Room for the River philosophies will inform this work, objectives and operations are being developed and delivered in collaboration with our communities and landowners. Upstream adaptation, room for the river techniques and other options in some upper river catchments will support downstream Kaituna flood protection works. From a whole of catchment approach the River Scheme Sustainability Project (RSSP) will continue to be Council's key strategic project that explores implementation of Room for the Rivers as part of our adaptation to climate change. **Gisborne District** No projects put forward in this funding round as they re focused on completing Gbrielle Recovery programme of works. Council Taranaki Regional No projects put forward. Council Horizons Regional No projects put forward in this funding round as they re focused on completing Gabrielle Recovery programme of works. Council Hawke's Bay No projects put forward in this funding round as they re focused on completing Gabrielle Recovery programme of works. Regional Council Greater Wellington Masterton District 1 River Rd Masterton Flood Project Description: River Road is on the eastern side of Masterton township. Stage 2 of the \$2.47 2024 3 Regional Council Protection Upgrade - Stage 2 project is a 150-metre rock revetment (wall) alongside the Ruamahanga River to protect a number of residential properties. PARA Framework: Protecting the riverbank to provide houses resilience from erosion. Deliver & Outcomes: The Project Team will deliver successfully in the Q4 2024. Boarder Outcomes: Correction Relationship: Connecting people and ideas surrounding mana whenua, plants, inmates, and identity 2024 3 Masterton District 2 River Rd Masterton Flood Project Description: Completion of the stage 3 of the Project, which involves the construction \$3.52 Protection - Stage 3 remaining of 11 river protection groynes along the Ruamahanga River Para Framework: Protect Masterton's landfill is on the edge of the river, the defence is to groynes ensure toxic material doesn't wash into the river Deliver & Outcomes: The Project Team expects to deliver successfully in the Q4 2024 which will complete the protection of the Masterton landfill. Boarder Outcomes: Development of iwi business' via planting

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Refreshed co-investment case

Greater Wellington Regional Council	Masterton District	3	Waipoua SH2 Left Bank Protection Upgrade	Project Description: Flood protection construction of a new rock revetment on the left bank of the Waipoua River to protect SH2 bridge abutment as well as the walking/cycle trail. PARA Framework: Protecting the riverbank to provide resilience form erosion to the abutment and walking/cycling trail Deliver & Outcomes: The Project Team will complete this project in 2024 and will safeguard the SH2 bridge from flooding damage and allow access for the public. Boarder Outcomes: Supporting the Mental Health of our Contractors	\$0.14	2024	3
	Masterton District	4	Waipoua Industrial Site - Akura Road Edge Protection Project	Project Description: Edge protection as a result of significant erosion of river-bank into industrial property, protecting Masterton's mains water supply pipe PARA Framework: Protecting the industrial area from erosion and improving resilience of Masterton's water supply. Deliver & Outcomes: To protect the local business and the city's water supply Boarder Outcomes: Contractor's employees resiliency workshops	\$1.46	2024	3
	Masterton District	5	Buffer Riparian Planting, South Wairarapa	Project Description: Planting of approx 60ha of the buffers/riparian as per the Te Kauru Floodplain Management Plan PARA Framework: Providing buffer planting to the river banks to allow room for the river and accommodate river processes. Deliver & Outcomes: Protection of the livelihood of the local farmers Boarder Outcomes: Incorporating native plants (>35,000) into site designs	\$4.80	2024	3
	Masterton District	6	Eastern Rivers Crack Willow Removal and Bank Stabilisation Planting	 Project Description: Reduce flood event damage by improving river flow through the removal of crack willow and planting, fencing and pest control to stabilise banks and reduce sediment on the Kopuaranga, Taueru and Whangaehu Rivers. Planting will also reduce run-off from farmland, improving water quality. PARA Framework: Removing willows blocking the river channel to accommodate floodwaters and provide community resilience. Deliver & Outcomes: Protection of the livelihood of the local farmers 	\$7.20	2024	3
	South Wairarapa District	7	Greytown Flood Protection Waiohine River Plan	Project Description: Design of two stopbanks both 800m long alongside the Waiohine River to improve flood protection for Greytown: one on North Street and one on Kuratawhiti Street, helping the river stay in alignment and improving community resilience. PARA Framework: Protecting the town from flooding, improving community resilience. Deliver & Outcomes: Protection of the people and business' within Greytown Boarder Outcomes: Hiring new workers within targeted demographics	\$2.99	2024	3
	South Wairarapa District	8	Fullers Bend Protection, Greytown	Project Description: Upgrading the current flood erosion protection with the construction of a new rock revetment on the Waiohine River PARA Framework: Protecting the riverbank from erosion, helping the river stay in alignment and improving community resilience. Boarder Outcomes: Creating a Rongoā garden incorporated as part of one site's planting program	\$2.32	2024	3
	South Wairarapa District	9	Awaroa Floodway Spill-over Sill, South Wairarapa	 Project Description: Upgrade spill-over sill into Awaroa floodway through rock protection and realignment of sills on the Waiohine River. Also includes vegetation removal, survey, and levelling. PARA Framework: Improving the floodway rock sill to accommodate floodwater and improve floodway operation assisting community resilience. Boarder Outcomes: Goodyarn wellbeing training for Contractors 	\$0.88	2024	3
	South Wairarapa District	10	Tawaha Floodway Spill-over Sill, South Wairarapa	Project Description: Upgrade spill-over sill into Tawaha floodway through rock protection and realignment of sills on the Waiohine River. Also includes vegetation removal, survey, and levelling. PARA Framework: Improving the floodway rock sill to accommodate floodwater and improve floodway operation assisting community resilience. Boarder Outcomes: Contractor's managers wellbeing modules	\$1.70	2024	3

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Refreshed co-investment case

Greater Wellington Regional Council	South Wairarapa District	11	Pukio East Stopbank Upgrade, South Wairarapa	Project Description: Pukio East Stopbank is located south of the Martinborough township along the Ruamāhanga River. The berm material requires to be disposed and the establishing the grass cover PARA Framework: Final stage of work for the stopbank protecting the community from flooding. Boarder Outcomes: Ongoing wellbeing Support (EAP+) for contractors	\$0.90	2024	3
	Masterton District	12	Waiopua River - Masterton Urban Reach Resilence Works	Project Description: The Waipoua River is at the northern end of the Masterton township. The works will involve stopbanks within the urban stretch of the Waipoua River. At present the Waipoua project group (made up of community members and GWRC) are working on an options assessment to determine the best course of action. Once this is completed pre- construction works will begin. Nature-based solutions are a core part of Greater Wellington comitment to Nature Based solutions and give effect to the expressions of both Ngāti Kahungunu ki Wairarapa and Rangitāne PARA Framework: Protecting the community from flooding and improving community resilience. Boarder Outcomes: Prostate health assessment	\$2.47	2024	3
	South Wairarapa District	13	Flood Gates - Fish Passage Upgrades, South Wairarapa	Project Description: Upgrades to existing river infrastructure at approximately 15 floodgates and 5 pump stations to include improved fish passage. PARA Framework: Accommodating fish within the flood management system which protects the community from flooding. Providing environmental and community resilience	\$0.36	2024	3
	Masterton District	14	Masterton Water Supply Protection Project	Project Description: Flood protection work to protect Masterton District Council's main water supply pipeline on the Waingawa River by constructing three rock groynes. PARA Framework: Protecting Masterton's water supply from erosion, improving community resilience. Boarder Outcomes: Working with iwi, a Maori and MSD to create a training framework for civil works.	\$0.95	2024	1
	Kapiti Coast District	15	Otaki Cliffs River Bank Protection	Project Description: Implementation of room for the river in a 300 m length of the Otaki River by construction of 21 groynes to protect a 50m river bank vertical bank, and provide permanent works to prevent the need for on-going bulldozer channel works. PARA Framework: Protecting the cliffs to provide resilience from erosion.	\$4.16	2024	3
	Upper Hutt City	16	Gemstone Drive Flood Protection, Upper Hutt	Project Description: Three section of erosion protection works to protect urban area of upper hutt from erosion.	\$3.40	2024	3
	Upper Hutt City	17	Poet's Park Development, Upper Hutt	Project Description: Final stage of works required for a two-stage project that was started in 2020 with the first tranche of Climate Resilience Flood Protection funding PARA Framework: Accommodating flooding and environmental considerations while managing flood risk to the community and improving recreational and community health.	\$0.64	2024	3
	Upper Hutt City	18	Pinehaven Streamworks Project, Upper Hutt	Project Description: Improving the level of flood protection for the Pinehaven community by increasing the capacity of the Pinehaven Stream to prevent flooding up to a 1 in 25-year return period event. Project includes two elements, Phase 1: replacement culverts in Sunbrae Drive and Pinehaven Road and Phase 2: increasing the stream capacity. PARA Framework: Protecting the community from flooding by carrying out stream works to change the stream capacity, managing the flood risk and improving community resilience. Boarder Outcomes: Certifications for individual workers	\$15.03	2024	3

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Refreshed co-investment case

