**Committee Members** 

Chair: Brett Cummings Cr Frank Dooley Cr Andy Campbell Cr Allan Birchfield Cr Peter Ewen Cr Peter Haddock Cr Mark McIntyre **Iwi Representatives** Francois Tumahai (Ngāti Waewae) Jackie Douglas (Makaawhio)



WEST COAST REGIONAL COUNCIL

# **PUBLIC COPY**

# Meeting of Resource Management Committee (*Te Huinga Tu*)

# Tuesday, 8 October 2024

# 9.30am

# West Coast Regional Council Chambers, 388 Main South Road,

## Greymouth

## and

# Live Streamed via Council's Facebook Page:

https://www.facebook.com/WestCoastRegionalCouncil

# Resource Management Committee Meeting (Te Huinga Tu)

# AGENDA

(Rarangi Take)

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#### 9. General Business

#### PUBLIC EXCLUDED BUSINESS

#### 10. Confirmation of Public Excluded Minutes

- 10.1 Minutes of Resource Management Committee Meeting 10 September 2024
   Matters arising
- 11. Actions List

### 12. Compliance Matters (Verbal Update)

D. Lew Chief Executive

#### **Purpose of Local Government**

The reports contained in this agenda address the requirements of the Local Government Act 2002 in relation to decision making. Unless otherwise stated, the recommended option promotes the social, economic, environmental, and cultural well-being of communities in the present and for the future.

#### Health and Safety Emergency Procedure

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If you require assistance to exit, please see a staff member. Once you reach the bottom of the stairs make your way to the assembly point at the grassed area at the front of the building. Staff will guide you to an alternative route if necessary.

Minutes of Resource Management Committee		
Meeting 10 September 2024		
Sarah Tripathi, Governance Advisor		
No		

### **Report Purpose**

The purpose of this report is to receive the minutes of the Resource Management Committee meeting of 10 September 2024.

#### Recommendations

It is recommended that Committee resolves to:

1. Confirm that the minutes of the Resource Management Committee meeting held on 10 September 2024 are a true and correct record.

#### Attachments

Attachment 1: Minutes of the Resource Management Committee meeting held on 10 September 2024.

#### WEST COAST REGIONAL COUNCIL

### MINUTES OF THE RESOURCE MANAGEMENT COMMITTEE MEETING HELD ON 10 SEPTEMBER 2024 AT THE OFFICES OF THE WEST COAST REGIONAL COUNCIL 388 MAIN SOUTH ROAD, GREYMOUTH COMMENCING AT 9.40AM

- **PRESENT:** B. Cummings (Chair), P. Haddock, F. Dooley, A. Campbell, A. Birchfield, P. Ewen, M. McIntyre
- IN ATTENDANCE:
   D. Lew (Chief Executive), J. Field (Group Manager Office of the CE), A. Pendergrast (Acting Corporate Services Manager (via Zoom)), R. Kemper (Group Manager – Council Business Unit), S. Morgan (Group Manager – Environment & Science), S. Genery (Principal Planning & Reporting Officer), T. Hopkins (Group Manager – Catchment Management), F. Love (Chief Advisor (via Zoom)), M. Dickens (Manager Policy), C. Barnes (Manager Compliance), C. Mills (Project Accountant), L. Sadler (Senior Planner), M. Bimont (Regional Planner), D. Bray (Senior Policy Planner), T. Wyndham-Smith (Principal Communications & Engagement Advisor), S. Tripathi (Governance Advisor), Lois Williams (Media)

#### 1. Welcome (Haere mai)

The Chair welcomed all attendees to the meeting and apologized for the late start.

The Chair commenced the meeting with a prayer.

### 2. Apologies (Ngā Pa Pouri)

The Chair called for apologies. Apologies were received from Jackie Douglas and Francois Tumahai.

**Moved** (Haddock/ Dooley) that the apologies from J Douglas and F Tumahai be received.

Carried

#### 3. Declarations of Interest

The Chair called for any declarations of interest for the meeting. There were none.

#### 4. Public Forum, Petitions and Deputations (He Huinga tuku korero)

There was no public forum, petitions, or deputations scheduled for this meeting.

1

#### 5. Confirmation of Minutes

#### 5.1 Minutes of Resource Management Committee meeting 6 August 2024

The Chair called for any corrections to the minutes of the Resource Management Committee meeting held on 6 August 2024.

**Moved** (Dooley/ Haddock) that the minutes of the meeting be accepted as a true and accurate record.

Carried

#### **Matters Arising**

A brief discussion was held regarding the planning forum, and it was noted that there has been no progress on this matter at this time.

#### 6. Actions List

The actions list was reviewed, and the following updates were noted.

- Item 1 Ongoing.
- Item 2 Completed. To be deleted.
- Item 3 Ongoing.
- Item 4 Completed. To be deleted.
- Item 5 Ongoing.
- Item 6 Completed. To be deleted.

**Moved** (Dooley/ Haddock) that the report be received.

Carried

#### 7. Chairs Report (verbal update)

There was none.

#### 8. Reports

#### 8.1 Planning and TTPP Report

C Barnes spoke to the report and took the report as read.

Discussion was held on the need for a code-based taxi system on the West Coast, noting that the region is one of the few in New Zealand without it. There was general agreement that the system should be implemented to improve accessibility, with the issue to be raised at an upcoming meeting. No formal decisions were made, but the committee prioritised the initiative for further action. An overview of the initial stages of the review was provided, noting that the current plan, established in 2001, is due for review as plans should be updated every ten years. A review process initiated in 2016 was not completed.

The Committee approved the withdrawal of the 2016 draft plan for the following reasons:

- Incomplete consultation
- Lack of legal weight for resource consent applications
- Age of the plan (8 years) and partial obsolescence
- Council's commitment to developing a new coastal plan

Moved (Dooley/ Haddock) that the Committee -

1. Receives the report.

Carried

Moved (Dooley/ Ewen) that the Committee -

2. Approves withdrawing the proposed Regional Coastal Plan 2016 under Schedule 1, section 8D of the Resource Management Act 1991.

Carried

### 8.2 **Coastal Plan Issues and Options Report**

M. Dickens presented an early-stage update on the Coastal Plan review, noting that the current plan from 2001 is due for review. The council is seeking approval to withdraw the incomplete 2016 plan to avoid legal complications in assessing resource consent applications, with a proposed withdrawal date of 17 September 2024.

Key deliverables and timeframes were outlined, including completing a draft issues and options paper by December 2024, a new plan by June 2025, consultations in March 2026, and final plan release by June 2027.

Councillors raised several concerns, including clarification of responsibilities between councils and the Department of Conservation, restrictions on coastal protection structures, the impact of boundary changes in the coastal marine area, and the importance of consistency with the TTPP and the New Zealand Coastal Policy Statement. The need to balance environmental protection with economic development was emphasized.

A workshop was agreed upon to further discuss these issues, to be scheduled after progress on the TTPP process.

Moved (Dooley/ Ewen) that the Committee -

1. Receives the report.

Carried

#### 8.3 **Catchment Coordination Strategy Report**

S Morgan spoke to the report and took the report as read.

The Committee received a report on the Catchment Coordination Strategy, a five-year plan for a non-regulatory role aimed at supporting farmers in areas with water quality or environmental concerns. The Catchment Coordinator, currently the only full-time employee, is funded by a grant expiring in June 2025, with efforts to extend funding to April 2026. Discussion touched on economic challenges facing farmers, with some Councillors questioning the effectiveness of environmental programmes. The programme aims to balance environmental goals with economic realities by helping farmers access funding for improvements like pest control and strategic planting.

Moved (Haddock/ Campbell) that the Committee -

- 1. Receives the report.
- 2. Endorses the Catchment Group Coordination and Support Strategy

Carried

#### 8.4 Environmental Science Quarterly Report

S Morgan spoke to the report.

The Committee received a report on the Catchment Coordination Strategy, a five-year plan for a non-regulatory role aimed at supporting farmers in areas with water quality or environmental concerns. The Catchment Coordinator, currently the only full-time employee, is funded by a grant expiring in June 2025, with efforts to extend funding to April 2026. Discussion touched on economic challenges facing farmers, with some Councillors questioning the effectiveness of environmental programmes. The programme aims to balance environmental goals with economic realities by helping farmers access funding for improvements like pest control and strategic planting.

Moved (Haddock/ Campbell) that the Committee -

- 1. Receives the report.
- 2. Endorses the Catchment Group Coordination and Support Strategy

Carried

#### 9. General Business

There was none.

The meeting was adjourned at 10.39am.

The meeting reconvened at 4.08pm.

#### PUBLIC EXCLUDED BUSINESS

### Moved (Haddock/ Ewen) that.

1. the public be excluded from the following parts of the proceedings of this meeting, namely – 10 to 12 (all inclusive):

ltem No	General Subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 7 of LGOIMA for the passing of this resolution
10.1	Confidential Minutes of Meeting – 6 August 2024	The item contains information relating to commercial, privacy and security matters	To protect commercial and private information and to prevent disclosure of information for improper gain or advantage (s7(2)(a), s7(2)(b), and s7(2)(j)).
11	Actions List	The item contains information relating to commercial, privacy and security matters	To protect commercial and private information and to prevent disclosure of information for improper gain or advantage (s7(2)(a), s7(2)(b), and s7(2)(j)).
12	TiGA Environment	The item contains	To protect

(Verbal Update)	Information	commercial and
	relating to	private information
	commercial,	and to prevent
	privacy and	disclosure of
	security matters	information for
		improper gain or
		advantage (s7(2)(a),
		s7(2)(b), and
		s7(2)(j)).

- 2. Darryl Lew, Chris Barnes, Shanti Morgan, Tom Hopkins, Chris Barnes and Jo Field, be permitted to remain at this meeting after the public have been excluded due to their knowledge of the subjects. This knowledge will be of assistance in relation to the matters to be discussed; and
- 3. That the minute taker also be permitted to remain.

The meeting moved into the public-excluded session at 4.08pm.

Chair	
Date	

#### **Actions List**

Author Sarah Tripathi, Governance Advisor

#### Authorizer

6

Public Excluded No

#### **Report Purpose**

This report is a summary of items that require actions.

The responsible managers have updated the list and will address their respective action items.

#### Recommendations

It is recommended that the Committee resolves to:

1. Receive the report.

## **ACTIONS LIST**

ltem No.	Date of Meeting	Item	Officer	Update
1.	10 Sept 2024	To review the membership of the Regional Transport Committee. The issue was raised regarding the potential for Iwi participation in the Regional Transport Committee during the RMC meeting of 29 Jan 2024. The CE and Council Chair to have discussion with the Iwi reps.	CE	Completed. Poutini Ngai Tahu have agreed they would like the option to have a representative on the Regional Transport Committee. We will update the TOR accordingly.
2.	10 Sept 2024	To investigate the delegation and/or deeds with WDC regarding the mining operations and noise issues/consents and update the Councillors.	Group Manager - Regulatory & Policy	Ongoing.
3.	10 Sept 2024	To email the Councillors the number of complaints regarding leachate along with last recorded discharge of leachate.	Acting Planning and Science Manager	Ongoing.

## 8. **REPORTS**

8.1	Planning and TTPP Report
Author	Max Dickens, Policy Manager; Lillie Sadler, Senior
	Planner
Authoriser	Jocelyne Allen, Group Manager Regulatory and
	Policy; Darryl Lew, Chief Executive
<b>Public Excluded</b>	No

#### **Report Purpose**

To update the Resource Management Committee on the planning and TTPP developments.

#### Recommendations

It is recommended that the Committee resolve to:

1. Receive the report.

#### Issues and Discussion

#### Planning

#### Air Plan review update

As part of the Regional Air Quality Plan Review, workshops on air quality "Issues and Options" will be scheduled for Councillors, the Resource Management Committee (RMC), and Poutini Ngāi Tahu (PNT) in late 2024. Due to the complexity of the review, it is divided into three sections: Home Heating Issues, Home Heating Options, and Issues/Options for other Air Discharges. Examples of these are odour, dust, and greenhouse gas emissions.

The first Councillor workshop on domestic home heating issues was held on 15 May, followed by a session at the RMC meeting on 4 June, and one with PNT on 13 June. A workshop on home heating options for Councillors took place on 21 August, and with PNT on 19 September. Additional workshops are being arranged on point source discharges with the RMC and PNT.

Staff are drafting an issues and options report on Air Quality and Home Heating, and following this will then draft the part concerning point source discharges. Additionally, in line with the National Policy Statement on Greenhouse Gas Emissions from

Industrial Process Heat, staff have initiated a mandatory planchange to add two new policies on industrial process heat emissions to the operative 2002 Regional Air Quality Plan. Staff are aiming to have this completed by the end of the year. The inquiry into industrial heat devices, such as boilers, and the consenting process for industrial greenhouse gas emissions, has been advanced by policy staff and transferred to the consents team.

#### Withdrawal of 2016 Coastal Plan

Following the RMC approval on 10 September, the proposed 2016 Regional Coastal Plan was officially withdrawn on 17 September 2024. The 2001 RCP is currently the only operative Coastal Plan while staff continue its review. A workshop for the Resource Management Committee will be held on 5 November to go through the Coastal Plan Issues and Options presentation in more detail.

#### Floodwall Protection Bylaw

A review of the Council's Floodwall Protection Bylaw is making good progress. Engagement with PNT is ongoing and Chief Engineer Peter Blackwood will be holding a workshop with Councillors on this bylaw.

#### Update on regulations for natural hazard information in LIMs

The Department of Internal Affairs (DIA) will be consulting in the coming months on draft regulations that will give direction to councils implementing recent amendments in the Local Government Official Information and Meetings Amendment Act 2023, to improve natural hazard information in LIMs.

The key changes in the Amendment Act 2023 are:

- a purpose to ensure that natural hazard information in LIMs is understandable;
- a requirement that regional councils must provide territorial authorities with natural hazard information (new section 44C); <sup>1</sup>
- a limitation of legal liability for local authorities when making available natural hazard information in good faith in LIMs (new section 44D).

The draft regulations are likely to cover matters such as minimum standards for describing natural hazard information, plain language summaries for new information, and known maps or links to online natural hazard mapping.

<sup>&</sup>lt;sup>1</sup> 44C and 44D: Local Government Official Information and Meetings Amendment Act 2023 No 41 (as at 23 December 2023)

The Minister must consult with councils who may be affected by the regulations, when they are being drafted.

#### Government to pause the rollout of Freshwater Farm Plans

The Government recently announced it intends to pause the requirement to submit Freshwater Farm Plans (FWFP) for certification until changes to improve the system are finalised. The pause will be carried out through a minor amendment to the Resource Management Act 1991 (RMA). The changes are expected to be introduced to Parliament in December 2024 and pass into law in mid-2025. Once the pause is in effect, farmers and growers will not have to submit a freshwater farm plan by the date specified.

### Government announcement on replacing the RMA

The Government recently announced their intentions to replace the RMA with two new Acts. One will be focused on driving urban development and infrastructure, the other focused on managing environmental effects:

- the design of the legislation will be centred on 'enjoyment of property rights'.
- spatial plans will support future infrastructure development.
- there will be a single regulatory plan per region, jointly prepared by regional and territorial authorities.
- there will be greater reliance on national standards over consenting.
- key aspects will be developed by an advisory group and go to Cabinet around the end of 2024 / early 2025.
- legislation is expected to be introduced to Parliament next year and be passed into law before the 2026 general election.

### Upcoming national wastewater standards

The Local Government (Water Services Preliminary Arrangements) Act (the Act) passed into law on 1 September. The new Act gives the Water Services Authority – Taumata Arowai, powers to set national wastewater and drinking water standards. While most of the key changes in the Act are relevant to district councils, another key change relevant for regional councils is that the Te Mana o te Wai hierarchy of obligations in the National Policy Statement for Freshwater Management 2020 (NPS-FM) will not apply when Taumata Arowai sets wastewater standards.

Taumata Arowai is currently developing the national wastewater standards which are anticipated to be in place mid-late 2025. Once set, the national standards will supersede any previous standards set by regional councils on public wastewater discharge consents, when the consents are due for replacement (renewal). The new standards will not apply to individual on-site wastewater systems (septic tanks). It is unclear whether the new national standards will be more stringent or not than the current standards in resource consents for West Coast public wastewater systems. Taumata Arowai will need to consult with councils on the new standards.

Regional sector media release from Te Uru Kahika on the Wairoa flooding report On 19, September the regional council sector organisation, Te Uru Kahika, released a media statement (Attachment 1) in response to the Mike Bush report (Attachment 2) findings on the recent flooding of the Wairoa settlement. The flooding was a result of the nearby River mouth not being manually cleared before the rain event. In summary, the media release stated that Councils are collaborating to improve climate resilience, addressing flooding risks, and seeking clearer legislation for effective flood management.