APPENDIX

Greater Wellington Regional Council	Masterton District	19	Hood Aerodrome Masterton Waingawa River Flood Protection	Project Description: The Hood Aerodrome is in Masterton along the Waingawa River. The work will involve: Installation of a 140m rock line, running along the true left bank of the Waingawa River. PARA Framework: Protecting Masterton's airport runway from erosion, improving community resilience. Boarder Outcomes: Fulltime machine & vehicle trainer and mentor	\$1.59	2024	3
	Masterton District	20	South Masterton Stopbank Upgrade	Project Description: On the Waingawa River the works require a retreat of the existing stopbank away from the river edge. The stopbank will be approximately 230m in length. The land beside the river historically being used as a timber treatment mill and will require a land contamination investigation and the effect on the water quality. PARA Framework: Protecting the community from floodwater, improving their resilience Boarder Outcomes: working with iwi for Nature Based solution	\$0.87	2024	3
	Masterton District	21	Homebush Wastewater Treatment Plant Resilience Works	Project Description: In a significant flood the stopbank may overtop. Therefore, there needs to be an increase in resilience to ensure the treatment plant headworks are kept operational. The works will involve raising the generator and electrical devices above flood levels. PARA Framework: Protecting the Wastewater Treatment plant from flooding, improving community resilience and preventing environmental pollution.	\$0.45	2024	3
	Masterton District	22	Upper Ruamahanga Buffer establishment	Project Description: Implementing room for the river through edgeworks widening of the Ruamahanga River channel and retreating stopbanks to establish a buffer area to protect assets upriver of Masterton. PARA Framework: Room for the River concept.	\$3.60	2024	3
	South Wairarapa District	23	Whakawhiriwhiri stream - project rescope	 Project Description: The Whakawhiriwhiri Stream flows through an overland floodway in South Wairarapa and takes some of the remaining ponded water from in the Tawaha floodway. The stream has been identified as under capacity to convey the ponded water causing flooding of affected landowners. PARA Framework: Accommodating flooding and environmental considerations while managing flood risk to the community. Boarder Outcomes: Iwi collaboration on planting, signage, art, etc. 	\$1.43	2024	3
Nelson City Council	Nelson City	1	Nelson Floods Repairs Risk Protection	Work includes channel capacity improvements, culvert upgrades, floodways and localised stream re-alignments, improved debris and gravel management, scour protection for river and stream banks, grade control structures, and fish passage. NCC is doing adaptive planning for expected climate change impacts. NCC has recently notified Plan Change 29 that includes update provisions on Natural Hazards including flood risk.	\$6.00	2024	3
	Nelson City	2	Maitai Flood Management Project	Work includes scour protection for urban river banks, stopbank improvements, raising river banks (floodwalls / roads), drainage improvements and backflow prevention, channel and bridge capacity improvements. Will provide substantial flood risk reduction to the Matai suburb, The Wood and other residential areas. Planning to set developments back from the river and establish a riparian corridor/floodway alongside the river channel. Property purchase will be considered for the Hanby Park Clouston Terrace area to allow for managed retreat as well as protect initiatives such as stopbank topping up and re-alignment to increase floodway capacity.	\$9.00	2024	3
	Nelson City	3	Jenkins Stream Flood Protection	Work includes stopbank along Jenkins Creek (adjacent Trent Drive), stopbank improvements downstream of Pascoe Street, and channel capacity reinstatement, to provide 1 in 100 year protection for houses, airport buildings and services, with design including climate change impact changes.	\$3.00	2024	3

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Tasman District Council	Tasman District	1	Lower Motueka River Stopbank Refurbishment	Upgrade refurbishment of 6.7km to complete upgrading all the Lower Motueka River and Brooklyn Stream Stopbanks, building on an initial stage of 4.8km of Kānoa co-funded project work. Relocation or retreat are not considered options in the short to medium term. TDC has recently invested in drinking water and waste water assets for these communities and committed \$2.5m through the first stage of stopbank enhancements. Initial work associated with this project included an improved assessment of flood effects and evacuation planning. This work and other flood modelling is also assisting in setting of floor levels and hazard assessment for new development. Over the longer term, TDC and the community will need to consider additional protection measures or retreat options for Motueka given its vulernability to climate change. TDC has recently commenced work on a two-year project to assess nature-based solutions in the Motueka catchment (funded by a grant from the Ministry for the Environment). The results of this work will feed into assessment of longer term options.	\$11.00	2024	3
	Tasman District	2	Peach Island Stopbank Repair	Stopbanks around Peach Island to be brought up to a climate resilient condition and to protect them from further damage. Relocation or retreat have not been discussed by Council but the existing dwellings are vunerable as the land is low lying and surrounded by flood channels. This work is seen as an interim measure to protect vunerable dwellings. Community engagement in Stage 1 of this project raised awareness of the importance of stopbanks, and Peach Island residents now fully understand future flood risks, and have an Emergency Management Plan in place. TDC has commenced work on a two-year project to assess nature-based solutions in the Motueka catchment (funded by a grant from the Ministry for the Environment). Council will be considering flood vulnerability through the development of its second generation resource management plan and in light of the Climate Adaptation Act.	\$1.50	2024	2
Marlborough District Council	Marlborough District	1	Lower Wairau River Flood Capacity Upgrade	Reconstruction, stabilisation and realignment of stopbanks over a 2km length including the retreat of existing stopbank alignment to allow more room for the river to flow through the narrowest section of the Wairau River. The Lower Wairau is home to historic Pā site and Māori land, particuarly Māori housing and businesses who are disproprtionately affected by flooding in this area. Mana whenua (Ngāti Rārua, Ngāti Toa Rangatira, Rangitāne) have for decades requested the 1 in 100 year flood protection provided elsewhere along the river. Upgrades provide enhanced protection for Spring Creek township, SH1, the Picton to Chch main rail line and Spring Creek rail yard currently being upgraded by the KiwiRail IREX Project. Includes enhanced rock armour protection, of overhead services and roadway, removal of deposited sediment within the floodway, and permanent remediation of previously-repaired breach in existing stopbank.	\$6.00	2025	2

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Refreshed co-investment case

Marlborough District Council	Marlborough District	2	Wairau River Flood Protection Scheme	Construction of 5 intermediate groynes, extension of rock armour on 5 primary groynes, and new riparian planting to complete the upgrade project started under the previous Kanoa round of funding. Scheme decreases pressure on the primary Wairau stopbank in the critical area protecting the entrance to a historic secondary flow path which leads to the community of Renwick and ultimately the regional centre of Blenheim. Increases protection of the Southern Valleys Irrigation Scheme intake. Greater flood resilience for particularly lower socio-economic status housing and jobs, disproportionately affected by any failure in the primary stopbank.	\$4.80	2024	3
	Marlborough District	3	Renwick Lower Terrace Flood Protection	Construction of new flood relief culvert and replacement of existing culvert and bridge structures impeding channel flow in Ruakanakana Creek. Improved flood resilience for Renwick township and transport infrastructure of State Highway 6 (a critical inter-regional and intra-regional transport lifeline route). Accommodate future flood events by developing capacity for attentuation and controlled release of floodwaters, and by increasing channel capacity through the removal of infrastructure obstructions.	\$2.20	2024	3
	Marlborough District	4	Lower Opaoa Flood Protection Upgrades	Reconstruction, stabilisation and realignment of legacy stopbanks, upgraded to 1 in 100 year standard. This will complete the upgrade of the Lower Opaoa Stopbank Network which protects the Riverlands industrial Estate and Blenheim Sewage Treatment Plant as well as vineyards and lifestyle residences.	\$2.60	2024	3
	Marlborough District	5	Andersons Floodway Reconstruction	Reconstruction and upgrade of an un-maintained 2.5km-long flood diversion channel including reconstruction of grade-controlling drop structures. Maintains flood protection of Wairau Valley township and surrounding area by diverting a portion of flood flow in Walkers Stream directly to the Wairau River 5km upstream from the village. Greatly reduces the volume of flood flow through the village and the frequency of inundation of adjacent properties.	\$2.00	2024	2

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Environment Canterbury	All (Canterbury)	1	Region wide Flood Recovery & Resilience Programme	Increases level of protection to large number of vulnerable communities on at least ten key catchments. Work examples include but are not limited to accelerated Orari River stopbank upgrades which protect Geraldine and Temuka, stopbank retreat in Ashburton/Hakatere which improves flood capacity and enables gravel extraction and structure replacements on the Waimakariri River which protects Kaiapoi. Overall work diversity includes stopbank rebuild/retreat, various river works, gravel removal, rock, planting including nursery development, investigations and land purchase. Works will be integrated to ensure environmental and ecological health. Embraces full PARA framework.	\$20.00	2024	3
	Timaru District	2	Waitarakao/Washdyke/ Seadown	Climate adaptation and coastal retreat of a stopbank and drainage network. Protects Timaru township waste water treatment plant. Work includes investigations, consenting, drain relocation/retreat, stopbank rebuild, wetland creation/enhancement, planting. Works will be in partnership with Arowhenua Rūnanga. Embraces the retreat and protect elements of the PARA framework.	\$4.00	2024	3
	All (Canterbury)	3	Region wide Planting and Berm Transition #2	Increase resilience of flood protection/river berms by removal of invasive species increas- ing native biota by providing competition and a seed source for the future. Work includes planting, weed control, wetland enhancement. Expansion and continuation of existing highly successful programme of work. Works are supported by a number of Rūnanga across the region. Embraces the protect and accommodate elements of the PARA framework.	\$4.00	2024	3
	Timaru District	4	Rangitata Flood & Resilience #2	Expansion and continuation of existing highly successful programme of work. In flood events the river can paralyze critical infrastructure and both State Highways cutting access/egress down the east coast of the South Island. This break of road and rail lifelines impacts hospital transfers, schools and transfer of goods. Work includes investigations, land purchase, stopbank build, rock, diversions and river works, planting, wetlands. Embraces the full PARA framework.	\$3.00	2024	3
	All (Canterbury)	5	Structure Upgrade/Adaptation Programme	Adaptation of critical flood protection infrastructure including culverts, weirs etc – some of which need fish passage enhancement. Work includes investigations, monitoring, capital upgrades, fish passage enhancements. Embraces protect and accommodate elements of the PARA framework.	\$2.50	2024	3
	All (Canterbury)	6	Fairway Vegetation Clearance Programme	Increases resilience of several rivers by removing weed infestations which are currently affecting flood capacity and causing bank erosion. Work includes vegetation spraying and mechanical removal (primarily alder, willow, gorse, broom) in the fairway. Embraces the protect and accommodate element of the PARA framework.	\$3.00	2024	3
	Christchurch City & Selwyn District	7	Halswell/Huritini & Te Waihora Catchment Initiatives	Improvements to large area of drainage network and lowland waterways. Works include planting and shading of drains – leads to less mechanical maintenance, less weed growth and less chemical use during spraying. Land investigation and possible purchase for wetland storage and/sediment traps. Supports environmental ecological health primarily by allowing restoration of natural character and reduction of pest species. Embraces the protect and accommodate element of the PARA framework.	\$1.50	2024	3

Construction of new riverwall at location of existing breach to prevent additional scouring

Attachment 1 to Report 24.384

Refreshed co-investment case

2

2024

\$7.00

	Refreshed co-investm	nent case
AFFENUIX	West Coast Regional Council	Westland District
		Buller District Council
		0 0

1

Wanganui River Resilience

Council		1	Project	and eventual progression of erosion towards the nearby State Highway No. 6 including adjacent power and communication services. Identification of at risk riverbanks to the southern reaches and installation of new riverbanks including modification of existing floodwalls and drainage paths to mitigate impacts from riverine flooding while working alongside river and coastal processes.	φ 7. 00	2024	2
	Buller District Council	2	Mokihinui River Flood Hazard Mitigation	Setup of a hydrological model to enable the production of flood hazard maps for two towns, Seddonville and Mokihinui. Development of a Dynamic Adaptive Plan (DAP) to plan and set triggers and timescales for future managed retreat from higher risk areas.	\$0.50	2024	2
	Grey District	3	Cobden Floodwall	Construction of new Cobden Floodwall and Flood Pump that will mitigate significant Range Creek flooding and coastal storm surge inundation risk to many houses. Protection of the lower Cobden residential area, gateway to Port Elizabeth and North Beach. Removal of existing wall that is creating downdrift erosion.	\$4.00	2024	3
	Grey District	4	Preston Road	Provision of improved floodgate capacity and safe emergency access from Greymouth CBD and Blaketown by raising the existing road bridge and construction of floodgates to separate Sawyers Creek outflow from Grey River during flood events, to provide for flood resilience for events greater than 3 or 4 year ARI. Current evacuation very limited.	\$4.00	2024	3
	Buller District Council	5	Pororari River Bund	Construction of low bund to protect the Punakaiki Village from the combined river flood and coastal storm surge impacts. Low lying areas are vulnerable to inundation. Plus native vegetation planting. Punakaiki is a key national and regional tourist drawcard.	\$1.40	2024	3
	Buller District Council	6	Karamea Stopbank Upgrade & Flood Hazard Mitigation	Raising and strengthening of stopbanks to protect Karamea, which becomes isolated cut off like an island in storm events. There is also the provision of flood hazard maps and a flood evacuation plan.	\$0.85	2024	2
Otago Regional Council	Dunedin City	1	Continuation of Contour Channel (West Taieri) Resilience Upgrade	The Contour Channel was originally built in the 1900s to intercept runoff from the Maungatua Range and uses gravity to the Waipori River. The existing bank has an undulating profile which makes controlled overtopping impossible. The Contour Channel floodbank is a key asset within the Lower Taieri Flood Protection scheme which provides flood protection to the people and property of West Taieri including the township of Outram, approximately 7,300 hectares of highly productive agricultural land, Dunedin International Airport, which is 50% Crown owned, and State Highway 87. The existing floodbank has an undulating longitudinal profile that promotes concentration of overtopping during flood events, potentially exposing parts of the floodbank to relatively rapid failure. This failure of the floodbank would potentially inundate the area and place the surrounding communities at risk. The proposed upgrades are a continuation of the current work programme and are necessary to bring the existing floodbank up to a standard that can be relied upon as a flood defence and provide protection to the Lower Taieri area.	\$9.00	2024	3

Attachment 1 to Report 24.384

Refreshed co-investment case

Otago Regional Council	Dunedin City	2	Outram Floodbank Safety Upgrade	The township of Outram (population approx. 700) lies immediately west of the Taieri river, protected by a 6 metre high flood bank. Work is underway to establish the structural integrity of the floodbank. Recent flooding events and investigation into seepage risk for the northern section of floodbank has identified concerns about the composition of materials used to construct the floodbank. The Outram Flood Bank provides critical infrastructure, to providing flood protection to people and the property of West Taieri (including the township of Outram), approximately 4,000 hectares of highly productive agricultural land, Dunedin International Airport, (which is 50% Crown owned), and State Highway 87. The frequency of flood events has placed a priority since 2017, on remediating this floodbank to ensure resilience from the Taieri River flood waters to limit the the risk to public safety, economic loss to property, and the township of Outram if the bank fails or overtops. The floodbank is list listed on ORC's Risk Register which identifies that interim measures (which may include evacuation of people and/or livestock) of monitoring and decisions during a flood event to manage the infrastructure and impacts during flooding. Investigation and hydraulic modelling work about to be commissioned.	\$5.50	2024	3
	Clutha District	3	Balclutha Township Relief Wall Replacements	The Balclutha floodbank forms a part of the Lower Clutha Flood Protection Scheme which protects and drains an area of approximately 9,300 ha. Most of the area covered by the flood scheme is productive farmland, but also includes the towns of Balclutha and Kaitangata. The Balclutha pressure relief wells are critical to ensuring ongoing protection for the Balclutha township by limiting seepage pressures along the floodbank during a flood event. This reduces the risk of failure of the floodbank maintaining public safety, protecting key community assets and maintaining social and economic wellbeing for Balclutha. This project aims to replace relief wells which were damaged during the February 2020 event, ensuring that the integrity of the floodbank is maintained for future events.	\$1.00	2024	3
	Dunedin City	4	East Taieri Lower Pond Gravity Floodgates	Backflow of water from the Taieri River into the Lower Pond has been observed during instances of high river flows (e.g. 2017, 2021). It is understood that this is occurring due to a combination of deteriorating culverts and gate condition, as well as poor headwall configuration. Work is required to replace the gabion headwalls, culvert and gravity gates to ensure ongoing structural integrity. The East Taieri Lower Pond Gravity Floodgates are a key asset within the Lower Taieri Flood Protection scheme which provides flood protection to the people and property of West Taieri including the township of Outram, approximately 7,300 hectares of highly productive agricultural land, Dunedin International Airport and State Highway 87.	\$1.70	2024	2
	Dunedin City	5	Kaikorai Stilling Basin Resilience and Environmental Enhancement	Replacement of stilling basin on the Kaikorai Stream that was significantly damaged in the 2017 flood. The stilling basin was constructed in the 1960's as part of other channel works to enable the construction of the neighbouring motorway (SH1). This stilling basin is necessary to help dissipate energy and subsequently minimise erosion of the riverbanks in this section of the stream, in close proximity to homes and businesses. The stilling basin is built out of concrete panels that have suffered damage that has compounded from successive high flows. Completion of this work would better enable room for river and increased environmental and ecological benefits by modifying the channel (shape and meander where possible) and replacing concrete sections with nature based solutions. This would fit into the 'accommodate' category of the PARA framework where changes are made to infrastructure to improve resilience, but also provide multiple benefits in the environmental space.	\$2.50	2024	3

Attachment 1 to Report 24.384

Refreshed co-investment case

Refreshed co-investment case

Otago Regional Council	Clutha District	6	Clutha Delta Split Lagoon Environment Enhancement	Split Lagoon forms a part of the Lower Clutha Flood Protection Scheme which protects and drains an area of approximately 9,300 ha. Most of the area covered by the flood scheme is productive farmland, but also includes the towns of Balclutha and Kaitangata. The function and operation of flood protection assets around the lagoon are to be considered alongside ORC's Clutha Delta Natural hazard adaptation programme investigating the future of the delta faced with the treats of sea level rise and coastal erosion. This would fit into the 'retreat' category of the PARA framework where changes are made to infrastructure to adapt to the forecast coastal erosion, but also provide opportunity in the environmental space for various methods of built and nature based solutions. The opportunity to transition an adaptive retreat whilst incorporating environmental outcomes is being proposed.	\$2.75	2024	3
	Clutha District	7	Puerua Outfalls Culvert (Training Line)	Puerua Outfall forms a part of the Lower Clutha Flood Protection Scheme which protects and drains an area of approximately 9,300 ha. Most of the area covered by the flood scheme is productive farmland, but also includes the towns of Balclutha and Kaitangata. The function and operation of flood protection assets associated with training line are to be considered alongside ORC's Clutha Delta Natural hazard adaptation programme investigating the future of the delta faced with the threats of sea level rise and coastal erosion.	\$2.00	2024	2
Environment Southland	Gore District	1	Mataura River Flood Protection Upgrade Project	Increasing resilience across the Flood Protection Scheme (FPS) for Southland's 2nd largest population area. The exisitng flood protection network needs to be reviewed and upgraded to accomadate the predicted effects of climate change to maintain the level of protection for the current communities. Identifying future solutions and incorporating alternate nature based flood protection solutions to FPS will be be part of this project.	\$18.00	2024	3
	Invercargill City	2	Invercargill City Flood Protection Scheme Upgrade	Raises and strengthing stopbanks and increasing capacity in the river channel, property purchase of 62 Ha for ponding and detention dam to compliment the Stead Street pump station upgrade. The exisitng flood protection network needs to be reviewed and upgraded to accommadate the predicted effects of climate change to maintain the level of protection for the current communities. Identifying future solutions and incorporating alternate nature based flood protection solutions to FPS will be be part of this project.	\$11.00	2024	3
	Southland District	3	Oreti River Catchment Flood Protection Upgrade Project	Oreti FPS upgrade Stage One, Winton and Lumsden. The existing flood protection network needs to be reviewed and upgraded to accomadate the predicted effects of climate change to maintain the level of protection for the current communities. Identifying future solutions and incorporating alternate nature based flood protection solutions to FPS will be be part of this project.	\$5.00	2025	2
	Southland District	4	Aparima Catchment Flood Protection Scheme Upgrade	Improving the Aparima Catchment floodplain capacity and hydraulic efficiency of the river by upgrading floodbanks to accommodate offset the effects of climate change including bioengineering controls.	\$0.50	2024	2
	Southland District	5	Te Anau Basin Catchment Flood Management Project	Improving the Te Anau Catchment floodplain capacity by upgrading floodbanks to offset and accomadate the effects of climate change including bioengineering controls.	\$0.50	2024	1
	Southland District	6	Makarewa Catchment Flood Management Project	Improving flood plain capacity and the hydaulic efficiency of the river by removing aging pest trees, pest weed build ups to offset and accomodate the predicted effects of climate change.	\$0.50	2024	1

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Environment Committee 8 August 2024 Report 24.410



For Information

FARMING REFERENCE GROUP CHAIR UPDATE

Te take mō te pūrongo Purpose

1. To update the Environment Committee on the items discussed at the Farming Reference Group meeting held on 29 July 2024.