This Council understands the issues with preventing and mitigating flooding and is working hard to minimise the risk of damage and harm to people, property and infrastructure from natural hazard events. Council agrees with the need for legislative changes for manual opening of river mouths.

#### Critical Minerals List Consultation

The Government has released a critical minerals list that are:

- essential to New Zealand's economy, national security, and technology needs, including renewable energy technologies and components to support our transition to a low emissions future; and/or
- in demand by New Zealand's international partners to enable us to benefit from international economic opportunities, contribute to the diversification of global mineral supply chains and improve the pipeline of the end-use products for which these minerals are essential; and
- susceptible to supply disruptions domestically and internationally.

The consultation closes on 10 October 2024. Staff have been working with Councillors on this submission.

Organisations	Subject Mater	Date
RMC	Air quality and point	8 October 2024
	source discharges other	
	than home heating, Issues	
	and Options workshop	
RMC	Floodwall Bylaw	October - November

#### Upcoming Workshops

PNT	Reviewing Coastal Plan	In first week of each
	Issues & Options Report	month; next meeting 4
	chapters	October
RMC	Coastal Plan Issues &	5 November 2024
	Options presentation	

#### TTPP

The Signs and Noise hearing was held at WCRC on 4 and 5 September with 13 submitters and experts speaking to submissions.

Topics for hearings in October are as follows:

- South Westland Natural Hazards (excluding coastal hazards) and Franz Josef zoning will be heard in Franz Josef on 8 and 9 October.
- Natural Hazards (excluding coastal hazards) will continue to be heard along with the Coastal Environment in Westport on 22 and 23 October, and in Hokitika on 30 and 31 October.

The Hearing Panel continue to undertake site visits to inform their recommendations reports to TTPP Committee. Sites in Franz Josef and the Haast area will be visited in early October.

TTPP Committee accepted five submissions on Proposed Variation 1 - Commercial Activities on the Surface of Water. Submitters were given 10 working days to make further submissions. No further submissions were received on Variation 1, and an online hearing is scheduled for 4 December 2024.

Submissions on Proposed Variation 2 to the TTPP: Coastal Natural Hazards Mapping closed on 30 August 2024. 112 submissions were received and are being summarised for TTPP Committee approval on 10 October. This will be followed by a 2-week further submission period. The hearing for Variation 2 is scheduled for the week of 17-21 March in Westport and Hokitika.

#### Considerations

#### Implications/Risks

There are no implications or risks arising from items in this report.

#### Significance and Engagement Policy Assessment

There are no issues within this report which trigger matters in the Significance policy.

#### Poutini Ngāi Tahu views

Staff are working with Poutini Ngāi Tahu on some of these matters, as referenced in the reports above.

#### Views of affected parties

No parties will be affected by the subject matter of this report.

#### Financial

#### implications

There are no current financial implications arising from items in this report.

#### Legal implications

There are no legal implications arising from items in this report.

#### Attachments

Attachment 1: Te Uru Kahika response to release of Bush Review on Wairoa floods

Attachment 2: Bush Consulting Report

### Attachment - 1

#### Greetings

Below is the media message prepared by Nicole Taber and issued today, with Doug Leeder as spokesman on behalf of the regional sector. Your Comms Teams have also been advised. Key messaging is that we understand, we're working hard and we need legislative changes.

"With increasingly severe weather events, all regional and unitary councils are working together to better understand future climate impacts and work alongside our communities to build resilience.

"Recent reviews of events, including those from Wairoa, help to guide these efforts and make it clear that the current system is not future-fit.

"Flooding causes significant financial and emotional harm, and councils work hard to reduce the risk to people and their property. They are doing this in an increasingly challenging context including financial pressures.

"We support the review's finding of the need for central government to clarify the current legislative framework for flood management. The review outlined that New Zealand's flood management legislation framework is confusing and currently spread across multiple pieces of legislation. Our collective of 16 regional and unitary councils stand ready to work with central government on the necessary changes to our laws, and ultimately to provide an enduring framework for climate adaption.

"There's a lot to do to prepare, yet we strongly believe that together we can build resilient communities where livelihoods, environments, and people continue to thrive."

Ngā mihi Liz Lambert Executive Director Te Uru Kahika

#### Attachment - 2

# Review of the Management of the Wairoa River Bar by Hawke's Bay Regional Council



Image: Gisborne Herald.

# Independent, External Review for Ministry for the Environment

### **30 August 2024**



12303515.1

"The town of Wairoa got its name from the "Te Wairoa Hopūpū Honengenenge Mātangi Rau" river which in Māori language means "the long water which bubbles, swirls and is uneven". The ancestral canoe Tākitimu travelled up the river and landed near where the Tākitimu marae ... now sits... Tupaheke is the guardian taniwha of the Wairoa River as it enters the sea. He is said to have arms like a great crab and is harmless to local people. However, according to local tradition, if a stranger touches the rock, it is said they will suffer misfortune."

Wairoa iSite





# Acknowledgements

We would like to thank the people of Wairoa for their willingness to contribute to this review and their many constructive suggestions for the way forward. Special thanks to Juanita Savage at Wairoa District Council and Hamish and Sam Pryde.

Our thanks also to the management team, Asset Management and Civil Defence and Emergency Management staff at the Hawke's Bay Regional Council, and in particular, to General Counsel Matt McGrath for his open, prompt and responsive support to our work.

Both councils provided feedback to drafts of this report under tight timeframes, which is appreciated.

We are also indebted to our liaison support from the Ministry for the Environment.



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# Terms of Reference and Limitations

#### Terms of Reference

On 1 July 2024, Cabinet agreed to an independent, external review of the Hawke's Bay Regional Council's management of the Wairoa River bar following the flooding event in Wairoa in June 2024.

We were tasked with undertaking an urgent and focused review to be completed within four weeks. Findings and recommendations were presented to the Ministry for the Environment in August 2024.

The purpose of the Review was to urgently assess the current framework for management of the Wairoa River bar by Hawke's Bay Regional Council (HBRC), the basis for decision making around monitoring of the bar, and to make recommendations as to future monitoring and management of the bar.

The findings of an initial technical review by Tonkin + Taylor commissioned by HBRC into the flood event which was completed in July 2024 have also been an input to this review (the Tonkin + Taylor Technical Review).<sup>1</sup> HBRC expects an additional technical review by Tonkin + Taylor to be finalised shortly, and we have had the benefit of considering that report in draft (the Second **Draft Tonkin + Taylor Review**).<sup>2</sup>

More specifically, our independent external review was required to address the following specific matters:

#### General statutory framework:

What is the statutory framework applying to decisions on management of the bar?

Detailed review questions:

- What monitoring responsibilities does HBRC have for the state of the bar?
- What powers are available to HBRC to make decisions relating to the management of the bar? What actions are available to the HBRC to manage the bar? Is there recognised best practice for making such decisions and / or taking actions?
- What was HBRC's practice relating to engagement with mana whenua / tangata whenua on its management of the bar?

In addition, the review was required to consider any other relevant contextual matters, including the findings of the separate Technical Reviews commissioned by the HBRC.

<sup>&</sup>lt;sup>2</sup> Tonkin + Taylor Wairoa River Mouth: Dynamics, Issues, and Management (Draft) June 2024, job number 1017353.2405 v1. The scope of this review was to assess the coastal processes and dynamics influencing the river mouth position, and to provide options for improving river mouth management in the context of flood mitigation. The commissioning of this review pre-dated the 26 June 2024 Wairoa flood, and was initiated because HBRC was in the process of designing and implementing an improved flood management scheme for Wairoa.



<sup>&</sup>lt;sup>1</sup> Tonkin + Taylor Review of Physical Processes Influencing the 26 June Wairoa Flood August 2024, job number 1017353.2406 v3. The scope of this review was to identify the physical processes that were likely to have collectively influenced flooding in Wairoa on 26 June 2024. It specifically did not include a review of river mouth management activities.

For clarity, in light of the scope of this review, and the fact it has been commissioned on an urgent basis, we have not commissioned our own independent engineering advice on the technical matters addressed in this report.

In terms of deliverables, we were asked to provide a report focussed on making recommendations relating to the systems and processes and roles and responsibilities of HBRC in the context of the flooding event.

Our methodology has been interview based, along with a review of the available documents relating to the event. We have also considered the findings of the HBRCs technical review. Interviews were conducted in confidence and on a voluntary basis.

While we have made careful efforts to cross check and correlate all information presented to us, as a rapid review this is not a formal investigation and at times we have had to rely on our own experience and judgement.

Our review makes a number of recommendations relating to the systems and processes and roles and responsibilities of HBRC in the context of the flood event.

Administrative support for this review was provided to us by the Ministry for the Environment. We note that the Chief Executive of that agency identified a conflict of interest in regard to this review in light of his previous employment at HBRC between January 2016 and February 2023, including five years as its Chief Executive. He has not been involved in our review process in any way.

The review findings were presented in draft form to the HBRC, Wairoa District Council and Tatau Tatau o Te Wairoa Trust for their checking of factual accuracy and to seek their feedback on any adverse comments about persons or groups. We have carefully considered their feedback and some changes in response have been incorporated in this final version.

#### Limitations

The terms of reference provided our review was **not** intended to address:

- Civil, criminal, or disciplinary liability of any person or legal entity.
- Local government arrangements and structure.
- Civil defence and emergency management roles, responsibilities and response to the event.
- Any new assessment of the damage caused by the event; and
- Direct engagement with affected communities, as this will be managed by Local • Authorities as part of recovery locality planning.

While this review is not a review of civil defence and emergency management (CDEM) roles, responsibilities and response, some of the actions undertaken as a part of the CDEM response are directly relevant to the management of the bar and we have used our judgement to identify where these are relevant matters in respect of this review.

For example, the HBRC staff with flood and asset management responsibilities are also involved in CDEM preparedness, planning and response. When we comment on their actions in their day jobs, these insights may also be relevant to CDEM matters.



Rush

As noted above, our findings have taken into account the Tonkin + Taylor Technical Review that HBRC commissioned to understand the events leading up to the flooding. We acknowledge the key finding - that even if the bar had been opened flooding would not have been completely avoided. Wairoa District Council does not accept that finding. However, in the face of increasing frequency and intensity of these types of events our role was to make recommendations that will best prepare the community for the future.





# Foreword<sup>3</sup>

"Mama, Baba! Mama Baba!"

Around 4am on Wednesday 26 June 2024, the Wairoa District Council Civil Defence and Emergency Management (CDEM) Controller was woken by her baby's cries. The child had lost her 'Baba' doll in her cot. As the mother located the doll and soothed the child back to sleep, she decided to check her emails. Rainfall in the district had been heavy overnight. She had been sufficiently worried about the flooding risk to the town the prior day that she had placed local marae on standby for evacuations.

She found an email sent at 3.59 am, shortly prior to her waking, from the Hawkes Bay Regional Council (HBRC) flood forecaster, (who had himself been sufficiently worried during the night to check his models), warning that the Wairoa River 'has risen higher than expected in the last few hours. It has reached the Orange - 5 year level at the Town Bridge. This could result in flooding along Kopu Road, depending on the condition of the mouth.<sup>24</sup>

To the Controller, who knew that the river mouth was in a poor position and that high sea swells were forecast, this email meant she had to move into immediate emergency management and civil defence response. At 4.04am she phoned homeowners on low lying Kopu Road, who told her they were already inundated and self-evacuating. She then phoned emergency responders, sounded the fire station siren, requested an Emergency Mobile Alert (EMA) be issued, and activated an Emergency Operations Centre (EOC), including the establishment of an evacuation centre.<sup>5</sup> By 6.37am, the Mayor had declared a state of local emergency for Wairoa. A full timeline is set out at Appendix 1 to this report.

The event resulted in considerable trauma to residents still suffering from the prior Cyclone Gabrielle event. It created widespread damage and loss to 400 plus homes and businesses, with 127 homes yellow stickered. The map below shows the extent of the flooding.



<sup>&</sup>lt;sup>3</sup> We note HBRC's objection to the inclusion of this foreword on the basis that it is subjective and focuses on the role of the Civil Defence Controller. The CDEM response is outside the scope of the terms of reference for this review. However, we include this foreword as an illustration of the real human impact of the flood.

 $<sup>^{\</sup>rm 5}$  The Hawke's Bay CDEM Group's actions are outside our Terms of Reference.



<sup>&</sup>lt;sup>4</sup>Since 1989, the governing authority for the management of the river mouth and bar has been the HBRC.

# The Wairoa River and bar



Images: Location Wairoa and key locations around the river mouth, including breach monitoring profile locations.<sup>6</sup>

The Wairoa River, whose path and location are shown in the images above, is significant to the iwi and hapū of Ngāti Kahungunu. The river is regarded as tapu. The water of the river was used for purification, ancient chants and prayers. It is said that the Takitimu waka came up the Wairoa River and landed at Makeakea Stream. Te Reinga Falls, the starting point of the river, is associated with Hinekorako and Ruamano, which were taniwha carried to Aotearoa on the Takitimu waka. The river mouth is associated with two taniwha engaged in an ongoing struggle between Tapuwae and Te Maaha.

In pre European times the river was used as a major avenue for trading and commerce. Several important pā sites are located along and at the mouth of the river including Rangihoua/Pilot Hill, which is sacred to tangata whenua and is a registered archaeological site.

The river mouth lagoons are also an important mahinga kai for tāngata whenua.<sup>7</sup>

Wairoa township sits on the bank of the Wairoa River just upstream of the river mouth where it discharges into Hawke Bay. The final section of the river is approximately 3.5 kilometres long, from Spooners Point to the river mouth, with Kopu Road extending along the town side riverbank. The river catchment is a semi-circular shaped area in which all major tributaries

<sup>&</sup>lt;sup>6</sup>From Tonkin and Taylor Ltd. Wairoa River Mouth – Dynamics, issues and management, Report for HBRC, June 2024 DRAFT, p 2. <sup>7</sup>Details are from Wairoa-River-candidate-OWB-report-201807111 PDF (<u>www.hbrc.govt.nz</u>)



converge into the Wairoa River, at the top of a 3000 hectare flood plain, with around a 50 kilometre run to the sea.

The Wairoa River typically carries high volumes of silt and local soil types tend to be thin, which reduces the moisture retention capacity of much of the catchment.

The catchment is prone to frequent flooding and experienced major floods in 1948, 1988 (Cyclone Bola) and in 2023 during ex tropical Cyclone Gabrielle.

The below map, taken from the HBRC Hazard Portal, indicates the flood hazard arising from the Wairoa River.



The risks arising from flood events on the Wairoa River are exacerbated by the state of the bar at the river mouth. This is often either closed, or has the opening located south or north of the main body of the river. As one local put it to us:

"The river and lagoon near town are like a bathtub, with the plug being the river bar. If there's a big enough storm, the plug will pop out like the mouth opening and the flush will mitigate flooding. That's what happened in Gabrielle, when the mouth was in an optimal position. If the mouth is in the wrong place or really silted up however, the increase in water volume will overflow the bath and impact the town."

As noted in the image below, the area affected by the June flooding broadly correlates with an area identified as being in Coastal Hazard Zone 3, meaning that it is area of land assessed as being potentially at risk of sea water inundation in a 1 in 50 year combined tide and storm surge event, and includes allowance for sea level rise.<sup>8</sup>

This map shows the relevant area on the HBRC Hazard Portal:

<sup>&</sup>lt;sup>8</sup>https://www.hbrc.govt.nz/assets/Document-Library/Plans/Regional-Coastal-Environment-Plan-RCEP/Current-RCEP-Part-I-Glossary.pdf





Wairoa District Council considers the map showing Coastal Hazard Zone 3 is not relevant to the flooding that occurred. I include it here simply to illustrate the fact that the area that flooded is broadly similar to the zone shown in that map.

The bar at the mouth of the Wairoa River was a constant source of frustration for early European settlers because it regularly was closed by wave action moving sand and gravel into the river's mouth, making it difficult for boats and ships to travel between the river and Hawke's Bay. Training walls were erected, and channels and new exits were dug, but the river mouth tended to close again at critical points. Even small floods in the river channel would build up against the bar and backflow into low lying areas of the town.



Image: MTG Hawke's Bay Tai Ahuriri, Hawke's Bay Museums Trust/Ruawharo Ta-u-rangi collection. Reference: 4273





Image: Auckland Libraries Heritage Collections AWNS-19090826-05-03

The mouth has been manually opened since early European settlement, evolving from physical opening as shown above to openings using mechanical diggers.

In the 1990s, the HBRC commissioned engineering studies to assess the feasibility of a range of physical infrastructural options for bar management, including:

- New training walls and moles at the river entrance,
- Coastal groynes, •
- Maintenance dredging, •
- Excavated backhoe openings; and •
- Bank revetment. •

In a 1997 report by HBRC Works,<sup>9</sup> training moles and maintenance dredging were identified as the likely best options, but all options were rejected on the grounds of complexity, cost and uncertainty as to their environmental impacts, sustainability and likelihood of success.