Te tāhū kōrero Background

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 (<u>Attachment 1</u>).

Ngā āpitihanga Attachment

Number	Title	
1	Farming Reference Group Chair's Report	

Ngā kaiwaitohu Signatories

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

He whakarāpopoto i ngā huritaonga Summary of considerations

Fit with Council's roles or with Committee's terms of reference

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.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

The Farming sector is a key demographic withing the Greater Wellington Region with a focus on environmental matters.

Internal consultation

There was no internal consultation.

Risks and impacts - legal / health and safety etc.

There are no known risks and impacts related to this report.

Attachment 1 to Report 24.410 Farming Reference Group Report for Environment Committee 8 August 2024

Farming Reference Group - July 2024 following a meeting on July 29 2024

To the Greater Wellington Environment Committee

I am writing this report on behalf of the Greater Wellington Farming Refence Group (FRG).

Having just returned from six weeks away in the UK and Italy feeling extremely grateful for the wonderful little country we live in with the wide-open spaces. It was quite overwhelming to sit in an airport and look at the huge volume of fellow holiday travellers all going somewhere - an hour and a half queued on the JFK runway waiting to depart, inching forward every 30 seconds gave us a graphic look at just how many planes are in the air at any one time. Tourism is big business for those countries with historic and world heritage sites and they are really starting to grapple with the pressure this puts on their environment and infrastructure.

Anyway, I digress from our latest FRG meeting.

With a full attendance we welcomed Gavin Bruce formally to the FRG committee and know he will make a great contribution and it will be good to have more representation outside of the Wairarapa.

We had an interesting trip to look at the new Daleton Nursery and discussion around where it is at in the development stage - this looks like a good collaborative land use with the Carterton Treatment plant supplying treated water onto some of the best soils in the Wairarapa, fingers crossed it will grow good willow and poplar when the first third is planted in August.

Due to a lot of confusion in the wider farming community David Boone spoke to us to clarify who in the Greater Wellington require a Certified Farm Environment Plan (cFEP) as needed under the rules of the Regional Plan. These plans are required despite the Government putting the national Freshwater Farm Plans (FW-FP) on hold - there is still confusion amongst landowners despite the efforts of Greater Wellington to explain. There is a need to get the message out to landowners but we all acknowledged the terminology of the plan names means that they are not easily differentiated and blend into one by landowners leading to the requests being ignored.

Please note that in our own farm business we already have two other on-farm audit processes we comply with to be able to supply product to our processors. This audit process gives our marketers the confidence in the messages they give their consumers about grass fed, ethically raised protein.

Jo Gillanders, Team Leader Planting Operations, gave us an update on the Akura nursery. With pole supply affected by the cyclones and reduced farmer demand there will be only 14,500 planted this year, 24,000 planted last year. Unfortunately for Akura tree planting is a budget line that is easily removed in times of financial pressure.

It was nice to hear that there is more emphasis on sourcing and upskilling local growers to provide native seedlings. Whilst Akura has sold native seedlings the majority of native planting has occurred on the Western Hills of Wellington as part of recloaking papatūānuku rather than on private land.

The new dam safety regulations have been designed as part of the Building Act, the task of getting the information out to owners of classifiable dams and ensuring compliance

Attachment 1 to Report 24.410 Farming Reference Group Report for Environment Committee 8 August 2024

has fallen to the regional councils throughout New Zealand. Greater Wellington have produced a list of potentially classifiable dams and have tried to contact landowners. Whilst some of the contact details are out of date other landowners, I have spoken to do not see this as a priority based on all the other pressures their business is under. I am confident that quite a few of the dams on the list will not need to be classified due to <u>not</u> having a 4-metre plus dam wall. This will need photographic evidence to Greater Wellington rather than the cost of an engineer (estimated to cost \$7000), who are also on short supply, to have the dam removed from the classifiable dam list.

Hopefully we can repackage the message to farmers and maybe get Greater Wellington staff on-site to explain the why and the how rather than expect the landowner to review Ministry of Business, Innovation and Employment (MBIE) web sites.

It is likely that any of the dams on private land over the 4-metre requirement that would end up needing a Potential Impact Classification (PIC) of Low meaning no further action would be required. Only dams with over a 4-metre wall and 20 000 cubic metres of water would need to secure a PIC. And those in Medium or High risk may have to take remedial action depending on the engineer's assessment.

In summary, direct from the FRG members, farming is feeling the effect of recession as directly as our urban businesses and the mood amongst all farmers is very subdued. Younger farmers are dealing with the effects of high interest rates, increasing on farm costs such as rates and insurance for the first time in their business career. Compound that with a tough autumn leading to lower-than-average scanning rates things are challenging on the farm.

I would also like to thank Kerry Walker and Cr Penny Gaylor for the time, effort and commitment they have put in to the Kapiti Whaitua process.

Some food for thought around my regular topic of pest control

"How do we monetarise deer and goat control?"

I have wondered if we could look at a district deer trap with three to four catches/harvests a year with the animals processed for meat - venison and goat attracts a good price per kilo. This would require a collective effort to build a catching paddock and a small handling facility with truck access.

Would this work in our region?

A Hawkes Bay Catchment Group have been harvesting deer and running very successful butchery processing classes.

Thank you Barbie Barton Chair, Greater Wellington Farming Reference Group Environment Committee 8 August 2024 Report 24.375



For Information

TE RÕPŪ TAIAO | ENVIRONMENT GROUP UPDATE – AUGUST 2024

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. Progress on action items from previous Committee meetings is outlined in **Attachment 1**.

Strategic direction

- 3. The Environment Group has completed the first stages of our Strategic Framework. The framework will guide Rōpū Taiao's planning, evaluation, and capability development. Please see <u>Attachments 2</u> and <u>3</u> for details of the framework.
- 4. The Intergenerational Strategy that we shared last year underpins this new framework and will continue to shape how we remain adaptive at the multi-generational level. The Strategic Framework provides more tangible direction, setting medium-term outcomes and communicating the shifts we want to make around how we will work to achieve our outcomes.
- 5. This framework will form the basis of the advice we provide to you about Environment Group's work. We also intend it to be a guide for you in your deliberations about how we care for te taiao in the Wellington Region, and a clear basis to hold us to account in how we are implementing our work programmes.
- 6. The framework consists of:
 - a An outcomes framework with a vision, long-term outcomes and 10-year outcomes. These outcomes are based on our existing major policies and plans such as the Regional Policy Statement, Natural Resources Plan, Whaitua plans, Toitū Te Whenua Regional Parks Network Plan, Floodplain Management Plans, and the Kaipupuri ki te ao whānui framework (Mauri Tūhono).
 - b A set of four 'Strategic Shifts' that will focus how we need to go about our mahi over the medium term to achieve the outcomes in a way that has lasting

impact. The Shifts describe clearly what we need to do to realise the intent of the new Rōpū Taiao structure - to integrate our work and deepen our partnerships to improve how we can deliver for te taiao and the people of the region. They apply to all our work and relationships within Rōpū Taiao, across Greater Wellington, and externally with our mana whenua partners and the wider community. The shifts include:

- Te Whariki in action: Improve outcomes for mana whenua and Māori.
- **Engage, collaborate and partner**: Think collectively and work collaboratively to maximise impact for people and the environment.
- **Catchment approach:** Deliver integrated catchment approaches that lead to holistic local outcomes.
- **Nature-based approaches:** Increase the balance of nature-based approaches in our work.
- 7. Over the coming year we will enhance the framework by developing three-year outcomes that will provide an additional level of direction to guide our work. These will be based on the first steps we need to take to achieve our longer-term outcomes.
- 8. The Strategic Framework was designed internally with input from Te Hunga Whiriwhiri and other teams across Greater Wellington. Because we drew on existing key documents, we can be confident that values and priorities from a range of different engagements with mana whenua and the wider community have influenced how these outcomes and strategic shifts have been developed.
- 9. As we use the Strategic Framework to guide our annual and business planning processes, we will also develop an evaluation approach. Evaluation will enable us to check how we are progressing against what we want to achieve and help us to adapt as conditions and circumstances change across our region.
- 10. We will discuss the framework in detail with you at a future Environment Committee meeting.

Regional Overview

Summary of current fast track applications

11. The table below lists the current fast track applications and status, as of 25 July 2024.

Project	Description	Status as at 25/7/24		
Moy Estate, Otaki	Residential development	Consents granted 15/7/24		
Waikanae North	Residential development	Consents granted 25/7/24		
Harmony Energy Solar Farm, Carterton	Solar farm	Greater Wellington comments on application provided 17/7/24, Expert Consenting Panel considering application		

Project	Description	Status as at 25/7/24			
Plimmerton Farm Stage 1	Residential development	Greater Wellington comments on application provided 21/6/24, Expert Consenting Panel considering application			
Otaki Māori Race Course development Jamaica Rise	Residential development Residential	Comments on application provided 30/5/24, Expert Consenting Panel considering application			
development, Grenada North	development	Consents granted 22/7/24			
Metlifecare retirement village, Karori	Retirement village	Greater Wellington comments on application provided 21/6/24, Expert Consenting Panel considering application			

Further information can be found on the EPA website here:

https://www.epa.govt.nz/fast-track-consenting/fast-track-projects/

Summary of regulatory activity over past year

- 12. Information on Greater Wellington's regulatory activity is required to be submitted to the Ministry for the Environment (MfE) as part of the National Monitoring System and to the Compliance and Enforcement Special Interest Group as part of an annual report they publish. A summary of activity is provided below:
 - a 495 resource consents were processed, all of which were processed within statutory timeframes. The overall level of satisfaction with our consent processing service was 4.2 (out of 5).
 - b 2402 resource consents were identified for monitoring, and 81% of these consents were monitored
 - c 78% consents monitored were fully complying, 14% had low risk technical nocompliance, 6% had moderate non-compliance and 2% had significant noncompliance
 - d 2 prosecutions were concluded with fines totalling \$158,875 and 142 infringement notices were issued totalling \$111,250.
 - e 1 enforcement order was granted by the Environment Court and 25 abatement notices were issued to remedy or cease non-compliance
 - f 1188 notifications of environmental incidents were received through our Environment Hotline

Erosion prone land restoration

13. 6800 Poplar and Willow poles have been planted across 51 properties during winter 2024, covering 124 hectares in the region. 134 hectares of native planting/reversion, and 80 hectares of exotic afforestation are planned for this winter on the region's priority erosion prone land.

Fish passage remediation

14. The fish passage remediation project has met all Key Performance Indicators (KPIs) as part of the MfE funding agreement. The project team have assessed 355 instream structures and remediated 110 barriers. The team also attended a

weeklong masterclass and are moving towards more sustainable methods of barrier remediation.

Regional Policy Statement Change 1

- 15. The first change to the Regional Policy Statement (RPS Change 1) has finished hearings. This ends a process that comprised:
 - a 22 days in hearings across 7 Hearing Streams
 - b More than 480 published documents
 - c 17 s42A officer's assessment reports
 - d 1209 pages of evidence transcribed
- 16. The first draft of the Panel's recommendations report has been received. This is currently being reviewed and analysed by Greater Wellington officers.
- 17. Officers will brief Council in a workshop on 5 September 2024. Officers will seek a Council decision on RPS Change 1 at the council meeting on 26 September 2024.
- 18. Post Council decision, the appeals and mediation period will begin.

Resource Management Amendment Bill

19. Greater Wellington has submitted on the Government's first amendment to the Resource Management Act and secondary legislation (Resource Management (Freshwater and Other Matters) Amendment Bill) and appeared in front of the Primary Production Select Committee (on 17 July). When the Select Committee has heard submissions and undertaken deliberations, it will report the Bill back to the House.

Natural Resources Plan Change 1

- 20. Natural Resources Plan (NRP) change 1 implements the National Policy Statement for Freshwater Management (NPS-FM). It solidifies the regulatory recommendations from the Te Whanganui-a-Tara and Te Awarua o Porirua Whaitua Implementation Programme (WIP) in a planning instrument, resulting in significant changes to the operative NRP. It has now been notified and both the submission and further submission periods have closed. Over 270 submissions were received, comprising more than 10,000 individual submission points.
- 21. Officers are now working with technical experts and consultant planners to prepare for the first hearing stream, which will be held in late October/early November 2024. This will be the first of four hearing streams, which are currently planned to be scheduled as follows:
 - a Hearing Stream 1 (Overarching matters and objectives) in late October/early November 2024
 - b Hearing Stream 2 (Urban issues) in March 2025
 - c Hearing Stream 3 (Rural issues) in May 2025
 - d Hearing Stream 4 (Wrap-up and minor region-wide topics) in July 2025

- 22. On 27 June 2024 Council appointed the Part 1, Schedule 1 Hearings Panel that will hear submissions and issue recommendations on submissions. The Chief Freshwater Commissioner is currently in the process of appointing the Freshwater Planning Panel. The two Panels will have overlapping and identical membership.
- 23. We will be inserting a direct policy from the NPS-FM on 27 August 2024 on wetlands direction, following the withdrawal of a judicial review on NPS-FM clause 3.22 by Forest and Bird. Details will be coming in a report to Council on 27 August 2024.

Tsunami and sea-level rise

- 24. The Policy team (through Dr Iain Dawe Hazards Analyst) has been working with Wellington Region Emergency Management Office (WREMO) and GNS Science to promote tsunami awareness and education through a series of six community workshops along the Kāpiti Coast, discussing tsunami hazard and risks and safe evacuation planning. This mahi has prompted an agent-based tsunami evacuation modelling programme, commissioned by Greater Wellington and WREMO and undertaken by GNS Science, to understand how people would evacuate in the event of a tsunami. The aim of this was to identify evacuation bottlenecks and work through the problem with local communities to identify ways to evacuate more quickly and safely. RNZ were present at one of the workshops and produced an article and news item: https://www.rnz.co.nz/news/national/518770/vital-people-know-tsunami-warning-signs-emergency-manager
- 25. The release of the Wellington Region Climate Change Impact Assessment received interest in the media, particularly from TVNZ One News who interviewed Dr Iain Dawe to learn more about how sea level rise is impacting the Wellington region and what Greater Wellington is doing to help plan for it effects and build community resilience. The news item can be viewed here: https://www.1news.co.nz/2024/07/17/watch-sea-level-rise-and-subsidence-a-double-hit-for-coastal-areas/

Dam Safety Management

26. As part of the new Building (Dam Safety) Regulations 2022, which came in effect 13 May 2024, the Potential Impact Classification (PIC) for any 'classifiable'¹ dam is required to be assessed, reviewed, certified and submitted to the regulator (which is Greater Wellington) by 13 August 2024. The three classifiable dams which Greater Wellington own and manage within Environment Group, have all now been certified and submitted to the Regulator for approval.

Greater Wellington reports on urban development

- 27. Greater Wellington has released two reports focusing on urban development and growth:
 - a Infrastructure costs and urban form A proof-of-concept model²

¹ A height of 4 or more metres and stores 20,000 or more cubic metres volume of water or other fluid.

² https://www.gw.govt.nz/assets/Documents/2024/05/Comparative-cost-of-urban-form.pdf

- b Urban Design Toolkit³
- 28. Both of these reports support the changes to the regional planning framework sought through RPS Change 1 and PC1 to the Natural Resources Plan and implementation of the Future Development Strategy.

Pest Animals

29. Annual rabbit night count routes have been counted again and we have had increased numbers across several sights. With only two years of data, it is too soon to consider this a trend. Skyline walkway accounted for most of this increase. Since the count on the Skyline a poison operation has been conducted, and an unofficial post operation count in this area has seen a 70% decrease in population. Modified McLeans Scale monitoring was completed across the region and indicated no areas exceeding four on Modified McLeans scale.

Te Awarua-o-Porirua

- 30. Te Whakaritenga/Harbour Accord with the signing of the Accord currently on hold, we await the outcome of discussions between Ngāti Toa and Porirua City Council (PCC) to agree a way forward.
- 31. Greater Wellington's views were sought on the Glen subdivision/Kakaho 271 Grays Road, Pāuatahanui. A team of Greater Wellington experts have collaborated with PCC planners to provide recommendations that were subsequently passed onto the Agent and Developer for better environmental outcomes for this subdivision. This process enabled Greater Wellington expertise to be shared with the applicant prior to lodging of the subdivision consent with PCC.
- 32. Te Awarua-o-Porirua Forestry Sector Engagement & Behavioural Change Project the final report has been received from Forme consultants summarising findings and achievements for the first full year of the project. Forme's engagement with active harvests led to numerous behaviour change actions, and the education of operators. The project has provided highly valuable insight to engaging with this sector and improving practice with this high-risk activity. The project has been an overwhelming success and planning is underway to extend this for a further year, and also undertake similar work in other parts of the region.
- 33. Te Whakahou o Te Awarua o Porirua coordinated by Ngāti Toa and Institute of Environmental Science and Research (ESR), we had an excellent 'Think Tank' hui (June) on fostering sharing of data and innovative ideas for harbour restoration. Greater Wellington staff presented on our restoration, research, monitoring programmes for the harbour.
- 34. Collaboration with PCC on restoration Greater Wellington continues to work closely with PCC's Riparian Programme through both our Recloaking Papatūānuku and Environment Restoration incentives Programmes. This includes joint projects in West Belmont and Battle Hill Regional Parks as well as on private land. Greater

³ https://www.gw.govt.nz/assets/Documents/2024/07/GW-Urban-Design-Toolkit.pdf

Wellington is continuing discussions with PCC on a joint programme for private landowners for 2025.

Pest Animals

35. Planning has been completed for the Transmission Gully predator pathways project. 122 trap sites have been supplied to NZ Transport Agency Waka Kotahi (NZTA) for approval from Ōtaki to Waitangirua.

Regional Parks

36. Greater Wellington will soon be starting an expression of interest process to create a farm education experience at Battle Hill. Officers have been working hard to understand the land, potential farming systems and what may be available to prospective grazers.

Wairarapa Coast

Pest Animals

- 37. The Pest Animals team responded to a request from the Riversdale ratepayer's association to inspect over 50 properties in the township. We are planning to apply pindone early in the new year after the holiday rush.
- 38. Contracted work on Regional Predator Control Programme areas (Castlepoint and Stronvar) for possum control is now complete and monitoring is underway. Work has begun in the Langdale and Tinui areas as part of the FY24-25 programme.
- 39. The Riversdale Key Native Ecosystem (KNE) extension is about to commence with predator traps prepped ready to go out in the coming weeks.

Community planting

40. The annual community planting day out at Riversdale beach was a great success. Approximately 1,000 plants went into the ground along the dune system, supported by 40 people from the community.



Figure 1: Riversdale Beach Community Planting Day



Figure 2: Riversdale Beach Community Planting Day

Government Funding – Department of Prime Minister and Cabinet (DPMC) – Cyclone Recovery Unit

41. As stated in the June 2024 meeting report, we were successful in obtaining \$3.5 million from the Department of Prime Minister and Cabinet (DPMC) for the Recovery and Flooding Resilience fund for the crack willow blockage removal in the eastern rivers in the Wairarapa. This decision was publicly announced on 6 October 2023. Our contribution is \$250,000 worth of project management time.

Crack Willow blockage removal – eastern Wairarapa rivers

- 42. This work includes sub-catchments in the Wairarapa Coast and Ruamāhanga.
- 43. Phase one of the crack willow removal project has been completed with a focus on the Kōpuaranga and the Whareama Rivers.
- 44. To date we have removed 220 blockages from the Kōpuaranga and the Whareama Rivers, clearing approximately 66km of river channel.

Below are some images of blockages and removals.



Figure 3: Whareama River – Pre blockage removal



Figure 4: Whareama River – blockage removal commenced

- 45. We will continue clearing blockages and removing debris as long as the weather will permit.
- 46. Discussions with the Tinui/Whareama catchment community group is continuing to ensure we are aware of all major blockages and can prioritise accordingly. Work is being done to create a restoration plan aligned with the removal sites that also have wider benefits for biodiversity and future flood resilience (more details about this project are included in the Ruamāhanga update).