Additional 1999 reports by Tonkin and Taylor<sup>10</sup> presented further options including:

- A pumping system to reduce silt build up the river mouth; and •
- A barrier to prevent the mouth migrating to an undesirable location. •

Following these investigations, none of the structural options was funded and no additional fieldwork appears to have since been undertaken.

The default current option is to manually open the river mouth at a safe location when it is technically feasible and safe to do so. This is a highly complex, five to seven day exercise provided conditions are favourable. As outlined in more detail below, it has traditionally been undertaken on an as required basis by local contractors, though no standing contract is in place with that company.

<sup>&</sup>lt;sup>10</sup> Tonkin and Taylor, Wairoa River Mouth Pre-Feasibility design study for HBRC, January 1999 and Tonkin and Taylor, Wairoa River Flood Protection Scheme Cost Benefit Study for HBRC, December 1999.



<sup>&</sup>lt;sup>9</sup> Wairoa River mouth: Stability Investigations and Erosion Control, Technical Report, ISSN 1173-1907, by Works Consultancy Services for HBRC.

In short, the Wairoa flood risks as they relate to the bar and river mouth are well known and wellstudied. As the operative Wairoa District Council Plan<sup>11</sup> outlines them, in the section on natural hazards:

"Flooding is a major hazard in the district. Many lowland areas, including the Wairoa township area itself, are at risk from flooding. Wairoa Township and surrounding areas including Frasertown are at risk from flooding from the Wairoa River for events as frequent as 3.3% probability of occurring annually. Flooding from other sources such as the Awatere Stream and a closed, or practically closed, Wairoa River mouth is also a risk. There are few measures in place to protect the town. It is, however, very expensive to provide effective protection."

Wairoa township is thus a town in the shadow of a known threat, with complete reliance on mechanical mouth opening as its primary line of flood protection defence.

<sup>&</sup>lt;sup>11</sup> See section 8 of the relevant Wairoa District Plan here: <u>https://www.wairoadc.govt.nz/assets/Document-Library/District-Plan/Full-</u> Operative-District-Plan.pdf


# Key findings

Wairoa is a remote, vulnerable community that was already grieving the damage wrought by Cyclone Gabrielle. The somewhat sinister river mouth looms over the town.

Wairoa is wholly reliant on a single method of risk mitigation for river mouth driven flooding, and yet:

- No operational plan for the ongoing management and maintenance of the Wairoa River • mouth currently exists.
- To widen the bar weather and sea conditions need to be aligned and takes five to seven days. It is not possible to complete the mechanical digging and grading required at short notice when a flooding risk is imminent.
- Management decisions for the river mouth are made in Napier/Hastings by the HBRC, • on the basis of infrequent physical inspections of the bar.
- The risks of remote management of the bar were well known prior to this event. •

Wairoa's civic leaders, including iwi Māori, hoped that the multiple reviews or the Wairoa River mouth and its impact on flood risk undertaken over the last many years would have informed a proactive and collaborative management plan between the local District Council, iwi and the HBRC.

Instead, locals told us they were saddened by the apparent failure to internalise the insights of prior experience and previous reviews. As with Gabrielle, they felt unheard and isolated from wider support. One said:

"It's only a few months on, so we wouldn't expect everything at HBRC to be perfect. But how hard would it have been to empower a few local decision makers in advance on this? How hard would it have been to clear the bar as a precaution when we had local contractors on standby? To make a phone call on night, rather than sending email? To tell us a simple 'sorry' when it all went pear shaped? It feels disrespectful. It's created real bitterness and more grief we just didn't need."

The way forward seems clear to us and was echoed by most of those we interviewed. An Operational Management Plan for the Wairoa River and bar is essential to support regionally coordinated and locally delivered emergency preparedness, risk reduction and response.

Local and indigenous knowledge must be harnessed in the development of the Plan and practical delegations and standard operating procedures (SOPs) must be agreed.

A long term contract for both regular maintenance and per event work must be in place with expert contractors. In this June weather event, the local contractor was not formally mobilised until late on Monday 24 June for Tuesday prework and a potential opening of the river mouth on Wednesday 26 June. This proved far too late to move the required machinery and undertake the work prior to peak rainfall and poor sea conditions. Once the contractors received the Emergency Mobile Alert on the morning of June 26, they stopped the work for safety reasons.



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Photo: New Zealand Herald

In the 1990s, a significant number of engineering based options to manage the Wairoa River bar and mitigate risks were explored but not progressed. A quarter century since the prior investigations, it is also past time that more strategic, infrastructural options for river containment/bar stabilisation were further explored.

The issues we have identified appear to postdate the centralisation of Hawke's Bay local government structures, at which time, the management of the river and bar was transferred from Wairoa authorities to the HBRC. Prior to this, Wairoa respondents told us that the local Council had tended to take a proactive approach to the management of the bar, which regularly moves up and down the coast. As one put it:

"Management of the Wairoa River mouth is complex and an art not a science. It is a dynamic situation in which people on the ground need to use their experience with weather, tide management, current and river height. Timing is key."

Although HBRC regularly sends staff to Wairoa as noted above, it also relies heavily on river flow telemetry to support modelling and assess risks. Some respondents told us they felt this approach, while vital, was also overly academic with regard to the overall impacts of the mouth and bar on river levels.

We don't think, as some Wairoa locals do, that the core issue here is about which entity has legal or regulatory authority for commissioning the opening of the Wairoa River mouth. Nor do we believe wholesale legislative change is required, beyond some clarification of the existing framework.

Rather, the key solutions we propose here go to repairing and rebuilding critical relationships, lifting the practices of the relevant HBRC teams and to improved partnering and collaborating to develop improved plans and SOPs.

There have been enough reviews. It is now time to act decisively and with urgency.



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## The causes of this event

HBRC has recently commissioned a review of the causes of the June 26 flooding of Wairoa township, with an emphasis on river dynamics and the interplay between river and sea conditions. The report was finalised in August 2024 (- the Tonkin + Taylor Technical Review).

The following image, sourced from the Tonkin + Taylor Technical Review on the physical processes of this event, is a satellite image showing the pre event river mouth and bar position on 24 June 2004.12



The next image, from the same report, shows the post storm bar breaches and the new mouth position three days after the flood.<sup>13</sup>



<sup>12</sup> Sourced from https://browser.dataspace.copernicus.eu/

<sup>13</sup> Sourced from https://browser.dataspace.copernicus.eu/



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The Tonkin + Taylor Technical Review found, in summary that:

"...the combination of high rainfall, rising river level, spring tides, large waves, storm surge, as well as the position and size of the river mouth through the bar, all coincided to influence the flooding experienced."14

In simple, non-technical terms, and for the purpose of the discussion below, it seems clear that the event resulted from a combination of factors, including:

- The non-optimal placement and size of the river mouth and bar, which had migrated south and narrowed in recent months, making it hard for the river to flush to the sea and increasing land side water levels.
- An unusually high sea state, with heavy swell, huge waves and high winds, which pushed • surf over the bar and into the river and lagoon; and
- Moderate rainfall, above that predicted by MetService. •

This combination of factors caused the 'bathtub', as some locals refer to the river near its mouth, to back up and overflow, driving a mix of fresh and salt water into the low lying areas of the town facing the bar. We note the river silt and bathymetric conditions were unknown so it is unclear what role they played.

Particularly impacted in this event was low lying Kopu Road, shown here in a pre-flood Lidar map. Its elevation averages around 3.5 metres above sea level.<sup>15</sup>



<sup>&</sup>lt;sup>14</sup> See Tonkin & Taylor Ltd Review of Physical Processes Influencing the 26 June Wairoa Flood – Data summary and analysis Hawke's Bay Regional Council August 2024 Job No: 1017353.2406 v3 <sup>15</sup> Sourced from the above report. LINZ data.



# What is the statutory framework applying to decisions on management of the bar?

There is no single flood management statute in New Zealand. As such, the framework attaching to decisions on the management of the Wairoa River bar is spread across various Acts and instruments. An overview of the relevant aspects of the general flood management framework is set out below, followed by a description of Hawke's Bay-specific instruments, and our comment on the functionality of the current framework.

### Local Government Act 2002

The Local Government Act 2002 (LGA) outlines the purpose, framework and powers under which local authorities function. Local authorities may comply with their routine obligations through the various statutory documents required by and produced pursuant to the LGA, such as Long Term Plans, Annual Plans and Asset Management Plans.

In terms of flood protection, the LGA specifically:

- 1. Allows regional councils to establish bylaws in relation to flood protection and flood control works undertaken by, or on behalf of, the regional council;<sup>16</sup>
- 2. Requires each local authority to prepare a Long Term Plan every three years, providing a strategic outlook of at least 10 years for the local authority's decisions and actions;<sup>17</sup>
- 3. Requires that a Long Term Plan must, to the extent determined appropriate by the local authority, identify:18
  - a. the local authority's flood protection and control works and the rationale for their delivery;
  - b. the capital expenditure requirements for the flood protection and control works;
  - c. the intended levels of service (design standard) for the flood protection and control works:
  - d. the community outcomes for the district or region;
  - e. steps intended to be taken to foster the development of Maori capacity to contribute to decision-making; and
  - f. a financial strategy and an infrastructure strategy.
- 4. Mandates that the infrastructure strategy in the Long Term Plan must cover a period of at least 30 consecutive financial years addressing:19
  - a. significant infrastructure issues over that period,
  - b. options for managing those issues and their implications; and
  - c. how the local authority intends to manage those infrastructure assets (including their renewal, replacement, provision for growth, changes in levels of service and providing for resilience of infrastructure assets to risks relation to natural hazards).

<sup>&</sup>lt;sup>19</sup> LGA, s 101B.



<sup>&</sup>lt;sup>16</sup> Local Government Act 2002 (LGA), s 149(1)(c).

<sup>&</sup>lt;sup>17</sup> LGA, s 93.

<sup>&</sup>lt;sup>18</sup> LGA, sch 10, pt 1.

### Civil Defence and Emergency Management Act 2002

Although this review is not focused on the CDEM response, it is important to note the Civil Defence and Emergency Management Act 2002 (CDEM Act) as it is a key piece of legislation for flood risk management. One of the purposes of the CDEM Act is to encourage and enable communities to achieve acceptable levels of risk in respect of hazards. This includes:

- 1. identifying, assessing, and managing risks;
- 2. consulting and communicating about risks;
- 3. identifying and implementing cost-effective risk reduction; and
- 4. monitoring and reviewing the process.

The Act provides at section 64 that local authorities must plan and provide for civil defence and emergency management within their districts.

### Soil Conservation and Rivers Control Act 1941

The Soil Conservation and Rivers Control Act 1941 (SCRCA) is a 'legacy' statute that assigned powers and duties to catchment boards. While the SCRCA still refers to catchment boards, the role of the catchment boards was assigned to regional councils following their establishment in 1989.

This assignment is difficult for the untrained eye to spot on the face of the SCRCA alone. For example, in the case of HBRC, the answer is found at cl 15 of the Local Government (Hawke's Bay Region) Reorganisation Order 1989. That clause provides that the functions, duties and powers of the newly established HBRC would include the functions, duties, and powers of a catchment board and a regional water board under the SCRCA and the Water and Soil Conservation Act 1967 or any other Act.

One of the key objectives of the SCRCA is the prevention of damage by floods.<sup>20</sup> To achieve that objective, the SCRCA:

- 1. Stipulates that it is a function of every regional council to minimise and prevent damage within its region by floods;<sup>21</sup>
- 2. Provides regional councils discretionary powers to construct, reconstruct, alter, repair, and maintain flood protection works that they consider necessary or expedient to control or regulate the flow of water towards and into watercourses, control or regulate the flow of water in and from watercourses, prevent or lessen the likelihood of the overflow or breaking of the banks of any watercourse, and prevent or lessen any damage that may be occasioned by any such overflow or breaking of the banks;<sup>22</sup> and
- 3. Allows regional councils to:<sup>23</sup>
  - a. cleanse, repair, or otherwise maintain in a due state of efficiency any watercourse or outfall for water, or any bank, dam, groyne, or other defence against water.
  - b. deepen, widen, straighten, divert, or otherwise improve any watercourse or outfall for water, or remove any groynes, stopbanks, dams, weirs, trees, plants, or debris,



<sup>&</sup>lt;sup>20</sup> Soil Conservation and Rivers Control Act 1941 (SCRCA), s 10(c).

<sup>&</sup>lt;sup>21</sup> SCRCA, s 126(1).

<sup>&</sup>lt;sup>22</sup> SCRCA, s 126(2).

<sup>&</sup>lt;sup>23</sup> SCRCA, s 133(1).

or any other obstructions whatsoever to watercourses or outfalls for water or to the free flow of flood waters in existing flood channels, or raise, widen, or otherwise improve any defence against water.

- c. in such manner and of such materials as it thinks necessary or proper, make any new watercourse or new outfall for water and cause the same to communicate with the sea or any arm thereof, or with any other watercourse or a lake, or erect any new defence against water, or carry out any other work it thinks necessary or desirable for the purpose of controlling or preventing damage by flood waters; or
- d. divert, impound, or take away any water from any watercourse.

The powers and duties of regional councils under the SCRCA are subject to the Resource Management Act 1991.<sup>24</sup>

#### **Resource Management Act 1991**

The Resource Management Act 1991 (RMA) provides a framework for the sustainable management of the environment, including natural hazards.

Regional councils exercising authority under the RMA must recognise and provide for matters of national importance, including the management of significant natural hazards.<sup>25</sup> Under the RMA, both regional and territorial authorities have discretionary powers to regulate land use to prevent or mitigate natural hazards, including flood risks.

The functions of a regional council under the RMA include:

- 1. the establishment, implementation and review objectives, policies and methods to achieve integrated management of the natural and physical resources of the region;<sup>26</sup>
- 2. the control of the use of land for the purpose of the avoidance or mitigation of natural hazards;27
- 3. in respect of any coastal marine area in the region, the control of the taking, use, damming, and diversion of water, and any actual or potential effects of the use, development, or protection of land, including the avoidance or mitigation of natural hazards:28 and
- 4. the control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body, including the setting of any maximum or minimum levels or flows of water, or the control of the range, or rate of change, of levels or flows of water.<sup>29</sup>

#### **Regional Policy Statements**

A Regional Policy Statement (**RPS**) is an instrument under the RMA prepared by regional councils to achieve the purpose of the RMA by providing an overview of the resource

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<sup>&</sup>lt;sup>24</sup> SCRCA, s 10A.

<sup>&</sup>lt;sup>25</sup> RMA, s 6(h).

<sup>&</sup>lt;sup>26</sup> RMA, s 30(1)(a).

<sup>&</sup>lt;sup>27</sup> RMA, s 30(1)(c)(iv).

<sup>&</sup>lt;sup>28</sup> RMA, ss 30(1)(d)(iii) and (v).

<sup>&</sup>lt;sup>29</sup> RMA, ss 301(e)(i)-(ii).

management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region.<sup>30</sup>

Among other things, an RPS must state:<sup>31</sup>

- 1. the significant resource management issues for the region;
- 2. the resource management issues of significance to iwi authorities in the region;
- 3. the objectives sought to be achieved by the statement;
- 4. the policies for those issues and objectives and an explanation of those policies;
- 5. the methods (excluding rules) used, or to be used, to implement the policies;
- 6. the environmental results anticipated from implementation of those policies and methods;
- 7. the processes to be used to deal with issues that cross local authority boundaries, and issues between territorial authorities or between regions;
- 8. the local authority responsible for specifying the objectives, policies, and methods for the control of the use of land to avoid or mitigate natural hazards;
- 9. the procedures used to monitor the efficiency and effectiveness of the policies or methods contained in the statement; and
- 10. any other information required for the purpose of the regional council's functions, powers, and duties under the RMA.

An RPS must be considered by local authorities when preparing regional and district plans and must be given effect to by regional and district plans.<sup>32</sup>

When considering an application for a resource consent, the consent authority must also have regard to the relevant provisions of the RPS.<sup>33</sup>

When preparing or changing an RPS, regional councils must also have regard to the National Adaptation Plan.34

### **Regional Plans**

A regional council may prepare a regional plan for the whole or part of its region, and for any one of the purposes specified at section 65 of the RMA. Those purposes include for the avoidance or mitigation of natural hazards.<sup>35</sup> The RMA provides a regional council shall consider the desirability of preparing a regional plan whenever particular circumstances or considerations arise or are likely to arise, including any risks from natural hazards.<sup>36</sup>

A regional plan must set out the objectives for the region, the policies to implement those objectives, and any rules to implement those policies.<sup>37</sup> The plan may also state a number of

 $^{35}$  By reference to s 30(1)(c)(iv) of the RMA.