Wairarapa Catchment Collective

47. Over 50 representatives from catchment groups, rural industries, and environmental organisations came together last week to help us celebrate the launch of the Wairarapa Catchment Collective. The Wairarapa Catchment Collective will collaborate with partners to streamline and coordinate access to services, support the development of catchment action plans, help deliver actions, provide opportunities to access expertise and funding, network, and share knowledge. Greater Wellington is a key partner in the Collective to support groups with their planning to align out outcomes with actions.



Figure 5: The Wairarapa Catchment Collective

Ruamāhanga

Pest Animals

48. The Pest Animals team completed their predator control work throughout both the Te Whiti and Ruamāhanga operations, targeting mustelids. Black fronted dotterel were seen for the first time by a staff member while undertaking a Te Whiti mustelid service. Predator trapping will be extended in these areas in the 24-25 year. Currently, we are responding to more potential wallaby sightings, however, there has been no positive identification.

Te Kāuru Upper Ruamāhanga Floodplain Management Plan (2019)

- 49. Stage Two of River Road, Masterton (the construction of a rock groyne and a 150metre rock revetment) commenced on the 22 April 2024.
- 50. Rock supply has been completed with the delivery of 6,500 tonnes of rip rap rock and 1,300 tonnes of underlayer rock to site.
- 51. The construction phase of the project is now 90% complete. Rock placement for the rock revetment will be completed by the 15 July 2024. The temporary beach and bunding will be stripped by the end of July with the reinstatement works continuing through to early August 2024.

Below are some images of progress to date.



Figure 6: Stage two (Waipoua River) – 1,000 tonne rock groyne completed within the Waipoua River



Figure 7: Stage two (Waipoua River) – Excavation of the rock revetment within the Waipoua River (the excavation is bunded from the Waipoua River and is not within the flow of the river)



Figure 8: Stage two (Waipoua River) – Rock groyne and rock revetment completion within the Waipoua River. Coconut matting has been installed to the battered river bank above the rock revetment



Figure 9: Stage two – Secondary stockpile site adjacent to the Riverside Cemetery



Figure 10: Stage two (Ruamāhanga River) – Construction of the rock revetment continues within the Ruamāhanga River



Figure 11: Stage two (Ruamāhanga River) – Excavation of the rock revetment within the Ruamāhanga River (the excavation is bunded from the Ruamāhanga River and is not within the flow of the river)



Figure 12: Stage two (Ruamāhanga River) – A section of the rock revetment within the Ruamāhanga River is completed. The temporary bunding has been retreated. This photo overlooks the confluence of the Waipoua and Ruamāhanga Rivers

- 52. The project is on schedule to be completed by the end of July/early August 2024.
- 53. Stage three of River Road, Masterton is planned to commence during summer 24/25. Discussions with Rangitāne o Wairarapa took place in June 2024 and there has been no concerns raised regarding the proposed implementation of eleven rock groynes between stages one and two. We are following up with Kahungunu ki Wairarapa.

Government Funding – Department of Prime Minister and Cabinet – Cyclone Recovery Unit

- 54. As stated in the June 2024 meeting report we were successful in obtaining \$3.5 million from the DPMC for the Recovery and Flooding Resilience fund for the crack willow blockage removal in the eastern rivers in the Wairarapa. This decision was publicly announced on 6 October 2023. Our contribution is \$250,000 worth of project management time.
- 55. A steering group governance committee has been further established since the previous meeting report. The steering group now consists of a Senior Responsible Owner, Senior Suppliers, a Project Sponsor, Suppliers, a Financial Business Partner and a Project Manager. Steering group meetings will continue to be held monthly.

Crack Willow blockage removal – eastern Wairarapa rivers

- 56. This work includes sub catchments in the Wairarapa Coast and Ruamāhanga
- 57. Phase one of the crack willow removal project has been completed with a focus on the Kōpuaranga and the Whareama Rivers.

58. To date we have removed 220 blockages from the Kōpuaranga and the Whareama Rivers, clearing approximately 66km of river channel. This included the removal of over 1,186 trees to date. The resulting debris, predominately Crack Willow trees (Salix fragilis) is either being burnt or buried on-site. To date we have spent a total of \$893,319.00.

Below are some images of blockages and removals.



Figure 13: Kōpuaranga River – Pre blockage removal



Figure 14: Kōpuaranga River – post blockage removal

- 59. We will continue clearing blockages and removing debris as long as the weather will permit.
- 60. Riverbank re-stabilisation and riparian planting has been excluded from the Project Funding Agreement; however Greater Wellington has committed limited funding for bank re-stabilisation and riparian planting within the Whareama River. Bank restabilisation and riparian planting for the Kōpuaranga, Whangaehu and Tauweru Rivers will be funded by other avenues which will be announced during August.
- 61. We will continue planning for phase two during winter months, with blockage removals commencing in September 2024. Work packages will be identified for the purpose of procurement. Multiple work packages will be awarded through a tendering process for the tree blockage removals within the Eastern Rivers of the Wairarapa.
- 62. Discussions with community groups continue through both the Catchment groups (Wairarapa Coast and Ruamāhanga Flood Operations and Planting Operations teams) to ensure we are aware of all major blockages and can prioritise accordingly.

Wairarapa Moana

- 63. Pest Animals investigated the use of thermal imaging equipment to successfully detect bittern. While this is considered for the future, predator trapping will continue. Results indicate increasing bittern numbers.
- 64. The Wairarapa Moana restoration project's winter planting is well underway with 28,500 indigenous plants in the ground this winter, bringing the project total to date to over 102,000.
- 65. 10 years of kākahi monitoring has been completed, with a total of over 3,674 individuals collected and measured by citizen scientists. This monitoring indicates that juvenile kākahi are rare, and population size distributions are heavily skewed. It also indicates that recruitment failure has been occurring for many years. Without intervention the last major cohort will soon die out. The main cause is likely to be degraded habitat, high sediment loading and potentially, fewer and less healthy host fish populations. As part of conservation week in September 2024, the project team are hosting a mini-expo style event "Lets talk Kākahi", to raise awareness and encourage conversations about our local population.

Certified Farm Environment Plans

66. Engagement at multiple information events and workshops have been successful with over 60 farmers in attendance over the past month. We continue to work closely with the certifiers and nutrient risk advisors to ensure they are well equipped to produce quality farm environment plans and connecting with farmers and landowners who require Certified Farm Environment Plans.

Regional Parks

67. Early stages of scoping a Reserve Management Plan and considerations of how best to enable mana whenua co-design are in progress with the Hiwinui Forest area southeast of Martinborough.
Mt Munro Wind Farm (Meridian Energy)

68. Mediation was held in Palmerston North 18-19 June 2024 between the applicant (Meridian Energy), Council Representatives (Masterton District Council (MDC), Tararua District Council (TDC), Greater Wellington and Horizons Regional Council), and the s274 parties (submitters). Expert conferencing is about get underway as all parties prepare for the Environment Court hearing which is set to begin on the 16 September 2024.

Daleton Nursery Development

69. Progress has been steady throughout the winter period to date. Irrigation infrastructure and artificial shelter belts are currently being constructed. The intent is to have irrigation operational sometime during October 2024 when we will be able to commence the application of treated wastewater to ground. The artificial shelterbelts will be supplemented with planted shelter and this combined protection will ensure that the production nursery is well sheltered when planted in late August/early September.



Figure 15: Daleton Nursery 6m artificial shelter construction



Figure 16: Daleton Nursery irrigation construction underway

- 70. The facilities, compound, and associated infrastructure tender is being scheduled for September-November 2024. The intent is to have a contract in place to enable construction during the summer/autumn period and fully take advantage of the settled and dry weather.
- 71. Overall, the project is still on-track to be completed by the 30 June 2025, within budget, and to scope. All significant risks have been mitigated to date, including illness from handling treated wastewater, vehicle collision while accessing the site off State Highway 2, cost blow-outs due to inflation, and delays due to war and terrorism with materials arriving from overseas i.e. Israel, and Europe.

Kāpiti

Pest animals

72. Large pindone carrot operations have been undertaken for NZTA on the Kāpiti Expressway and several sites on private land. Planning has been completed for the Kapiti Expressway predator pathways project. 122 trap sites have been supplied to NZTA for approval from Ōtaki to Waitangirua. Traps and other infrastructure are ready at our Upper Hutt depot.

Environment Restoration mahi

73. Parahamuti: After over three years of investigations, design and planning, the construction of two fish friendly weirs has been completed to increase the extent of two natural wetlands near Te Horo. It is only the second time Greater Wellington has consented an activity to expand a known natural wetland. The site of low-lying farmland was historically wetland and has been named "Parahamuti" by Ngā Hapū o Ōtaki. It's expected that these weirs will expand the natural wetland from 1.2 hectares to over 4 hectares. The next stage of the project is to plant the wetlands with appropriate native species. In partnership with the landowners, Greater Wellington has supported this project through the Wetland Programme, with further support from Kapiti Coast District Council and Fonterra.

Enviroschools

74. Greater Wellington enabled Mountains To Sea Wellington to provide marine or freshwater interactive experiences to 211 students and 67 parents through the Healthy Harbours Porirua school programme across Te Awarua o Porirua catchment last financial year.

Kāpiti whaitua implementation programme and next steps

75. We've met with the Kāpiti Whaitua committee Taurite (co-chairs) to establish next steps on finalising the WIP and progressing the plan change. We're currently confirming the governance and working arrangements for this mahi. A focused hui is being planned for August 2024 for Greater Wellington staff and members of the Whaitua committee to discuss the regulatory recommendations of the WIP and how we progress next steps on a plan change.

Te Whanganui-a-Tara

76. Greater Wellington contracts the survey and reporting on bird populations on the Miramar Peninsula to track the success of the pest animal control done by Predator Free Wellington. This last summer's results continue to record the recovery of indigenous birds on the peninsula (see figure below), with a subsequent decline in exotic birds as the indigenous species are released from pest animal predation.



Figure 3.1: Trends in the mean number (± standard error) of native and introduced birds encountered per bird count on Te Motu Kairangi / Miramar Peninsula between 2017 and 2023. Shaded areas represent 95% confidence limits of modelled trends.

Figure 17: Mean bird count per station

77. North Island Brown Kiwi have moved into the Wainuiomata Water Collection Area that Greater Wellington manages from the release site in the Remutaka Forest Park. Greater Wellington has been supporting the Remutaka Conservation Trust to monitor their spread and breeding success, providing audio recording equipment and logistical support. Since the Remutaka Conservation Trust last surveyed in 2020, 21 kiwi have extended their range into the Water Collection Area and continue to pair up for breeding.

Predator Free Wellington

- 78. The Predator Free Wellington (PFW) Team has been tracking a stoat that found a way onto the Miramar Peninsula. The Peninsula has been in a state of elimination, and only dealing with predator incursions. Through partnership and a lot of hard work with the community, the stoat was caught by volunteers. An expert in this field assisted Greater Wellington staff and community volunteers with insights and training. The stoat (a lone male) was trapped successfully.
- 79. A trial of a new technology is underway. The H2-Zero tool has been developed by ZIP and is novel due to the way the bait is delivered. A liquid/gel formulation of brodifacoum is contained in a secured container, the container slowly releases the bait, which collects inside a secure bait station. The potential benefits of this tool are reduction of labour in staff needing to revisit and top up manual bait stations, reduced bait needed to be used as this tool dispenses a small amount over a long period of time, keeping bait fresh and only exposing released bait. Trials are in the early stages.



Figure 18: Installation of H2 Zero unit on a secure bait station

- 80. The project is in the second phase of the operation Te Papa down to Owhiro Bay. The current eliminated area in phase 2 is 273ha, with a further 214ha under active management.
- 81. Community volunteers are assisting the operational work for the PFW project, this is a first for PFW to have volunteers operational in phase 2, in a space where the Greater Wellington staff are active.
- 82. Greater Wellington staff are assisting the Banks Peninsula Conservation Trust, who are about to undertake a possum elimination in an urban area. The PFW Team are highly knowledgeable in this field and are supporting the work where possible. Two staff members are attending the project to advise on community outreach and operational deployment of predator control devices.

Pest animals

- 83. Kaitoke wallaby eradication site has had the final dog search completed. No detections were found, and the site has been declared eradicated. Large pindone carrot operations undertaken on Skyline Walkway for WCC.
- 84. Both the possum control and predator control programmes were completed on time and in full. Te Kopahou block now has 250 AT220 traps in place in conjunction with WCC with the first service recording 1524 possum kills. These traps will continue to be serviced next year. Work has begun at Ohariu-Makara as part of the 2024/25 program.
- 85. We undertook the Remutaka Hill road goat operation in collaboration with Department of Conservation. A survey followed by a shooting operation was completed in conjunction with ongoing NZTA planned road closures.
- 86. Ungulate control was completed as scheduled in KNE sites, with the finish of the aerial programme. Work in Wainuiomata/Ōrongorongo and Pakuratahi started earlier in the year due to the delay in the Remutaka aerial 1080 operation.

87. Recloaking Papatūānuku site night shooting work is in a busy time of the year with new areas being planted.

Regional Parks

- 88. Improvements to open space and accessibility are being progressed with fence removal across about 9ha of retired grazing land at Baring Head, Queen Elizabeth, and Kaitoke Regional Parks.
- 89. An extension to Gums loop track has been installed at Wainuiomata Regional Park to improve accessibility and resilience of the popular track.
- 90. Of interest to the Key Native Ecosystems within our Regional Parks OSPRI's Northern Remutaka 1080 operation is still on hold, waiting on suitable weather conditions and new bait to be manufactured. The delay is allowing us to complete monitoring of possum population levels in Wainuiomata Mainland Island and the Wainuiomata-Ōrongorongo water collection area, both areas being within the 1080 operational area. Monitoring possums now and following the operation will give us evidence on the effectiveness of the operation and of our control regimes in the mainland island.

Ngā āpitihanga Attachment

Number	Title
1	Action items from previous Environment Committee meetings
2	Rōpū Taiao Strategic Framework
3	Rōpū Taiao Strategic Shifts (part of the Strategic Framework)

Ngā kaiwaitohu Signatory

Approver	Lian Butcher – Kaiwhakahaere Matua Taiao Group Manager
	Environment

He whakarāpopoto i ngā huritaonga Summary of considerations

Fit with Council's roles or with Committee's terms of reference

The Environment Committee has responsibility to consider all matters across the development and implementation of the work programmes of Greater Wellington's Environment Group.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

Development and implementation of related work programmes fall under the core activities of the 2021-2031 Long Term Plan.

Internal consultation

Internal consultation was limited to officers of Greater Wellington's Environment Group.

Risks and impacts - legal / health and safety etc.

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.

Date	Action item	Status and comment
13 June 2024	Te Rōpū Taiao Environment Group Update -	Status: Completed
	Report 24.241 [For Information]	Comment:
	Noted: The Committee asked officers to provide an assessment of whether Greater Wellington has any immediate use for the area at Pākuratahi that was	The site has been assessed by staff with ranger, planning and asset maintenance responsibilities.
	leased by the Glider Club, rather than seeking to lease it to another party.	Potential for other site uses were considered which could impact an external expression of interest process. The only pragmatic use foreseen for Greater Wellington purposes is an agreement with the Motor Caravan Association to use it as an overflow site for self-contained campers when Kaitoke gets busy, That would require investment in the road and managed access.
		We wouldn't be able to open the road up to general access without significant investment as it would be narrow and one way in between trees that are owned by the external Forest Right holder. The road is also used as a harvest route. Public access in the summer would also increase fire risk and likely involve public exclusions at high risk times.
		In considering future site uses, the EOI process in itself doesn't commit Greater Wellington to going with any particular club or granting exclusive usage. However, if a club wished to invest in upgrading the dilapidated buildings and fit with the other park values we would recommend considering a longer term agreement for

Action items from previous Environment Committee meetings

Action items from previous Environment Committee meetings

use of the building to save Greater Wellington from the potential building removal costs that are not currently budgeted.
Greater Wellington owns the adjacent Pakuratahi farm (For water storage purposes) which will eventually provide off-road connections to Kaitoke regional park and has potential for additional carparking.
The EOI process is proceeding. The Glider club's exit increases the risk of further vandalism or other related issues of leaving buildings unused in a secluded location.

Rōpū Taiao Strategic Framework

	The environment and people flourishing in the Wellington region					
O o making, and incorporate te ao Māori andcaMātauranga Māori perspectives, so we canmatauranga mātauranga mātaurang		Te taiao is enabled to thrive Te taiao is enabled to thrive to support the capacity of air, land, freshwater and coastal marine ecosystems to sustain all life and future generations.		The people of the region can flourish Our region is welcoming, with access to our natural environment that is safe and people friendly, offering unique and diverse experiences to support our communities and the broader regional economy. We support people to live in ways that value, restore, and enhance our environment.		Regional resilience and sustainability The Wellington region is a low-emission and climate-resilient region, for both people and the natural environment, with climate mitigation and adaptation being an integral part of our decision making. We work to protect our communities from the consequences of drought, flooding and sea level rise.
10-YEAR OUTCOMES	 Safeguarding and restoring ecosystem natural environments across our robe Air, land, ecosystems, freshwater bodies, the area and the indigenous species that live in the environments throughout catchments are enally an integrated and connected way. Our policies and regulatory settings, supported by on-the ensure that our environment does not degrade and is enally indigenous ecosystems and habitats are protected from thuman activities and invasive species that are harmful. The quality of freshwater bodies and the coastal marine a leading to improvements across all areas throughout catched and retain their ecosystem function at Air quality is improved to benefit community health and o 	e coastal marine abled to thrive in abled to thrive in abled to thrive. the impacts of area is increased, schments. and range of uses.	 Marbour navigation Mana whenua and common connected to te taiao are connected to te taiao are Everyone can safely accregional parks network, More communities access high qua across our parks network, river correst or connections across our rohe with t 	munities across the region are d know the stories of their home. sess and connect to nature across our river corridors and harbours. ality, safe recreation experiences ridors and harbours. The taiao and people are strengthened, aries and develop solutions together. that carry people and goods and	 Communities a impacts of clim Communities a impacts of clim Our policy and reduction of gre The community for hazard even Our flood mana service as part 	environmental restoration work contributes to the senhouse gases. y and emergency services are supported to plan effectively
 Air quality is improved to benefit community neatth and our climate. Improved water supply and demand systems reduce the amount of stress on rivers and aquifers, and communities are becoming more resilient to effects of worsening drought risk amplified by climate che amount of the environment and partner. Te Whāriki in action Improve outcomes for mana whenua and Māori Engage, collaborate and partner Think collectively and work collaboratively to maximise impact for the environment and peop 				and aquifers, and communities are becoming more cts of worsening drought risk amplified by climate change		
		vhenua and Māori		A3 30	nd work collaborative	ely to maximise impact for

RÕPŪ TAIAO STRATEGIC	~ر	Te Whāriki in action Improve outcomes for mana whenua and Māori	A STREET	Engage, collaborate and partner Think collectively and work collaboratively to maximise impact for the environment and people
SHIFTS	\diamondsuit	Catchment approach Deliver integrated catchment approaches that lead to holistic local outcomes	Ø	Nature-based approaches Increase the balance of nature-based approaches in our work

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Rōpū Taiao Strategic Shifts

July 2024



Introduction

Definition and purpose

These shifts are the big changes we will focus on across Ropū Taiao over the next few years, as we work towards achieving our vision and outcomes over the long term.

The shifts direct <u>how</u> we will go about this mahi. They will ensure that what we do for te taiao has a longer lasting impact. The shifts keep sight of the original intent of the new Rōpū Taiao structure, which was to integrate our work and deepen our partnerships to improve how we can deliver for te taiao and the people of the region. They apply to all our work and relationships within Rōpū Taiao, across GW, and externally with our mana whenua partners and the wider community.

The shifts are outlined in this document with a short description of what they are trying to achieve, the reason why they are needed and examples of actions that can be started, increased, reduced or stopped.