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<sup>&</sup>lt;sup>37</sup> RMA, s 67(1).



<sup>&</sup>lt;sup>30</sup> RMA, s 59.

<sup>&</sup>lt;sup>31</sup> RMA, s 62(1).

<sup>&</sup>lt;sup>32</sup> RMA, ss 67(3)(c) and 75(3)(c).

<sup>&</sup>lt;sup>33</sup> RMA, s 104(1)(b)(v).

<sup>&</sup>lt;sup>34</sup> RMA, s 61(2)(e); The National Adaptation Plan is a guidance document prepared by the Ministry for the Environment under the Climate Change Response Act 2002.

<sup>&</sup>lt;sup>36</sup> RMA, s 65(3)(c).

matters set out in the RMA.<sup>38</sup> For the purpose of carrying out its functions under the RMA and achieving the objectives and policies of the regional plan, the regional council may include rules in the regional plan.<sup>39</sup>

### Hawke's Bay Instruments

The Hawke's Bay Regional Resource Management Plan, incorporating the Regional Policy Statement (**RRMP**)<sup>40</sup> comprises an RPS and regional plan for the Hawke's Bay region. It sets out a policy framework for managing resource use activities in an integrated manner across the Hawke's Bay region. The relevant aspects of the RRMP are as follows.

Chapter 3.12 addresses natural hazards. It aims to avoid or mitigate the adverse effects of natural hazards on people's safety, property, and economic livelihood.<sup>41</sup> In terms of flooding, it provides that there is widespread flooding in the Hawke's Bay region, and "to be truly effective flood protection works must be undertaken in conjunction with better land use planning, and adequate and timely flood forecasting".<sup>42</sup> It states that the HRBC will use the non-regulatory methods set out in Chapter 4 of the RRMP as the principal means of addressing hazard avoidance and mitigation, in particular:<sup>43</sup>

- 1. liaison with territorial authorities to provide information on natural hazard risk and advocate that future development is managed in such a way that the risk of exposure to natural hazards is avoided, remedied or mitigated;
- 2. works and services to provide hazard mitigation methods, in particular flood mitigation measures, where the benefits can be shown to outweigh the costs and the identified beneficiaries can meet the costs; and
- 3. natural hazard priorities to focus both hazard avoidance and mitigation on areas of high human population density as a first priority.

Chapter 4.3 addresses liaison with territorial authorities. It provides that due to "the interlinkages between their responsibilities and decisions it is important that the HBRC and territorial authorities adopt a consistent and co-ordinated approach to resource management issues".<sup>44</sup> A range of methods are then set out, including communication with territorial authorities through working groups, and liaison with tangata whenua.

In terms of liaison with territorial authorities on natural hazard management more specifically, Chapter 8 addresses how these are managed between HBRC and territorial authorities. The RRMP provides that both the HBRC and territorial authorities are responsible for developing objectives and policies for managing the use of land for the purpose of avoiding and mitigating natural hazards.<sup>45</sup> While territorial authorities are responsible for developing methods controlling the use of land for the purposes of avoiding or mitigating natural hazards, the RRMP provides HBRC will provide relevant, up to date and accurate data in an appropriate form for the

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<sup>&</sup>lt;sup>38</sup> RMA, s 67(2).

<sup>&</sup>lt;sup>39</sup> RMA, s 68.

<sup>&</sup>lt;sup>40</sup> Operative as at 28 August 2006 and as subsequently amended.

<sup>&</sup>lt;sup>41</sup> Objective 31.

<sup>&</sup>lt;sup>42</sup> RRMP at 3.12.3.

<sup>&</sup>lt;sup>43</sup> RRMP at 3.12.10.

<sup>&</sup>lt;sup>44</sup> RRMP at 4.3.1

<sup>&</sup>lt;sup>45</sup> RRMP at 8.4.4.5.1.

territorial authority to use and will be the "key information provider" in order to support the territorial authorities in their role.46

The RRMP states that the information and assistance to be provided by HBRC will include particular information as it becomes available, including identification and distribution of information on those parts of the region at risk from flooding (including in relation to the flood risk to Wairoa township from movement of the Wairoa River mouth) and ongoing maintenance and improvement of flood forecasting and assessment data (including provision of models of flood and storm events for emergency management purposes).<sup>47</sup>

The Regional Plan section of the RRMP provides at Rule 70 it is a permitted activity under the RMA for a local authority exercising its powers, functions and duties under the SCRCA and other specified legislation to carry out river mouth openings for the purpose of flood mitigation. The Rule provides a number of conditions, standards and terms, including that the works must comply with the HBRC Environmental Code of Practice for River Control and Drainage Works.<sup>48</sup> That Code provides that river mouth opening shall be undertaken if one of the specified conditions is made out, including where the river mouth is blocked and the river is at risk of flooding, or where the river mouth is located in an undesirable location due to it migrating too far from an ideal position.<sup>49</sup>

### Comment

While the flooding event on 26 June was not caused by the lack of clarity in the legislative framework, we consider the current legislative framework has the potential to create confusion, particularly in relation to jurisdictional responsibility for flood management.

We are not the first to consider the current framework would benefit from clarification. In 2006, a report prepared by Johnson McSweeney Ltd for the Ministry for the Environment considered flood management legislation in New Zealand.<sup>50</sup> It found that while the legislation provided a comprehensive range of flood management tools, the various statutes "present a complicated and sometimes confusing legislative picture".<sup>51</sup> Further, in light of the "different intent and purpose of the acts and the age of some of the legislation, ... some of the legislation is difficult to understand and ... inconsistencies exist."

Based on this report and other workstreams, the Ministry for the Environment and the Flood Risk Management and River Control Review Steering Group concluded in a 2008 report that while there was legislative uncertainty, that uncertainty was not sufficient "to warrant undertaking a significant legislative change immediately", and that it would be better to pursue amendments as and when legislation was reviewed.<sup>52</sup>

In 2010, the Ministry for the Environment published 'Preparing for Future Flooding: A guide for local government in New Zealand'. The guide stated that it was not intended to form comprehensive guidance on how to manage flood risk. Rather, it aimed to provide a picture of the impacts of climate change on river flow and flooding, and provide good practice information

<sup>&</sup>lt;sup>52</sup> Ministry for the Environment Meeting the Challenges of Future Flooding in New Zealand August 2008 at 36.



<sup>&</sup>lt;sup>46</sup> RRMP at 8.4.4.5.1-8.4.4.5.2.

<sup>&</sup>lt;sup>47</sup> RRMP at 8.4.4.5.3.

<sup>&</sup>lt;sup>48</sup> RRMP at 187.

<sup>49</sup> At 4.14.

<sup>&</sup>lt;sup>50</sup> Johnson McSweeney Ltd Overview of Flood Management Legislation in New Zealand November 2006.

<sup>&</sup>lt;sup>51</sup> Johnson McSweeney Ltd at 28.

and guidance to help local authorities incorporate climate change impacts into flood risk management planning.

We note that on 22 August 2024, the Minister responsible for RMA Reform announced a suite of changes to the RMA. These changes include a new national direction on natural hazards which will provide direction to councils on how to identify natural hazards, assess the risk they pose, and how to respond to that risk through planning controls. An RMA Amendment Bill will also include improved emergency provisions to better enable rapid responses to disasters. The timeframe for this to be implemented is mid-2025.

Although work on the RMA is under way, we consider there is a lack of clarity in the legislation more broadly. There would be value in clarifying flood management legislation at the next available opportunity. Such work need not be wholesale amendment, but targeted at clarifying the existing functions, powers and duties of central, regional and local government so that responsibilities are clear. It may be that the development of the new national direction on natural hazards will be a good opportunity for this broader work.

Wairoa District Council's view is that it cannot afford to wait for legislative change in order to get effective management of the Wairoa bar, because "there are likely to be multiple flooding events" in the meantime. This review does not claim that clarification of the legislative framework is a silver bullet, or that such clarity should be achieved before other action can be taken. Legislative amendment is but one point in a suite of recommendations that we are making, the majority of which are practical actions to be taken by HBRC. However, the current framework has the potential to cause confusion, and should be clarified when there is next an opportunity.

Finally, we note that there are, at present, no national statutory policy instruments available to central government to promote certain flood mitigation outcomes by local government. In view of the increasing frequency of severe flood events related to climate change, this may be a matter our commissioning agency wishes to address.

# What monitoring responsibilities does HBRC have for the state of the bar?

### Current state

HBRC is the governing authority with accountability for management of the river mouth. The HBRC has a published guide for the 16 or so regional rivers that are periodically opened to alleviate flooding. This guide outlines the general approach to the opening of the bar.<sup>53</sup>

The previous section of this report sets out HBRC's responsibilities under the RRMP, including the provision of information relating to flood risk to territorial authorities such as Wairoa District Council. Given the identified risk of the Wairoa River mouth, we consider that this means HBRC has an overarching responsibility to monitor and share information on the condition of the mouth.

In terms of how this plays out in practice, this has changed over time. At the formation of the HBRC in 1989, engineering operations were centralised out of Napier and the responsibility for operational mouth opening decisions transferred to other Wairoa-based HBRC staff.

<sup>&</sup>lt;sup>53</sup> This is reproduced at Appendix 2 to this report.



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In recent years, the practice has changed, whereby HBRC makes the decisions around the river bar and mouth from the Napier-based Asset Management team.

More specifically, HBRC has a staff member within its Operations team dedicated to the Northern Schemes (a number of drainage schemes in and around Wairoa) and who also has responsibility for making recommendations on operational decisions on the northern river openings.

Supervision and guidance in this work is provided by the HBRC Operations Manager, who makes operational decisions recommended by the scheme managers, and also by the technical engineering team within the Regional Assets team.

The authority to manage schemes and open rivers sits with the Operations Manager, on the recommendation of the Scheme Manager. The financial delegation for a typical bar opening sits with the Operations Manager. Surveillance of river mouths is undertaken by Scheme Managers and Ranger staff.

The annual HBRC budget for river openings is around \$150,000 per year. This is funded from general rates and is not part of any particular scheme. As one HBRC manager put it: "As river mouth openings are very difficult to predict there is no expectation that the budget performance will be very close. To the best of my knowledge, work to open rivers has not been delayed or deferred due to budget constraints."

The bar is physically viewed multiple times per month with a record of that inspection kept on MS Teams. In addition, an HBRC manager told us that "though Regional Councils have no formal communication requirements with Territorial Authorities specifically on catchment management activities," its staff do respond to ad hoc requests from other HBRC staff, the Wairoa District Council, the preferred contractor (Prydes) and the local community to inspect the bar.

There is currently no enduring, multiple year contract in place with the preferred contractor.

At the practical level, the Regional Council's internal Asset Management Group has personnel with river engineering and modelling skills. The Asset Management team has a range of relevant functions, including:

- Flood protection and control works, comprising of:
  - Flood schemes
  - Drainage and pumping
- Flood risk assessment and warning,
- Coastal hazards; and •
- Regional water security. •

The HBRC's new Three Year Plan 2024 - 27 signals renewed investment in building flood resilience, with all existing schemes currently under review in the wake of Cyclone Gabrielle.<sup>54</sup>

The Council has recently received findings and recommendations from the Hawkes's Bay Independent Flood Review - Pae Matewai Parawhenua, which examined the flooding in the region during the Cyclone Gabrielle event.

<sup>&</sup>lt;sup>54</sup> This can be found at https://www.hbrc.govt.nz/assets/Document-Library/Cyclone-Gabrielle/Report-of-the-Hawkes-Bay-Independent-Flood-Review-Digital-Version.pdf



Directly related to this report, it also commissioned the Second Draft Tonkin + Taylor Review.<sup>55</sup> The Tonkin + Taylor Technical Review was also recently completed, specifically related to the causation of this event.

Supported by central Government funding from the North Island Weather Event (NIWE) fund, the HBRC is also working with communities to develop new flood protection schemes for Category 2 areas (which include Wairoa) and improve flood management infrastructure. It is unclear to us what this will entail for Wairoa.

In the 2021 HBRC Long Term Plan, additional funding was requested to provide for additional instrumentation, SCADA<sup>56</sup> and CCTV for a number of river mouths. This was intended to support the creation of trigger points for action, improve record keeping and access to real time information. This was to be implemented over a 10-year period and is currently in the planning stages for the Wairoa River.

There is currently no hazard plan specifically for flooding due to the blockage of the Wairoa River mouth. However, as shown in the hazard map above, coastal inundation maps are available, showing the flooded area in a 1% AEP coastal inundation event.<sup>57</sup>

In addition to the eyes on inspections noted above, monitoring of the bar and river mouth placement by the HBRC Asset Management team is currently based on technical information from:

- A comprehensive network of rainfall and river level records across the region.
- Continuously run flood modelling, which is self-correcting in real time.
- Flood plain mapping.
- Catchment management planning; and
- Reviews of specific flooding issues. •

These activities support advice on rainfall and river flows during flood events, in addition to providing hazard information for land use planning and community preparedness and resilience.

Notably, they do not regularly include some monitoring measures that are in use on other New Zealand rivers, including:

- Cameras at the river mouth, (though these are currently being planned).
- River level gauges near the mouth. The nearest gauge (installed in 2023) is currently 5 • kilometres upriver from the mouth.
- Bathymetric surveys of river dynamics. The HBRC has twice recently attempted bathymetric surveys on the Wairoa River, but work has been deferred due to technical and health and safety concerns.
- Satellite tracking of river mouth position and movement of the bar; and
- Wave conditions and forecasts.

<sup>&</sup>lt;sup>57</sup> An annual exceedance probability (AEP) is the probability of an event. On average, one event of this size will occur every 100 years.



<sup>&</sup>lt;sup>55</sup> As required by our Terms of Reference, we have seen a draft of this report and have utilised a number of its insights to support our own findings. While the report is a technical one, the broad themes it identifies are very similar to those of our own review. <sup>56</sup> SCADA Supervisory Control and Data Acquisition systems are used for controlling, monitoring, and analysing industrial devices

and processes. The system enables remote and on-site gathering of data, including from water monitoring devices.

The flood modelling that occurs for the Wairoa River is also complicated by the fact that the river flood model, which can be run on two scenarios, for an open or restricted mouth, does not currently include:

- Existing sea conditions, other than normal tide ranges. HBRC flood modelers are currently working with NIWA to try to incorporate a method to include sea forecasts in the model.
- Riverbed information near the mouth. This has generally been considered so dynamic as not to be useful for modelling. Riverbed information is located only at cross stream locations, considerably upriver from the mouth; and
- Challenges calibrating the model for river silt scenarios. The Wairoa River has high levels of silt build up and significant floods create scour. This means that, counter intuitively, the town can flood at higher levels from the combination of high seas and low rainfall, than from a major flood.

Many in the Wairoa community told us that, since the centralisation of river mouth management to the HBRC team, they felt decisions were increasingly disconnected from local insights, indigenous knowledge and institutional memory around previous management practices.

Prior to this, Wairoa respondents told us that the local Council had tended to take a more proactive approach to the management of the bar and mouth. As one put it:

> "Management of the Wairoa River mouth is complex and an art not a science. It is a dynamic situation in which people on the ground need to use their experience with weather, tide management, current and river height. Timing is key."

Another said:

"A good analogy to describe the best approach to river mouth management is that the manager has to think the way a farmer thinks about their livestock and crops. At certain times of the year and under some circumstances, it is a 24 hour a day and 7 day a week job until the situation is resolved."

In spite of the lack of a formal contract, the local contractors monitor and visit the river mouth/bar daily to assess river flow, condition of the bar, the location of the mouth and sea state and wind and wave direction.

This is also common practice amongst Wairoa locals who have lived with the threat of the river for generations.

In the context of this event, we find it surprising that, given the current non optimal location of the bar, the forecast sea state and the weather warnings, a precautionary opening of the bar was not commissioned and attempted well in advance of the forecast rain.



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We find it even more surprising that, in a town dominated by such a significant and obvious natural hazard, the bar is not more regularly and proactively planned for and managed based on local understanding of threat levels, in addition to the available technical data.

HBRC has advised us of a number of reasons for this. First, opening the bar in accordance with HBRC and Pryde's methodology requires an anticipated rise in river levels in order for a new mouth to be sustained and not be overwhelmed by the action of the sea restoring the bar. Accordingly, we are advised undertaking the work ahead of rainfall being forecast is not possible. Secondly, in this case, no notable rainfall was forecast for Wairoa until Monday 24 June, when the works were instigated. Finally, given the forecast rainfall was minimal and the sea state was forecast to be significant at the same time that any increase in the river level was likely, the factors for a successful opening were not anticipated to align. Accordingly, HBRC's position is that the approach of attempting an opening was precautionary in the circumstances, as the prospect of a successful opening was marginal at best.

Despite HBRC's position, we consider there is clear scope for improving management of the bar. If anything, HBRC's position highlights the need for current approaches to change, since mitigation steps may not be able to be taken prior to any immediate threat.

The risks of remote management of the bar were well known prior to this event. Wairoa District Council's own Cyclone Gabrielle review report found that:

"...there is significant benefit in having local expertise and contractors that are able to monitor and respond to onsite conditions prior to and during any significant flood event. In the absence of more costly infrastructure solutions for the mouth, recent history suggests there is a solution i.e., the use of expert local based staff and contractors being given sufficient discretion to make timely decisions on mouth opening. This approach requires an institutional continuity of approach."58

In April 2024, community concerns about flood risk and the bar were raised with HBRC through the NIWE Flood Resilience project Wairoa Stakeholders Group. Similar issues were also raised by the Matangirau Reserves Board and the HBRC Maori Committee. In response, the Council commissioned several expert reports. These include the Tonkin + Taylor Technical Review, as well as reports on river dredging and upper catchment reafforestation.

Local Wairoa District Council staff and expert contractors told us that, while operational relationships with HBRC staff visiting the Wairoa community were good, they regularly felt 'not listened to' by senior Council staff during planning for and response to flood emergencies. As an example, on the Friday prior to the flooding, the HBRC put the local contractors for the bar on standby but did not let Wairoa District Council staff know about this. Nor did they share their 'worst case scenario' regional forecasting in the days immediately prior to the event. The latter clearly showed poor potential outcomes for Wairoa.<sup>59</sup>

<sup>&</sup>lt;sup>59</sup> See the relevant PowerPoint slide used to brief the CDEM Group Controller meeting on Tuesday 25 June at Appendix Three below.



<sup>&</sup>lt;sup>58</sup> See the review report prepared by Strome Consulting for the District Council at <u>https://www.wairoadc.govt.nz/assets/Document-</u> Library/Reports/Wairoa-Cyclone-Gabrielle-Review-April-2024.pdf

We consider HBRC's approach to monitoring the Wairoa River mouth would be strengthened by a focus on building local understanding and trust through inclusive decision-making.<sup>60</sup>

### **Future intentions**

The HBRC's current Wairoa River scheme has a limited scope and is mostly limited to post flood clean up and revegetation. However, post-Cyclone Gabrielle, a number of measures have been undertaken by the HBRC in Wairoa that relate in part to flood protection. These include retaining structures to protect the Yacht Club (located near the river mouth), and walls to protect various public amenities.

Going forward, the new HBRC Three Year Plan 2024 – 27<sup>61</sup> (the **HBRC Plan**) undertakes to deliver the following relevant activities, shown with emphasis added:

- Prepare an annual programme of works, including a maintenance schedule, prior to the commencement of each financial year.
- Audit river assets annually by a chartered professional engineer and make a full assessment of each of the major rivers every 12 years.
- Inspect river mouths and lagoon outlets regularly and open when required, and • when river, sea and weather conditions allow, so private land above a specified contour is not flooded by river mouth closure.
- Maintain rivers and extract gravel to maintain the channel capacity and integrity of • flood protection assets.
- Conduct research to better understand the impacts of river sediment management • on sediment supply and make changes to the way rivers are managed resulting from this research, where appropriate.
- Monitor flood events in accordance with the Flood Manual.
- Continue to develop and upgrade flood forecast models of flood plain areas. •
- Calibrate models to significant storm events. •
- Collect and distribute flood hazard information for identified high and low risk area and; •
- Complete and report against annual coastal monitoring and investigation including • beach profiling; storm monitoring; sediment transport and processes investigation and modelling; hazard prediction including tsunami, inundation, erosion and storm surge.

The HBRC Plan makes little specific reference to Wairoa, except to identify the town as part of a 'key project' to develop new flood protection schemes over the planning period.

Post-Cyclone Gabrielle, the HBRC has also commissioned flood resilience work under the NIWE fund, for a 'comprehensive flood solution' for the North Clyde area of Wairoa. This work is being undertaken under the aegis of HBRC, the Wairoa District Council and Tatau Tatau o te

<sup>&</sup>lt;sup>61</sup> See 2024-2027 Three-Year Plan - Supporting Our Community's Resilience to Future Events. pp 48-9



<sup>&</sup>lt;sup>60</sup> See, for example, Greater Wellington Regional Council's guidelines for flood plain management planning (available at https://www.gw.govt.nz/assets/Documents/2015/06/Guidelines-for-Floodplain-Management-

Planning.pdf), which suggest that fundamental to good engagement for sustainable flood management outcomes are actions such as involving local residents, landowners and key community representatives in the flood planning process, and building understanding and trust locally, particularly through inclusive decision-making.

Wairoa, and funded by central Government through the NIWE fund. However, the North Clyde area was not the area most affected by the June 2024 flood event.

A number of the generic findings and recommendations of the recent independent flood management review noted above are relevant here with specific reference to the management of the Wairoa River.<sup>62</sup> That report recommended that:

- HBRC should communicate and collaborate effectively with communities, mana whenua and stakeholders in the development and implementation of flood risk management solutions for areas subject to flood risk.
- HBRC should make more and better use of the local networks and knowledge that exist within communities as it leads the process of developing comprehensive flood risk management solutions and implements the physical works needed to improve flood resilience in Hawke's Bay; and
- HBRC should develop a collaborative process for developing flood scheme design involving the regional and district councils, mana whenua and the wider community.

The Final Tonkin + Taylor Technical Review also traverses these issues, as here:

"At present, management decisions are made from Napier with limited visibility of the site, in terms of knowing the river mouth position and river level.63

A recent, short review for Te Uru Kahika, the Regional and Unitary Councils of New Zealand peak body, suggested the need for early involvement with local iwi ... [and] Wairoa District Council staff."64

Thus, multiple reviews have made similar suggestions for closer involvement by the community in decision making.

We do not suggest, as some Wairoa respondents did, that this should entail reversion of control to or full delegation of authority for monitoring and opening to Wairoa District Council. We do not consider that body to hold the expertise, resources or powers to hold that responsibility. Making this change would also require amendments to legislation.

However, core to any programme of future improvement are better relationships and deeper shared understandings between HBRC staff and leaders and Wairoa local leaders, including civic leaders and iwi.

We suggest that, in addition to the longer range solutions indicated in the HBRC Plan, many of which will entail formal community consultation, that practical, short term solutions here are threefold:

Establish a master contract with the local provider so that a new contract does not have to be formally initiated at each mouth opening, and statements of work can be quickly triggered.

<sup>&</sup>lt;sup>64</sup> HBRC Wairoa Mouth Cutting Procedures, 1 July 2024, prepared by Graeme Campbel, Strategic Advisor Flood Resilience, Te Uru Kahika, page 3.



<sup>&</sup>lt;sup>62</sup> See <u>https://www.hbrc.govt.nz/assets/Document-Library/Cyclone-Gabrielle/Report-of-the-Hawkes-Bay-Independent-Flood-</u> Review-Digital-Version.pdf pages 158/9.

<sup>&</sup>lt;sup>63</sup> At 23.

- Initiative a formalised programme of regular 'listening' forums, perhaps quarterly, with local Wairoa community leaders, including iwi, to discuss proactive and precautionary river risk management, including mouth openings; and
- Working in partnership with technical experts and utilising local knowledge, develop a specific Operational Plan for the River, including triggers for clearing the mouth<sup>65</sup>, clear standard operating procedures (SOPs), monitoring guidelines and performance key performance indicators (KPIs).

The Operational Plan will be of critical importance. The Plan should include:

- Formalised utilisation of indigenous knowledge and kaupapa Māori approaches to river, mouth and bar management.
- Actions to monitor the river bar (both locally and remotely) and to identify the trigger thresholds for action to mitigate and manage risks, including monitoring of mouth placement, sea state and wave conditions, river levels, silt conditions and rainfall forecasts.
- A risk management framework that defines areas of work to maintain the long term integrity of the river and surrounding communities.
- Clear trigger thresholds, delegated authorities and contingency resourcing to mobilise • river bar clearing/mouth opening well in advance of potentially high risk events.
- Detailed flow charts showing SOPs and mapping optimal timelines, decision paths and key accountabilities for mouth and bar management. These should take into account the long lead times required for mechanical bar and mouth management.
- KPIs for monitoring and reporting on bar and mouth integrity.
- Clear communications protocols for support to localised and tailored communications; and
- Targeted flood prevention, management and response plans for high risk communities, including those on the Wairoa coastal hazard zone in closest proximity to the river.



The position of the Wairoa River has been shifting west since 2016, reducing the efficiency of the river mouth. Image: HBRC

<sup>&</sup>lt;sup>65</sup> The Tonkin and Taylor Technical Review offers a simple schematic showing how such triggers might be utilised in SOPs, and this is included at Appendix Four below.65



# What powers are available to HBRC to make decisions? What actions are available to the HBRC to manage the bar?

#### Powers

As set out earlier in this report, HBRC's function to actively manage the bar for flood protection purposes (including manually re-aligning the river mouth) arises primarily from the Soil Conservation and Rivers Control Act 1941. Those powers are to be exercised in the context of other legislation and policy level instruments such as the Local Government Act 2002, the Resource Management Act 1991, and the guiding principles of the RRMP, which are all relevant considerations for the HBRC's management of the bar as a tool to protect against flooding as a natural hazard.

Opening a new river mouth or floodway is a permitted activity under RRMP Rule 70.

The statutory and regulatory framework enables HBRC to make decisions and undertake works relating to flood protection (in this case, decisions around the management of the bar) while balancing environmental protection, resource use and community interests.

### **Available Actions**

The Wairoa River mouth is one of 16 river mouths for which HBRC have an operational opening guide, (the 'Instructions' at Appendix 2 to this report<sup>66</sup>). The current Wairoa River instructions are high level, and in summary, state that:

- Potential for damage due to flooding caused by river mouth blockage is significant.
- ٠ Flooding can block access roads at Whakamahi and Kihitu.
- Opening the river requires a significant head of water in the river, along with favourable sea conditions (e.g. small waves, outgoing or low tide).
- Openings should ideally be undertaken at low tide with small waves.
- Excavated material is to be stockpiled clear of the mouth to minimise chance of reblocking.
- The river mouth is highly dynamic and migrates east and west depending on swell direction and intensity.
- Erosion is notable under Pilot Hill.
- A successful re-alignment of Wairoa Bar requires the river to first close and a head of ٠ water to build, before cutting a new opening using the old piles as a guide for the preferred location.

These instructions, respondents at HBRC told us, have been improved and updated regularly over the last few years. One said, "Part of the improvements to the River Opening document was to remove subjectivity from decision making, create clear trigger points for action and improve the data gathered by the installation of gauges."

We do not agree that the current instructions document is clear or specific about the triggers to be used to initiate an opening. We find it unhelpful as an SOP. As the Tonkin + Taylor Technical Review puts it:

<sup>&</sup>lt;sup>66</sup> There are three documents that relate to specific instructions about river mouth opening. In this report, we refer to HBRC Document 8.261-004 Lagoon and River Mouth Openings.



"The current opening plan has no clear criteria for when the river should be opened to reduce the risk of flooding. However, there appears to be consensus from council observations and the WSP modelling that river opening can significantly reduce the risk of flooding along Kopu Road and potentially Wairoa Town. Therefore, the level of resources allocated to manual opening of the river mouth can be scaled according to the flood risk reduction benefit."67

River mouth openings for Wairoa are undertaken by local contractors Pryde Contracting, who have significant experience opening the Wairoa River and other river mouths in Hawke's Bay. They have also documented their methodology, which was supplied to us.

The overall frequency of such opening events over the past decade is hard to determine, but it appears that opening works in 2022 were the only operation undertaken since 2016. The 2022 event used two excavators and one bulldozer (a total of 180 machine hours) and cost HBRC approximately \$30,000 for an initial attempt in January, with additional costs in March 2022 to finish the work.

Pryde Contracting's advice to us about their preferred method was, in summary, thus:

- Need a lead time of at least five to seven days to plan a successful opening. This allows for mobilisation of equipment that may be deployed across the region, and for a suitable preparation work to be undertaken before the final cut is made for an opening.
- This lead time requires high confidence in rainfall forecasting and an understanding of • the hydrology in terms of whether there is a risk to the town flooding if the river mouth is not aligned with the main river channel.
- Depending on the volume of sediment on the bar, the preferred approach is to use two bulldozers and two diggers to open the bar.
- Work is undertaken over a few days to prepare the channel, initially digging out the lagoon side, lowering the berm level and bunding the seaward side to prevent closure overnight from waves.
- Once the site is ready, the final opening is done using a digger to open a new channel on the high tide, allowing maximum head water to push through the new channel on the outgoing tide. As the contractors described it:

"The reason that all these conditions are needed at the same time, is because we essentially need the new river mouth to overwhelm the existing river mouth. These conditions mean the current mouth is blocking up, the time of the tide and the sea's swell create the best height difference between the sea level and the river level, and then the impending rainfall influx 'flush' will cause the water to flow through the new river mouth and erode the new mouth more and more."

# 67 At 23



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- A successful opening requires the water level in the river to be elevated above the water level in the sea, which means timing is critical on a rising flood event. Large waves in the ocean can compromise an opening event, even if tide and river level are otherwise suitable.
- A successful re-alignment of the mouth may require closure of the naturally offset mouth which is complex to do with the available machinery; and
- If the conditions have changed and it is decided that a further attempt will be • unsuccessful, a bund or sea wall can be constructed to try preserve the work done, in the hope that it would not fill back in again before the next chance to attempt to do it occurs (as happened in March 2022). The protective bund works created in January 2022 are shown in the image below, courtesy of Pryde Contracting.



With regard to the late attempted opening of the mouth immediately prior to the June event, the contractor told media that:

> "In the 30 years I've been involved I think we've been really lucky in some of the results we've got. Mother Nature is a pretty powerful beast, and I think it's sort of been a bit of a disaster waiting to happen,"68

<sup>&</sup>lt;sup>68</sup> Radio New Zealand Interview with Hamish Pryde, 22 July 2024.



# Is there recognised best practice for making such decisions and / or taking actions (if any)?

Local government operates under a range of principles arising from legislation, good practice and case law. As noted in the Ministry for the Environment's 'Preparing for Future Flooding: A Guide for local government in New Zealand', which addresses flooding risks in a world impacted by climate change and thus more frequent and severe flooding, these principles should now include (in summary paraphrase and with emphasis added):<sup>69</sup>

- Take a precautionary approach. •
- Use flexible or adaptive management options.
- Use no-regrets options. For example, ".. if you are already experiencing weather-related • problems, then cost-effective actions to deal with them should be no regret options".
- Use low-regrets options. For example, "...ensuring that any changing rainfall patterns • are taken into account early in the process of maintaining or improving infrastructure is an example of a low regrets option."
- Avoid making decisions that will make it more difficult for you or others to manage • climate change flood risks in the future.
- Use progressive risk reduction.
- Adopt an integrated, sustainable approach to the management of flood risk. "...this approach aims to consider a wide range of perspectives to decision-making that contributes to the environmental, cultural, social and economic well-being of people and communities.".

In terms of river mouth opening, we cannot comment of the efficacy or relationship to best practice of the current contractor methodology. In our view, the key problems here are:

- Manual river mouth opening should not be the only available flood protection measure • for Wairoa. Meaningful protection will need to be based on multiple components, with multiple barriers and approaches, particularly with respect to the coastal hazard zone on Kopu Road; and
- The instructions that guide the process are at present insufficiently rigorous with regard to when and how the mouth should be opened and the trigger thresholds and decision pathways that should support the process.

On the first point, we would suggest that river mouth and bar management options should be expanded to include additional engineering based options, such as structures or systems to 'train' or fix the river mouth in a preferred position, and land side resilience enhancement options, such as lifting the level of, or otherwise bolstering at risk roads and amenities. Any further exploration of these broader options will require additional engineering and environmental impact analysis, particularly to understand more about the riverbed and beach profiles at Wairoa.

Any such options will be extremely costly and likely beyond the resources of the HBRC. The Tonkin + Taylor Technical Review describes a like project at the Opotiki Harbour entrance, which is a \$100 million river mouth stabilisation exercise. Any similar project at Wairoa may be further complicated by the not yet fully explored gravel conditions and other river dynamics alluded to in the recent technical reports for HBRC.

<sup>&</sup>lt;sup>69</sup> See https://environment.govt.nz/assets/Publications/Files/preparing-for-future-flooding.pdf. These bullet points are expressed in full on pages 28-9.



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The second point can be addressed by means of the Operational Plan we recommend here and discussed in the earlier section. More detailed, prescriptive and clear SOPs should be an integral part of that Plan.