The shifts are underpinned by the karanga from te taiao expressed through the *Kaipupuri taonga ki te ao whānui* framework (Mauri Tūhono), in that we prioritise our Te Tiriti partnerships, relationships and collaboration, the importance of place, and putting te taiao at the heart of everything we do.

Like the interwoven strands in Mauri Tūhono these shifts are interconnected and progress towards any one shift supports progress towards across all of them. They should be applied together and not in isolation. In some cases, particular actions outlined may be similar or even the same across all four of the shifts. Where this occurs, the actions should be seen in light of the shift they relate to – the shift provides a particular lens to help understand how that action might be applied.

We will measure how we are progressing towards achieving these shifts. Directors will have responsibility to drive the changes they call for, but everyone in Rōpū Taiao is responsible for responding to this call and taking on the challenge. Regardless of anyone's role there will be some bold steps that can be taken to bring these shifts to life. They are intended to be applied in our work planning, our leadership behaviours, and staff development.

Te Whāriki in action

Improve outcomes for mana whenua and Māori

What are we trying to achieve?

We are working towards improving outcomes for mana whenua and Māori through partnering and engaging mana whenua in decision making. We are incorporating te ao Māori and mātauranga Māori perspectives. Across our work in Rōpu Taiao, and in a more joined up way, we are applying the principles of:

- 1. Partnership Mana whenua partners and kaitiaki are actively involved in decision making from beginning to end.
- 2. **Opportunities focused** Realise innovative opportunities to progress partnership aspirations in the dynamic Crown and Māori environment.
- 3. Effective Participation Mana whenua and Māori are resourced and enabled to participate in decision making.
- 4. Evidence based decision making Mātauranga Māori is an integral part of our policy, planning and implementation.

Why?

We acknowledge mana whenua as kaitiaki and ahi kā of the region, and the responsibilities they hold in this.

For collective impact for te taiao, our approach needs to be grounded in equity of resources, power sharing, te Tiritibased partnership and decision making, interconnection with nature and trust-based.

We also recognise and understand that Te Tiriti forms the foundation of our relationships with mana whenua, Māori, wider communities and te taiao. We need to be open to opportunities to learn and grow our own capability to be a good Te Tiriti partner and bring te taiao to the heart of our decision-making.

<u>When we participate in reciprocal and balanced relationships with mana whenua and resource them to do the work they</u> are already leading on, this can <u>unlock many opportunities</u> to enable te taiao to flourish.

How can we do it?					
Reduce	Increase				
 Providing short notice for work with iwi that has shorter timeframes and requires engagement and feedback. 	 The role of mātauranga Māori in our decision-making and practice, in a way that is guided by mana whenua as kaitiaki of this knowledge. Supporting different iwi approaches to their mahi across the region. Co-location and working together, opportunities for secondments. Purposeful, multi-year investment to support mana whenua aspirations. A high degree of of responsibility and accountability amongst staff to build confidence and capability to work in this space. Sharing resources flexibly so mana whenua can deliver more on-ground management where they want to. Māori leadership within Rōpū Taiao 				
Eliminate	Create				
 Power and control structures that embed inequality. 	 Te Tiriti-based decision-making frameworks. Co-developed initiatives that are based on power/responsibility sharing models. Programmes that build our joint capability where appropriate 				

Engage, collaborate and partner

Think collectively and work collaboratively to maximise impact for people and the environment

What are we trying to achieve?

We want to prioritise investing in engagement across communities, local and central government. We want to shift away from working with others in a competitive or directive way, and towards collaborative approaches where we are working with others. This work includes and is also in addition to our specific partnership responsibilities we have with mana whenua and Māori. We also need to be clear about what working in partnership means and what it requires to do well.

Why?

GW and our staff are part of a larger group of people who live, work, and play in the region, and care for te taiao together. We need to practice whakawhanaungatanga (ongoing work to establish and maintain relationships) to support community connection within te taiao, across the places and spaces we work.

While GW has a clear mandate and expertise in some areas, we need to recognise and respect the expertise, experience, worldviews, and interests of people outside of GW. Different ways of knowing, such as local knowledge, practical expertise, storytelling, creative arts, and various academic disciplines add richness and value to what we are trying to achieve collectively.

Working well with other agencies and with our communities gives us access to a much bigger pool of resource to achieve our shared goals. It also helps us reduce duplication and focus on the places where we can deliver the most value, because of our expertise or legislative powers.

This shift is about embracing the opportunity to create new kinds of relationships where GW is not at the centre, and where we use our expertise, capability, and capacity to complement and amplify the work that others do. By working collectively and collaboratively we can maximise the positive impacts for te taiao and ngā tangata. This also needs to be supported by our efforts to engage, collaborate, and partner within Rōpū Taiao and across wider GW.

How can we do it?					
Reduce	Increase				
Relying only on internal expertise.	Advocate and championing the work of others.				
Relying on mono-cultural expertise, knowledge, and	Build on the strengths of other organisations and people.				
approaches.Making isolated decisions.	• Being transparent about the knowledge we have and are applying and respecting other expertise and seeking out different viewpoints.				
	• Use engagement approaches that build commitment and trust, honouring what people bring to the table.				
	Engage equitably, early, and more broadly.				
	Build trust by demonstrating reciprocity (give and take) in our relationships.				
	Grow well-resourced social science, partnership, and catchment roles.				
Eliminate	Create				
 Assuming that 'informing' people about what we are doing is enough. 	Build capability, and supporting tools, to engage effectively and consistently.				
 Driving work that is only important to us. Accuming CW/ knows best 	• Prioritise community and mana whenua interests in our internal direction setting and planning.				
Assuming GW knows best.Relying on one kind of evidence.	 Acknowledge when we are in a position of power and adjusting our approaches to shift power dynamics. 				
	Value and invest in co-design and partnership approaches.				
	Acknowledge and invest in engagement as a field of expertise.				

Catchment approach

Deliver integrated catchment approaches that lead to holistic local outcomes

What are we trying to achieve?

This shift links the other three shifts by grounding them at the catchment scale – right from the mountain tops to the sea floor. It helps support a vision of "people knowing their place in te taiao and their role in helping it thrive" (Mauri Tūhono framework).

A catchment approach makes strategy-to-delivery tangible at a scale that the community can meaningfully engage with. It helps us see our work at place in an integrated way.

Catchment planning and integrated delivery of our work will support:

- 1. The transformative shift in our partnerships with mana whenua that connects to te taiao in their rohe.
- 2. Integrating the work of Ropū Taiao at the catchment scale and getting out of function-based silos.
- 3. Bringing a holistic lens to our work, understanding interconnections between people, place and environment.
- 4. Aligning the delivery of our work with a strategic approach that is focused on the catchment scale.

Why?

GW's current approach of multiple programme updates and requests doesn't work for our mana whenua, communities, other councils, or us. An integrated programme of work at a catchment scale will allow genuine priorities to be seen and considered at a meaningful level for each catchment. This will enhance long-lasting support by providing a way for GW to be more responsive, listen to different views and agree pragmatic priorities with partners within catchments. For example, if we link up different work like planning for climate change, riparian planting, spatial planning rules, flood protection works, and ecological monitoring we can achieve much better outcomes with what we have.

Building capability for this work across the group means GW will strengthen its understanding of the wider relationships and politics in each catchment, allowing for long-lasting and sensible solutions even in sensitive or challenging situations.

How can we do it?					
Increase					
 Linking our actions clearly to community values within catchments, in line with our shared outcomes - tell the story of why we do what we do. Holding functional work to account to deliver on catchment priorities. Create space for reflection, learning to change, innovation and creativity Building understanding of what a catchment approach is, including common use of language. Leaders modelling collaborative behaviours. Growing our capability in partnering and collaboration at the local level Partnering internally and carrying out social procurement, seeking support from the wider organisation. 					
Create					
Undertake effective business planning to support integration and making changes, tied to tools and processes that implement strategic directions.					
• Build a collaborative culture inside and outside the organisation.					
 Be clear on our mandate and role, what bottom lines we have, and what we can and can't change. Stick at new models that challenge us, including devolving/sharing power. 					

Nature-based approaches

Increase the balance of nature-based approaches in our work

What are we trying to achieve?

Putting te taiao at the heart of our decisions and looking for ways to work within ecosystem dynamics, including an increased use of native species and ecosystems.

Why?

Using nature-based tools and approaches can deliver multiple outcomes and benefits at once. They can help us improve our environment while building resilience to the effects of climate change and addressing issues like flood risk, water quality and supply.

For example, instead of grazing our regional parks to reduce fire risk, we can plant them out in a range of native species. These are less likely to burn than rank grass or gorse, they sequester carbon, provide amenity and shade, retain water and sediment in the soil, and over time will restore the mauri of the whenua and re-establish native ecosystem dynamics.

Similarly, re-naturalising streams with riparian plantings and establishing wetlands for floodwater retention can help recharge aquifers, support native bird, fish and invertebrate communities, improve water quality, support mahinga kai, reduce effects on downstream marine environments, and provide a better recreational environment for our community to enjoy.

Mana whenua and our communities are clear that they want to see more of this approach from us.

How can we do it?				
Reduce	Increase			
 Looking primarily to hard engineering solutions, where a nature-based approach could be used as well, or instead. Allowing for inappropriate development, particularly that which severely modifies natural 	 Partnering and co-designing with mana whenua, including using mātauranga Māori to inform and guide our work. Taking a holistic ecosystem-based approach to our work. Building social licence e.g. community and landowner support for 			
systems and/or is reliant on hard engineering to protect against flooding.	 wider river corridors. Taking the long view of our work – planning and resourcing for ecosystem establishment over generations. 			
Eliminate	Create			
 Siloed/one-dimensional approaches to our work. 	Build planning and delivery systems that make it easy to integrate our work.			
	• Partner with mana whenua and work with industry and NGOs to build capability and capacity for ecosystem regeneration e.g. nurseries, pest control.			
	• Create 'toolboxes' of nature-based tools that are easy for staff and wider society to use e.g. guidelines on how to create and maintain wetlands for flood- and storm-water detention that also have wider environmental benefits.			
	 Advocate for new funding models for sustainable land use and change, e.g. blue carbon. 			