# What was HBRCs practice relating to engagement with mana whenua/tangata whenua on its management of the bar?

HBRC has formal arrangements with a range of tangata whenua groups, including its Taiwhenua groups. It has regular engagement with iwi leaders and local tangata whenua fora and is invested in building these relationships further. Since Cyclone Gabrielle, the Council has made renewed efforts in this regard. However, tangata whenua respondents told us they saw three specific areas for improvement in the wake of this flood event, as follows:

- More formal capture and inclusion of indigenous knowledge into analytical and decision • making processes around river mouth and bar management, and into flood management approaches more broadly
- More regular and proactive 'listening sessions' with iwi leaders and other • representatives of local Māori communities to collaborate and plan for:
  - o tactical matters of river mouth and bar management
  - the more strategic issues relating to future flood protection resiliency for Wairoa and its catchment; and
- Broader opportunities to more actively value the granular local knowledge of tangata • whenua and incorporate this into planning processes.

We address the second point above in our recommendations section below.



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## Any other relevant contextual matters

The Wairoa River flood of June 2024 highlights a number of broader issues that extend well beyond the presenting issues of river mouth management and flood protection. Over the course of our review, we made the following observations.

1. Systematic arrangements for taking local knowledge into account in the management of the river mouth and bar are inadequate. Management decisions for the river mouth are made in Napier/Hastings by the HBRC, on the basis of infrequent physical inspections of the bar. There is no standing contract for regular and proactive maintenance with the local contractors who open the bar, with all work done on an ad hoc basis. Assessments of risk appear to us to be reliant on river gauges and technical instrumentation, which, if viewed without deep understanding of the state of the river bar/mouth and how it has behaved in the past, can create a misleading picture of local conditions.

In spite of the lack of a formal contract, the local contractors monitor and visit the river mouth/bar daily to assess river flow, condition of the bar, the location of the mouth and sea state and wind and wave direction.

This is also common practice amongst Wairoa locals who have lived with the threat of the river for generations.

Given the current non optimal location of the bar, the forecast sea state and the weather warnings, we were surprised a precautionary opening of the bar was not commissioned well in advance of the forecast rain. As noted above, HBRC advised that this was due to current management approaches, and we consider these need to be updated to address this risk. We find it even more surprising that, in a town dominated by such a significant and obvious natural hazard, the bar is not more regularly and proactively planned for and managed based on local understanding of threat levels.

The risks of remote management of the bar were well known prior to this event. Wairoa District Council's own Cyclone Gabrielle review report found that:

...there is significant benefit in having local expertise and contractors that are able to monitor and respond to onsite conditions prior to and during any significant flood event. In the absence of more costly infrastructure solutions for the mouth, recent history suggests there is a solution i.e., the use of expert local based staff and contractors being given sufficient discretion to make timely decisions on mouth opening. This approach requires an institutional continuity of approach."

Local Wairoa Council staff and expert contractors told us that while operational relationships with HBRC staff embedded in the Wairoa community were good, they regularly felt 'not listened to' by senior Council staff during planning for and response to flood emergencies. As an example, on the Friday prior to the flooding, the HBRC put the local contractors for the bar on standby but did not let Wairoa District Council staff know about this. Nor, in the days that followed, did they share their 'worst case scenario' flood forecasting.



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- 2. Since Cyclone Gabrielle, the HBRC has further upgraded its flood models and is in the process of adding additional cameras and surveillance apparatus. Flood modelling science for the Wairoa River mouth, however, does not presently take into account the sea state. Riverbed information is also only obtained in town locations, a significant distance from the mouth. More importantly than these limitations, however, is the fact that, in our view, neither the HBRC flood modelling or asset management teams have the relationships and connections at senior levels into communities such as Wairoa to combine their technical information with local insight and or to fully understand the potential human and economic impacts of possible scenarios. While it is the responsibility of the regional CDEM Group to bring these perspectives together as part of civil defence preparedness, we also suggest that technical staff need to be better tapped into the local networks that would give them insight into granular local factors for river mouth management purposes.
- 3. The HBRC CDEM Group held a planning meeting for the region's controllers on the afternoon of Tuesday 25 June, in light of the orange rainfall warning, forecast heavy swells and unfavourable sea state. While this review is not focused on the CDEM response, discussions at this meeting reveal a concerning attitude in respect of flood management at the Wairoa River. By this time flood modelling did show a potential worst case scenario of flooding in Wairoa's low lying Kopu Road. At this meeting the Controller for Wairoa also raised the issue of the poor placement of the river mouth and lack of maintenance of the bar. She was told that the planned opening of the bar had been suspended and that river levels were not expected to be high.<sup>70</sup> A participant mentioned that data from NIWA (National Institute of Water and Atmospheric Research) suggested rainfall predictions that were higher than those of MetService.<sup>71</sup> These concerns were also dismissed. We are concerned this shows optimism bias.

In our previous report on Cyclone Gabrielle, we recommended that worst case scenarios are planned for, exercised and scenario modelled. We consider this recommendation to be relevant here, too, to the extent it applies to HBRC functions (rather than CDEM functions). The fact that the river bar was in an unhelpful place (much worse than during Gabrielle) should have triggered at least discussion of the identified high risk scenario and the development of a contingency plan for Wairoa, particularly given the region's vulnerability, poor outcomes from the earlier storm and long history of significant flood events. Flooding contributed to by the bar has occurred every year for the last three years.

In view of the fact that Wairoa is a town wholly reliant on a single method of risk mitigation for river mouth driven flooding, (mechanical mouth opening) and that the relevant managers knew that method had not had time to be brought to bear, we find these decisions not to act in a precautionary manner on at least the day prior to the event a matter of concern. The communications from HBRC to Wairoa leaders and the local

<sup>&</sup>lt;sup>71</sup> It is unclear whether this comment related specifically to Wairoa or the region more broadly. HBRC has advised this review that it relies on MetService forecasting, rather than NIWA's, for a number of reasons. First, MetService is contracted to the Ministry of Transport to provide weather forecasts for all of New Zealand, which provides surety that appropriate systems are in place to ensure timely, accurate and appropriate forecasts. Secondly, HBRC are part of the nationwide regional councils' contract to MetService for provision of specific weather products and direct access to severe weather forecasters. Finally, HBRC use the gridded rainfall forecast provided by MetService whereby the data is automatically transferred into the correct format to the HBRC river level forecasting service, however NIWA does not offer a comparable product.



<sup>&</sup>lt;sup>70</sup> HBRC has indicated there are no meeting minutes recording that this was said, and has noted that works on the mouth were not in fact suspended and continued through the afternoon.

community were slow in the early stages of response to this event. This comment references the CDEM response, but that is unavoidable as it was through that process that Wairoa leaders and the local community appeared to have first become aware of the impending flooding.

As earlier noted, the HBRC Flood Forecaster sent a 4am email advising of river levels and the risk of flooding on Kopu Road. HBRC advised that this email went to some 48 recipients, including the local Wairoa CDEM lead. The Flood Forecaster did not make a phone call, which initially surprised us given the urgency of the situation. HBRC advised this review that it considered the Flood Forecaster acted appropriately and in accordance with protocol, which was for the Flood Forecaster to provide intelligence to the CDEM response via email sent to dedicated channels (which are monitored 24/7, particularly when the Group Emergency Coordination Centre (GECC) is in a state of enhanced monitoring, as was the case in this event). It is then for CDEM to make telephone calls.

It seems to us that this current system does not allow for information to flow as quickly as it needs to, in the context of a river mouth that is known to be difficult to manage and where the risk of flooding is known. Some residents woke to the Wairoa CDEM Controller's calls to find water lapping around their beds. Many struggled to evacuate given the nighttime conditions and the depth of the water. On one Kopu Road property a householder battled to get his pregnant daughter and grandchild over the back fence in the dark.

- 4. We were also surprised to learn that no operational plan for the ongoing management and maintenance of the Wairoa River mouth currently exists, in spite of the known impact of the bar and river mouth placement on flood risks. Such a plan should consider the complex interplay of the range or relevant factors, including mouth position, bar condition, review flows, sea tides, surges and wind and wave conditions. It would include actions to monitor the river bar and identify the triggers for action to mitigate and manage risks. At the moment, the following also appear to be lacking:
  - a. A risk management framework that defines area of work to maintain the integrity of the river and its mouth.
  - b. Delegated authorities and financial delegations to local decision makers to mobilise or trigger local contractors to work on river bar clearing.
  - c. Clear KPIs for effective bar management, with regular monitoring and reporting.
  - d. Detailed flow charts showing SOPs and mapping decision paths and key accountabilities for mouth and bar management.
- 5. In the 1990s, a significant number of engineering based options to manage the Wairoa River bar and mitigate risks were explored but not progressed. They included examination of maintenance dredging operations and the use of river dykes and groynes. Since that time, no further field investigations into infrastructural or engineering solutions appear to have taken place, leaving the default option of manual opening in advance of potential flood events, (a process which takes five to seven days) as the primary method of risk management. In spite of the funding challenges, such an approach appears to reflect a strategy of hope rather than experience.

Overall, we consider the June flooding of the Wairoa River is not just about technical matters all of which can be solved - but also through the realm of leadership, communication, culture and community relationships.



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A solution exists within regional governance and leadership. Whether viewed through the lenses of environmental management, emergency management or local government best practice, the relationship between the HBRC and the Wairoa District Council and Wairoa civic leaders can be strengthened, at least at executive levels.

Many in the Wairoa community – from leaders to people in the street – see HBRC leaders as patronising, technocratic and 'just not listening.' Whether or not these perceptions are accurate, the reality is that they exist and will have an impact on the relationship and, accordingly, management of flood risk.

Wairoa is a community with unique challenges arising from its relative isolation and dependency on vulnerable transport links, its socio economic deprivation and the fact that it has but a single line of flood defence - mechanical and difficult river mouth management - in a storm event.

Its people and leaders are passionate about their town and region, keen to harness and mobilise local knowledge to find innovative solutions to the periodic misbehaviour of their river mouth taniwha, and hungry to engage with HBRC to chart the way forward. Feeling unheard, however, makes some of them feel deeply offended. This is exacerbated by the residual trauma from the 2023 Cyclone event.

Meanwhile, HBRC leaders and staff are trying hard to deliver on the many recommendations of their various post Gabrielle reviews. They are keen to better understand the complexities of Wairoa River dynamics in order that a wider range of long term solutions can be explored. They are also struggling to do both these things within constrained resources.

Its people and leaders feel they are working hard to address the concerns of the Wairoa community highlighted by this event and during Cyclone Gabrielle. It is also clear to us however, that some HBRC staff are feeling that they can't do anything right. This has created what appeared to us to be a defensive culture and seems to have caused them to bunker down and prioritise technical effort rather than to invest in relationship effort.

We note the recent appointment by the Minister of Local Government of a Crown Manager, whose role is to assist the HBRC to develop and implement flood protection works for Wairoa taking into account the interest of multiple stakeholders. Our hope is that this appointment (which began 15 August 2024) addresses these relationship and communication issues.

As argued earlier, we don't think the solution here is overly complex or that it requires elaborate regulatory instrumentation or wholesale legislative change beyond clarification of the existing framework. While we considered making a recommendation in regard to formal delegations of authority for Wairoa River mouth opening to the Wairoa District Council, we do not believe that the legislative change process that would be entailed is necessary.

We think quarterly HBRC/Wairoa listening sessions with a formally chartered collective group, including iwi, and underpinned by an Operational Plan for which all parties share responsibility, would go a long way to addressing the issues we identify in this report.

In the meantime, it is critically important that the HBRC leaders model active listening and collaborative attributes from the top of the organisation.



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We consider this flood event suggests there are issues in regard to the culture and practice of the HBRC at operations level.<sup>72</sup> Shortfalls surfaced in this event included, as noted at various points in our earlier narrative:

- Lack of a proactive, precautionary approach to potential emergencies in remote and vulnerable communities.
- Related to this, optimism bias and failure to address worst case scenarios early.
- Lack of sufficiently granular, active and well invested local relationships so that informal networks could be activated and local and indigenous knowledge used to help manage and mitigate hazards and risks.
- Overreliance on the National Emergency Management Agency (NEMA) and MetService, when the former was remote and the latter's forecasts had already been shown - during Gabrielle - to underestimate rainfall in this catchment.

There are also some strategic issues raised by the event that have implications for central Government, including:

- It appears to us that individual regional councils lack the resources, incentives and expertise to explore a full range of infrastructural investment options on a proactive basis, outside support from periodic central Government schemes.
- There is little incentive for individual local and regional authorities to collaborate and share best practices. In this case, understanding other river control projects such as those at Opotiki, Te Waihora/Lake Ellesmere and Whakaki Weir, even though the hydrology and other factors in these cases are very different, could assist Asset Management staff at HBRC; and
- While the CDEM response is outside the scope of our terms of reference, we note for completeness that it is clear from this and other recent emergency events across the country that current emergency management arrangements can be improved, and this is currently under work by NEMA and other agencies.

While there remains more to do in the wake of this event to fully understand the particular combination of river and sea dynamics that caused it to be so harmful, the parties should not wait to tackle the recommendations we suggest here, many of which can be progressed with urgency and do not require major additional investment.

The time for more reviews is past. The people of Wairoa want and deserve action. As we suggest in our recommendations, much can be achieved - in regional governance, emergency management and environmental outcomes - simply by repairing and rebuilding critical relationships, lifting the culture<sup>73</sup> and practices of the relevant HBRC teams and by collaborating to develop improved plans and SOPs.

<sup>73</sup> As above.



<sup>&</sup>lt;sup>72</sup> HBRC has objected to the suggestion of issues with culture, given this was not a review by an organisational expert.

## Recommendations

Senior leaders at the HBRC need to prioritise their relationships with and communications to the Wairoa community and its leaders in order to rebuild trust and thus enhance future resiliency. Above all, Wairoa locals, including iwi, must feel sincerely listened to, both in advance of and during events. Optimal local government, emergency management and environmental management outcomes are all best secured through positive and trust-based partnerships.

Accordingly, we make the following recommendations.

### Recommendations

- 1. Central government should consider taking steps to clarify the current legislative framework for flood management, which is at present spread across multiple pieces of legislation and has the potential to cause confusion. An efficient time to do this may be when the new national direction on natural hazards is developed as part of the government's RMA reforms.
- 2. The HBRC should develop, implement and communicate a Wairoa River and Bar Operational Management Plan in partnership with local partners and communities. The Plan should include:
  - a. Formalised utilisation of indigenous knowledge and kaupapa Māori approaches to river, mouth and bar management.
  - b. Actions to monitor the river bar (both locally and remotely) and to identify the trigger thresholds for action to mitigate and manage risks, including monitoring of mouth placement, sea state and wave conditions, river levels, silt conditions and rainfall forecasts.
  - c. A risk management framework that defines areas of work to maintain the long term integrity of the river and surrounding communities.
  - d. Clear trigger thresholds, delegated authorities and contingency resourcing to mobilise river bar clearing/mouth opening well in advance of potentially high risk events.
  - e. Detailed flow charts showing SOPs and mapping optimal timelines, decision paths and key accountabilities for mouth and bar management. These should take into account the long lead times required for mechanical bar and mouth management.
  - f. KPIs for monitoring and reporting on bar and mouth integrity.
  - g. Clear communications protocols for support to localised and tailored communications; and
  - h. Targeted flood prevention, management and response plans for high risk communities, including those on the Wairoa coastal hazard zone in closest proximity to the river.
- 3. The HBRC should also:
  - a. Instruct its Asset Management Group to:
    - i. Integrate its various Wairoa River Management instructions into an integrated plan as above.



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- ii. Establish improved detection and early warning systems for the Wairoa River mouth and bar that provide adequate warning of potential or impending problems, including camera monitoring of the mouth.
- iii. Update its river monitoring models to stake better account of sea state, bathymetric riverbed profiles and silt levels, and wave and wind conditions.
- iv. Contract local resources to provide a regular maintenance regime for the Wairoa River mouth and bar, as well as to support prevention and response work when required, according to clear service specifications and standards as above; and
- v. Develop formal protocols such as regular collective forums for the ongoing utilisation of local Wairoa community knowledge in flood hazard preparedness and management.
- b. Take a more proactive and precautionary approach to potential emergencies, reducing the risk of optimism bias. A precautionary approach will ensure the timeliness of preventive work and ensure advance warnings are given to at risk communities.
- c. Consider utilising weather data from both MetService and NIWA.<sup>74</sup>
- d. Tailor and upweight its support to Wairoa, given that community's vulnerability and current single line of defence in flood emergencies.
- e. As recommended in the Tonkin + Taylor Technical Review, revisit past infrastructural options for mouth and bar management and commission the investigation of new technology and physical infrastructure options, including coastal groynes and methods for improving the flood resilience of high risk roads and settlements. This may entail further engagement with central government agencies; and
- f. Develop better and more responsive partnerships and communications systems to ensure that civic leaders in Wairoa have real time information, delivered in an appropriate manner and which supports them to inform and protect their local communities.

<sup>&</sup>lt;sup>74</sup> We note HBRC's comments that NIWA does not provide comparable products to those provided by MetService through the regional councils contract. However, we think there is still benefit in HBRC considering what additional benefit it could gain from also having regard to NIWA data in addition to that already obtained from MetService, in the event the two bureaus produce differing rainfall predictions.



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## Appendix One: Summary Event Timeline

Note: The following timeline was developed from a timeline and document set prepared by the HBRC, and from the documents, contemporaneous notes and recollections supplied to us by interview respondents.

Pre event	
<b>10 January 2024</b> : The adverse position of the Wairoa River mouth was first noted by HBRC' Northern Scheme Manager. <sup>75</sup> Prior to this, a natural breach of the bar had occurred in November 2023, resulting in a second mouth opening in a better position. <sup>76</sup>	
<b>12 January 2024</b> : the Northern Scheme Manager contacted local contractors Prydes to begin identifying opportunities for a mechanical realignment of the mouth: <sup>77</sup>	
Just wanted to check in with you to see if you have been assessing conditions to do an opening of the Wairoa River mouth in line with the main channel and closing the existing river mouth.	
We had a conversation over the phone last year and haven't been able to catch up with you on the status of this.	
Can you please inform me when the conditions are right for an opening so I can get the approval and engineering assessment side of things confirmed?	
4 April 2024:Prydes sent the following <sup>78</sup>	
I have attached a document that lays out some information about the Wairoa Bar and the information you requested. I finished it last night. I will shoot down to the river mouth now to have a check on it.	
The size of the 'flush' I talk about in the document, does need to be substantial and looking at Metservice, there doesn't seem to be any rain of note that would fit this bill, and so unlikely will have a chance to try do it in next 5 days or so.	
HBRC continued to inspect the condition of the bar on: <sup>79</sup> • 18 January • 30 January, • 12 February • 5 March • 12 March • 2 April • 20 April • 21 May (updated 23 May) • 6 June • 10 June • 21 June	
Over this time, no opportunities were identified where the necessary conditions aligned t allow for a successful mouth realignment in accordance with HBRC instructions.	

<sup>76</sup> MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', 30 Nov 2023 9.46am. <sup>77</sup>Email 12 Jan 2024 12:20pm.

<sup>83</sup> Email, Fri 21-6-24, 3.36pm



<sup>&</sup>lt;sup>75</sup>MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', 10 Jan 2024 2.10pm.

<sup>&</sup>lt;sup>78</sup> Email Apr 2024 7:37pm.

<sup>&</sup>lt;sup>79</sup> MS Teams 'Asset Management' Channel Posts in 'Surveillance and Field Reports', 18 Jan 2024 – 23 May 2024.

<sup>&</sup>lt;sup>80</sup> HBRC 2023-24 Budget Manager Detail - Asset Management March 2024.

<sup>&</sup>lt;sup>81</sup> MetService Severe Weather Outlook charts, issued 11.30am 21 June 2024.

<sup>&</sup>lt;sup>82</sup> Email, Fri 21-06-2024 8.53am

23 April 2024: HBRC Operations Manager met with Prydes on another job site and verbally confirmed that HBRC supported the methodology outlined in their abovementioned 'Attempting a new river mouth opening on the Wairoa Bar' document and that and funding was available for Prydes to proceed when conditions are suitable.

This is confirmed in HBRC's Budget Reporting for Asset Management, which noted (emphasis added) that "River and Lagoon Opening has been undertaken as required. Wairoa opening scheduled pending suitable conditions." 80

18 June 2024: The Northern Scheme Manager met with Prydes' at the Wairoa Bar to observe the current state. Together, they called the HBRC Flood Forecaster to discuss the rainfall and swell conditions for the coming week and were advised that the forecast involved a very large swell, and very little rainfall. Based on this information, the conclusion made by the Scheme Manager and Prydes was that these conditions did not favour a successful realignment of the river mouth.

#### During June Weather Event

#### Friday 21 June 2024

HBRC began responding to the oncoming weather event, a low to be situated off the east coast of the North Island, on Friday 21 June 2024, which is when a risk of severe weather affecting the region was first identified. At that stage MetService was forecasting a large swell but a low confidence of heavy rainfall for Wairoa on Tuesday 25 June.81

At 8.53am HBRC's Flood Forecaster sent an email to HBRC's Incident Response Manager, the Hawke's Bay Civil Defence Emergency Management Controller and Operations Manager, and the Central Hawke's Bay Civil Defence Controller noting that: 82

"There is a substantial low coming across the east coast starting Monday 24 and continuing until around Friday. No Met service warnings yet. We'll do a bit of research and prep. It could end up being a big swell, or possibly heavy rain on southern coast."

The Hawke's Bay Civil Defence Controller responded to note that the National Emergency Management Agency's Monitoring and Alerting Centre had not yet advised of any severe weather concerns for Hawke's Bay.<sup>83</sup>

As a precaution, HBRC commenced regular Operations Team meetings. These meetings are led by the Operations Manager and include key HBRC operational staff including flood forecasters, scheme managers, communications personnel and duty managers.

02.00pm The first meeting was conducted at 2pm on Friday 21 June. Following discussion on the situation in Wairoa, it was agreed that conditions remained unsuitable for an attempted mechanical realignment of the river mouth, but that HBRC would ask for Prydes to be available to begin work on a mechanical realignment if the situation changed over the weekend.

The situation would be reviewed by the Flood Forecaster in light of updated MetService forecasting over the weekend, and any material changes advised.



At 03.41pm: the Northern Schemes Manager phoned Prydes to confirm these arrangements. The Local Wairoa CDEM Controller was not advised of the standby arrangement.

On this call Prydes advised that key principals were away for the weekend but that workers would be placed on standby over the weekend. Advised that needed about 5 days' notice and 2-3 days preparation based on previous openings.

#### Sunday 23 June 2024

At 11.44am:on Sunday, MetService issued Wave Warning for Cape Turnagain to Mahanga, an area including Wairoa, which was valid 10pm Monday 25 June – 12:00am Thursday 27 June. This warned of an easterly swell and combined wave heights of up to 5m.

The Flood Forecaster monitored the forecast over the weekend and determined that there was no change that would materially affect the prospect of a mechanical opening of the bar being undertaken successfully, with the forecast sea state likely to hinder any such attempt.

At 02.39pm :on Sunday, Prydes reached out to the Northern Schemes Manager by text message (as below) to check whether there had been any update.<sup>84</sup> By return phone call, it was confirmed that there was no change, and that the situation would be reviewed again on Monday.

	Sunday 2:39 PM
Afternoon. Any update?	

#### Monday 24 June 2024

Monday 24 June: At 9:29am the HBRC Flood Forecaster sent the following update to HBRC Incident Response and Civil Defence Personnel, including the local CDEM Controller in Wairoa:85

It looks like the low coming down the east coast will bring rain for a few days. There's no met service watch yet since the total rainfall forecast is still less than 100 mm in 24 hours.

Highest rainfall looks to occur in Wairoa eastern catchment, but the southern coast from Cape Kidnappers down to Porangahau may also get some rain (and wind!).

River level forecasts show almost no rise in levels. At present the rainfall intensities are showing to be just around the infiltration rate, indicating the amount of runoff could be low.

If there's any major change, we'll provide an update.

At 9.30am MetService issued an Orange Severe Rainfall Warning for an area including Wairoa for 9am Tuesday 25 June to 9pm Wednesday 26 June.

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<sup>&</sup>lt;sup>84</sup> Text message, Sun 23-6-2024 2.39pm

<sup>&</sup>lt;sup>85</sup> Email, Mon 24-6-2024 9.29am.

At 9.41am the Northern Schemes Manager received a text message from Prydes but did not respond to the message: 86

"Morning, Had a look at the river mouth just before. Water level still very low and existing bar is looking more established. Seems at this stage that, if HBRC were wanting to do anything, it's get a bulldozer into where the potential new bar mouth would be and push excess sand off the top of the bar down near sea level height. That way, it's closer to being ready. Cheers"

At 10.36am MetService updated their Wave Warning, valid from 3pm Tuesday 25 June – 12am Thursday 27 June. This warned of easterly swell and combined wave heights of up to 6m.

At 11.26am: Wairoa District Council's Group Manager for Assets & Infrastructure emailed the Northern Schemes Manager and Regional Assets Manager:87

#### Hey team

With the weather set to come in this week, is it an opportunity to get Prydes in to relocate the bar? Some nervous Kopu Road residents.

At 11.41am: the Northern Schemes Manager called Prydes to discuss the earlier (9.41am) text message and advise that no action should yet be taken. During the call, Prydes sent a screenshot of the weather forecast to the Northern Schemes Manager.88



At 12.19pm: the Northern Schemes Manager called the Operations Manager, relaying Pryde's advice.

At 01.15pm the Northern Schemes Manager posted an update to the 'Surveillance and Field Reports' discussion in the HBRC MS Teams 'Asset Management' Channel, including an update of the state of the river mouth from 10am, and repeating the advice from Prydes earlier conveyed to the Operations Manager. He also noted that the forecast rainfall may now provide the flush required to assist with the opening.

Between 12.50pm and 01.55pm: multiple conversations occurred between the Operations Manager, Regional Asset Manager and Flood Forecaster. It was identified that it was unlikely that the predicted flow in the river would be sufficient to generate the flush required to sustain a new river mouth position. It was also noted that the forecasted extreme sea state was likely to hinder efforts to open the river mouth at a new location and created safety risk for those undertaking the work. The initial view was that, on balance, a mechanical realignment should not be attempted.

However, on further review of the updated forecast rainfall and the consequent impacts on river flow, it was decided that, as it was a marginal call, an attempted mechanical realignment may be warranted as a precautionary approach. That decision was taken at approximately 1.55pm and communicated to the Northern Schemes Manager on an MS Teams call at 1.59pm.

At 01.25pm: the Northern Schemes Manager called Prydes to confirm that no decision had yet been made to undertake a mechanical realignment.

<sup>&</sup>lt;sup>89</sup> MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', Mon 24-6-2024 1.15pm.



<sup>&</sup>lt;sup>86</sup> Text message, Mon 24-6-2024 9.41pm.

<sup>&</sup>lt;sup>87</sup> Email, Mon 24-6-2024 11.26am.

<sup>&</sup>lt;sup>88</sup> Text message, Mon 24-6-2024 11.44am.



<sup>&</sup>lt;sup>90</sup> Email, Mon 24-6-2024 11.26am.

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Note that the reference to "tomorrow low tide or the following low tide on Wednesday" is a copy of a mistake from the notification made by the Northern Schemes Manager. All communications with Prydes and all other internal correspondence refer to planned mouth openings on Wednesday or Thursday. <sup>91</sup> Text message, Mon 24-6-2024 2.59 pm.
At 04.00pm: HBRC conducted an internal operations meeting. The situation with regard to Wairoa, including the earlier decision to open a new river mouth, was discussed.



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At 04.13pm: HBRC's Chair and Chief Executive received a text message from the Mayor of Wairoa:<sup>92</sup>

Hi Nick and Hinewai, Hey I'm getting calls from concerned residents re the state of the Wairoa river bar and the imminent weather event. Could you please give me some clarification around the status and whether the community should have concerns. Kind regards Craig

At 04.13pm: the HBRC Flood Forecaster forwarded a mail from the Council's coastal expert.93

We are forecasting a large swell event to hit the coast between Tuesday and Wednesday this week, 25 and 26th of June.

According to the plot and tables below, from Tuesday at 12:00 am the swell will start to build up, peaking at 2.34 metres from 1:00 to 3:00 am at Haumoana. The swell then slowly recedes towards the end of the week.

The wave set-up forecasted is between 0.1 to 0.12 metres and the maximum tidal water levels are 1.5 and 1.39 metres during the event, whilst the wave period is of 12 to 13 seconds.

Please note that this is a 1 in 50-years event and that the offshore wave direction is SE, which wraps around Cape Kidnappers and Mahia Peninsula without much sheltering from these landmasses (see map below), therefore there's the potential of significant erosion along the shore.



<sup>&</sup>lt;sup>94</sup> Email to CDEM Controllers and others.



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<sup>&</sup>lt;sup>92</sup> Text message, Mon 24-6-2024 3.56 pm.

<sup>93</sup>Text message, Mon 24-6-2024, 4.13 pm.



<sup>&</sup>lt;sup>95</sup> Text message, Mon 24-6-2024, 4.15 pm.



<sup>&</sup>lt;sup>96</sup> Text messages, Mon 24-6-2024 4.16 pm.

<sup>&</sup>lt;sup>97</sup> Text message, Mon 24-6-2024 2.59 pm.

<sup>&</sup>lt;sup>98</sup> Email, Mon 24-6-24 4.21pm.

		- Option to organise a secondary Bulldozer from Gisborne- Weather and road condition dependant
		- 1600 Meeting regarding Matariki Rain Intel Report
		- Email (this one) sent out
		- Concerns as of Monday afternoon regarding Wednesday
		- Low tide: 0238 - Sea State: 5.5-5.8m - On Shore Wind: 40-50 kts
		Tuesday 25/06/2024
		- Prydes to start moving Material over the course of the day
		- Lowering height of beach crest by the new opening
		- Moving material closer to the old mouth for closing
		- Meeting will be held in the afternoon to discuss feasibility of continuing with Mouth relocation.
		- Depending on decision based on information on Tuesday afternoon the Wednesday timetable will adjust
		- Update questions to answer on Tuesday Afternoon 1600
		- Low tide, Sea State, On Shore Wind, Earthworks completed (m3), Prydes Comments.
		Wednesday 26/06/2024
		If approval by HBRC is given on Tuesday afternoon
		Opening will commence at Low tide
	At 0 Exe	<b>4.22pm:</b> the Wairoa Mayor sent a further text message to the HBRC Chair and Chief cutive, forwarding the concerns of an, unnamed, third party: <sup>98</sup>
IJ		FYI latest text received.
		It seems that despite the signals to HBRC about the present <u>high risk</u> condition of the Wairoa bar, any action is coming late again. There should have been machines mobilised at least 24 hours ago or more. I understand that WDC has enquired too. This ongoing poor performance is unacceptable for Wairoa. Are they taking us seriously? If Nick Peet is aware of how precarious a <u>situation</u> we're <u>in</u> then Wairoa is in real trouble because the action does not match the knowledge. This can be managed and should be by now given the independent reports and very clear recommendations. I would like to endorse any chance you have to pass the towns extreme concern to the CEO HBRC.
า	At 0	4.58pm and 06.36: the HBRC Chair responded: <sup>99</sup>
		Thanks Craig for sending this through. Can you relay Nic's feedback and if you need me to call this person to hear them out further than a message, wry happy for you to give them my number. And
		<u>Thanks Craig</u> for sending this through. Nic's reply would be good to share. We will get an update tomorrow that you can pass on also.
		During the <b>afternoon,</b> Wairoa CDEM Controller puts local iwi on standby for flood

recon and possible use of marae as evacuation centres. Iwi began feeding information to her on river condition. CDEM Controller then updated local elected members.

<sup>&</sup>lt;sup>100</sup> Text messages, Mon 24-6-2024, 4.58 pm and 6.36pm.



<sup>&</sup>lt;sup>99</sup> Text message, Mon 24-6-2024, 4.22 pm.

At 08.37pm: MetService updated the Severe Rain Warning:

- Area: Hawke's Bay north of SH5
- Period: 36hrs from 9:00am Tue to 9:00pm Wed

- Forecast: Periods of heavy rain. Expect 180 to 240 mm of rain inland, and 100 to 150 mm of rain about the coast. Peak intensities of 15 to 25 mm/h during Tuesday afternoon and evening.

At 09.48pm: the HBRC Flood Forecaster sent out an updated forecast stating, relevant to Wairoa: 100 101

Met Service has updated the Severe Weather Warnings to now include all of Hawke's Bay in ORANGE, and rainfall forecast totals have increased.

#### .... Wairoa

100-150 mm over 18 hours starting from 6 am Tuesday morning until midnight, then steady rain all day Wed/Thursday, totals up to 240 mm around Pukeorapa, less by the coast and in western catchments. River levels at Marumaru, Ardkeen and Wairoa at Railway could reach alert levels, (i.e. no immediate issues), however, with the Wairoa River mouth in poor condition, the forecast levels in the lower reach (by the yacht club and Ngamotu Road) will likely be high starting from Thursday morning (possibly earlier). This will of course depend on the actual amount of rain fallen, and we'll provide an update during the day on Tuesday. We are mobilising equipment to attempt opening the mouth in a better location, however, success will depend on factors such as the impact of the swell, and whether enough rain comes down to scour a new mouth. Surface flooding is possible in places like lower Kopuawhara, Nuhaka, Ohuia, Opoho.

Swell

Significant easterly swell. Concerns around Haumoana/Te Awanga coastline, and southern coast from Cape Kidnappers to Porangahau. No new info at present, we'll provide an update on Tuesday morning.

Minor update for CHBDC around Porangahau - forecast chart shows seas rising sharply on Tuesday afternoon, along with strong winds.

#### Tuesday 25 June 2024

At 08.09am: Northern Schemes Manager phoned Prydes to get an update on their progress. At this stage machinery was being mobilised to site, comprising two excavators and one bulldozer. A further bulldozer was being moved from Gisborne.

At 08.17am: the following text exchange occurred between the HBRC Chair and Mayor of Wairoa: 102

HBRC Chair: Wairoa bar equipment mobilised yesterday and underway. Timing is important as needs high flows to have a chance of working ie can't do it a week in advance

Wairoa Mayor: Cheers yes fully aware of the ins and outs, but local knowledge is important too.

HBRC Chair: Agreed

<sup>&</sup>lt;sup>102</sup> Text message exchange, Tue 25-6-2024, from 8.17 am.



<sup>&</sup>lt;sup>101</sup> Email, Mon 24-6-24 9.48 pm.

At 08.20am: the Northern Schemes Manager posted an update to the 'Surveillance and Field Reports' discussion in the HBRC MS Teams 'Asset Management' Channel: 103

> Currently at high tide. Mouth location still 450m west of pilot hill. River observed to not be flowing out into sea at high tide.

Current river level 2m below green marking on Wairoa town bridge.

Some debris caught behind the town bridge currently.

Machinery being moved to site. Hoping to have them on site by ~10:30am Will catch up with contractor after 10am meeting today.



- Area: Hawke's Bay north of SH5
- Period: 35hrs from 10:00am Tue to 9:00pm Wed

- Forecast: Expect 180 to 240 mm of rain inland, and 100 to 150 mm about the coast. Peak intensities of 15 to 25 mm/h during this afternoon and evening. Note, further periods of rain or showers are forecast through the remainder of Wednesday, Thursday and Friday, but intensities and amounts are expected to be much lower. Moderate chance of upgrading to a Red Warning.

<sup>&</sup>lt;sup>103</sup> MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', Tue 25-6-2024 8.20am.



At 09.57am: HBRC Flood Forecaster sent out an updated forecast: 105

Met Service has reissued the ORANGE warning for all of Hawke's Bay. Conditions look worse for Northern Hawkes Bay, mainly eastern catchment of Wairoa, Nuhaka, Mahia, Kopuawhara. Rainfall chart shows several 3 hour periods with 30 - 40 mm the 3 hours. This will likely cause the Kopuawhara stream to rise sharply later today. Overall effect on Wairoa river is likely to be limited to below alert level apart from near the mouth. The graph below is a forecast model using the river mouth mostly blocked. The reference to ramp and swing set is near the Yacht club along Kopu Road. Esk and coastal north of Napier - Continued rain all day Tues/Wed.

Swell forecast courtesy of [Coastal Specialist] -There was no significant change in the forecast for the next days. The swell peak is still about 2.4 metres at Haumoana with slight increase on maximum wave height (0.1 m) and wave setup (from 0.12 to 0.17 m in total). Other wave characteristics remain unchanged. Wave forecast for Porangahau is further below.

At 10.00am: HBRC conducted an operations meeting. The situation with regard to Wairoa, including the progress toward opening a new river mouth, was discussed.

At 10.30am: Wairoa CDEM Controller sent Facebook notice to community members in low lying areas of town to self-evacuate in advance of the event. Advised them to act during daylight hours.

At 11.32am: Prydes called the Northern Scheme Manager to discuss progress. Northern Scheme Manager advised that a second engineer (HBRC Senior Design Engineer) had been deployed to Wairoa and was available to assist as required.

At 01.00pm: First Group Controller meeting online. Technical expert said of Wairoa: "...looks ok only up to annual level - only issue around river mouth." HBRC advised that "Wairoa river mouth being worked on (probably in the morning)." It appears this anticipated timing referred to the opening itself.

There was a suggestion NIWA data showed different rainfall (it is not clear whether this comment related specifically to the Wairoa forecast).

We understand no regional plan to support Wairoa was discussed. Police/FENZ/St John advised they were on standby. NZDF advised had relocated to Napier and would not send support to Wairoa in advance of the event.

At 01.01pm: Northern Schemes Manager posted an update to the 'Surveillance and Field Reports' discussion in the HBRC MS Teams 'Asset Management' Channel: 106

Update of works at planned new mouth location looking from Kopu road by the sewage outlet. 2 diggers and 2 bulldozer on site prepping new mouth location.

At 01.11pm: Northern Schemes Manager posted a further update to MS Teams: 107

#### Update:

Current mouth still open. Dozer on site has moved gravel closer to mouth so it can be stockpiled then used to close old mouth.

<sup>&</sup>lt;sup>106</sup> MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', Tue 25-6-2024 1.11pm.



<sup>&</sup>lt;sup>104</sup> Email, Tue 25-6-24 9.57am.

<sup>&</sup>lt;sup>105</sup> MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', Tue 25-6-2024 1.01pm.

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At 02.00pm: Wairoa CDEM Controller sent a warning message to community via Facebook. Activated marae. At 3pm and 4pm sent updated emails to Controller list.

At 04.00pm: HBRC conducted an operations meeting. The situation with regard to Wairoa, including the progress toward opening a new river mouth, was again discussed.

At 04.12pm: Prydes contacted the Northern Scheme Manager via text message with a photo showing progress of the work on the bar and saying:<sup>108</sup>

Some photos just taken. Realistically, we will need another full day tomorrow.

At 04.20pmThe Northern Schemes Manager also posted the progress update on the 'Surveillance and Field Reports' discussion in the HBRC MS Teams 'Asset Management' Channel at, during the Operations Meeting.<sup>109</sup> The photos provided by Prydes (below) showed that they had excavated to water level on the upstream side of the beach crest.





At 04.41pm: The Northern Schemes Manager replied to Prydes at 4:41pm, stating:110

Talked to the rest of the team. Let them know the progress of works. River levels are expected to remain high till end of Thursday and swells expected to start dropping after mid-day Wednesday. If we can't aim for opening by low tide tomorrow, carry on and aim for opening on Thursday.

<sup>&</sup>lt;sup>108</sup> MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', Tue 25-6-2024 4.20pm. <sup>109</sup> Text message, Mon 24-6-2024 4.12 pm.



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<sup>&</sup>lt;sup>107</sup> Text message, Mon 24-6-2024 4.12 pm.

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At 04.55pm: the HBRC River Engineer sent an update on the action plan to Prydes via email:111

Kia Ora Team, Following on from the 4pm meeting Tuesday 25/06/2024 Prydes to start moving Material over the course of the day - Lowering height of beach crest by the new opening - Moving material closer to the old mouth for closing Meeting will be held in the afternoon to discuss feasibility of continuing with Mouth relocation. Depending on decision based on information on Tuesday afternoon the Wednesday timetable will adjust Update questions to answer on Tuesday Afternoon 1600 Lowtide: 1300 Wednesday - Sea State: High - On Shore Wind: High -Earthworks completed (m3): Minimal-Moderate -Prydes Comments: 1 more day of earthworks required Outcome: - Further monitoring over the night of river levels and rain - Decision to carry on with the process of moving the river mouth with below provisions Wednesday 26/06/2024 0600 With input from flood modeler Decision will be made on site between HBRC POC and Contractor POC to either. · Option 1; Proceed with Opening and closing the River mouth at Low tide · Option 2; Proceed with earthworks over the course of the day, and monitor for a Thursday Opening If Option 2 is the best way to move forward for a successful opening of the bar; If Over the course of the day due to weather, tide or any other unforeseen event work becomes unsafe to proceed, All equipment, machinery and personnel are to proceed to a safe location Over the course of the day, an opportunity to relocate the mouth becomes available HBRC and Contractor POC will make decision on site to proceed with the opening

At 06.00pm: HBRC sent weather update in relation to other areas. The email indicated other locations would be updated later in the evening.



<sup>&</sup>lt;sup>110</sup> Email, Tue 25-6-24 4.55pm.

At 07.46pm: MetService updated their Orange Severe Rain Warning:

#### Area: Hawke's Bay north of SH5

- Period: 25hrs from 8:00pm Tue to 9:00pm Wed

- Forecast: Expect a further 120 to 160 mm of rain inland on top of what has already fallen, and 60 to 90 mm about the coast. Peak intensities of 10 to 15 mm/h from this evening to Wednesday morning. Note, further periods of rain or showers are forecast through the remainder of Wednesday, Thursday and Friday, but intensities and amounts are expected to be much lower. Moderate chance of upgrading to a Red Warning. Impact: Streams and rivers may rise rapidly. Surface flooding, slips, and difficult driving conditions possible. Action: Clear your drains and gutters to prepare for heavy rain. Avoid low-lying areas and drive cautiously.

At 09.00pm: Wairoa CDEM Controller advised Mayor that two marae were on standby.

At 09.48pm: the HBRC Flood Forecaster sent an updated forecast via email:<sup>112</sup>

Met Service has reissued the ORANGE warnings, similar to previous. Their update is near the bottom of this message. We've had quite a few GREEN level alarms. The summary is below the rainfall charts. This satellite image provides a good overview of the low of the east cape and the effect it has bringing the rain on to the land. Here's a summary of rain that has fallen in the last 12 hours (8am to 8pm June 25). The above rainfalls in 12 hours are generally around a mean annual event, i.e. we'd expect to see this rainfall around once per year, which translates to river levels that are generally within the main channel. There are still a few places to keep closer watch on, since Met Service are predicting continued rain (Wairoa 120-160mm inland, 60-90mm coastal, Rest of Hawkes Bay, 70-100 mm inland, 50-80 mm elsewhere.

#### Wairoa:

Forecast levels at Town bridge could get up to the playground level on the d/s side, and remain there for most of Wed. Note the forecast is tracing slightly below the observed data. This assumes the mouth is partially blocked, which it is likely to stay in that state due to the high seas. Wairoa at Town Bridge - forecast and observed. Wairoa at Yacht club - Forecast. Kopuawhara – observed only – still below alert level, however additional rain at night could increase sharply. Kaiwaitau Road still at risk.

#### [...]

Swell - Reports of some waves cresting the beach at Westshore. No damage reported. Swell height around 2.5 m. Forecast is for swell to increase until around midnight – Haumoana to Clifton, as well as Mahanga still at risk.



<sup>&</sup>lt;sup>111</sup> Email, Tue 25-6-24 9.48 pm.



<sup>&</sup>lt;sup>112</sup> Email, Wed 26-6-24 3.59 am.

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At 04.04am: the Wairoa CDEM Controller started to call at risk residents and mobilised first responders and the local CDEM network. An evacuation centre was opened and Facebook messages sent, telling the community to self-evacuate or call 111.

At 04.36am: Email update from HBRC Group Controller re flooding in other areas. No mention of support for Wairoa.

At 04.53am: the Wairoa Controller called the HBRC river modeller and updated him re flooding and evacuations.

At 05.09am: the Wairoa Controller called Mayor and asked him to come to the EOC.

At 05.15am: the Wairoa Controller called 111 to activate the FENZ siren to wake the town residents..

At 06.12am: an Emergency Mobile Alert was sent, advising Wairoa residents:

FLOODING - Evacuate immediately

CIVIL DEFENCE FLOOD WARNING: there is serious flooding in Wairoa. River levels rising rapidly.

LEAVE NOW if you are in MACLEAN STREET, KOUPU ROAD and ALL STREETS IN BETWEEN. If possible, stay with friends or whanau, or go to the CIVIL DEFENCE CENTRE at War Memorial Hall. Call 111 if you are in imminent danger. Take pets with you, take grab bags with supplies for your whole household including pets if safe to do so.

DO NOT DRIVE OR WALK THROUGH FLOOD WATERS. The water may have washed away parts of the road and may contain debris. Treat all flood water as contaminated and unsafe. STAY AWAY from flooded areas until Civil Defence gives the all-clear.

https://www.facebook.com/wairoadistrictcouncil Issued at 06:10 on June 26, 2024.



Overnight, the observed rainfall exceeded the most recently forecast rainfall at a number of sites and large swells arrived as forecast. High tide occurred shortly before 9am. .

At 06.37asm: the Mayor of Wairoa declared a state of local emergency, as a result of significant flooding in the vicinity of Kopu Rd in the lower reaches of the Wairoa River. .

At 06.53am: the HBRC Chair exchanged text messages with the Mayor of Wairoa.114

HBRC Chair: Morena Craig if you need anything today just let me know. Nic is updating me regularly. Aroha to the evacuated whanau.

Wairoa Mayor: Will do just called a state of emergency

At 06.56am: the Northern Schemes Manager posted an update to the 'Surveillance and Field Reports' discussion in the HBRC MS Teams 'Asset Management' Channel.<sup>115</sup>

> Wairoa bar update: Contractor to assess condition this morning. If river level and swell conditions are deemed unsafe for the health and safety of the contractor at site, they will stop works on the Bar opening. Otherwise, the plan is to carry on working towards a planned mouth opening for Thursday around midday. Will get some photos if safe to do so as light comes out.

At 07.42am: the Mayor of Wairoa exchanged text messages with the HBRC Chair and Chief Executive<sup>116</sup>

Wairoa Mayor: Hey, pass onto [HBRC Flood Forecaster] that his comms are fantastic. I have so much faith in that man

HBRC Chair: Of course he and the rest of the team. Happy to pass on. Keep the faith e hoa.

HBRC CE: If only he could stop it raining

Wairoa Mayor: Exactly, we need to get past high tide and we should see a huge improvement

HBRC CE: Yeah all watching that closely

At 08.19am: Prydes sent a text message the Northern Schemes Manager: 117

We are stopping work. Our machines are flooded and it is unsafe to proceed

Immediately following the event, three mouths were open in the Wairoa River bar. <sup>118</sup> One of those was to the east of where Prydes had been working (50m wide),<sup>119</sup> one opposite Pilot Hill (200m wide) and one where the existing mouth had been (50m wide).

At 03.00pm: CDEM Controllers' meeting Wairoa Controller asked if Wairoa should selfevacuate now. Told that worst had occurred and river mouths had opened.

<sup>&</sup>lt;sup>118</sup> Confirmed later reviewing arial footage of the bar.



<sup>&</sup>lt;sup>113</sup> Text message exchange, Wed 26-6-2024, from 6.53 am

<sup>&</sup>lt;sup>114</sup> MS Teams 'Asset Management' Channel Post in 'Surveillance and Field Reports', Wed 26-6-2024 6.56am

<sup>&</sup>lt;sup>115</sup> Text message exchange, Wed 26-6-2024, from 7.42 am.

<sup>&</sup>lt;sup>116</sup> Text message, Wed 26-6-2024 8.19 pm

<sup>&</sup>lt;sup>117</sup> Email, Wed 26-6-24 6.38pm

# Appendix Two: Current Wairoa Lagoon and River Mouth Instructions HBRC (SOPs)

Lagoon & River Mouth Instructions

#### 261-004 Wairoa River

Definition: Te Wairoa Höpüpü Hönengenge Mätangirau.

#### Contacts

Mouth monitored periodically by Northern Scheme Manager.

#### Contractors

Pryde Contracting open the mouth (Ph. 06 838 4040 or Ph. 06 837 7805). If they are unable to then it is their responsibility to arrange an alternative contractor (Hamish Pryde, Ph. 027 442 6386 or, Sam Pryde, Ph. 027 585 1766).

#### Maximum water level

11.65m which is the top of the timber piles of the old pier our by the coast.

#### Notes

If the mouth is partially closed or restricted, or is not in a very good position, then attention to weather forecasts and sea conditions is required as mechanical openings of this mouth may normally involve quite an extensive operation, sometimes-taking days to complete.

The potential for damage due to flooding caused by a river mouth blockage is significant. Numerous small pastoral and residential properties in the Kihitu and Kopu Road areas are also affected. Access Roads into Whakamahi and Kihitu become blocked.

After taking the above into consideration, a significant head of water in the river along with favourable sea conditions is required for a successful mechanical opening. Ideally, all openings should be undertaken at low tide with a relatively flat sea.

Excavated material is to be stockpiled clear of the mouth to minimise chances of re-blocking.

The mouth's position is highly dynamic, generally migrates west of centre toward Pilot Hill. Notable erosion occurs when mouth is at Pilot hill carpark.

For a successful realignment of the Wairoa bar, river needs to completely close, gain a substantial head of water, and then we recut to the old pile lines.

"The shinale was readily scoured out with a flood but was quickly dammed back by heavy seas sweeping in during gales from the south, the direction from which the East Coast gets its worst weather. Continuous efforts were made to improve the situation, usually consisting of waiting for a complete block, and then, when the river was banked up, making a new cut and letting the water go. This however would usually only last a few weeks or months before the shingle would pile up again and the bar would be blocked again."9



<sup>9</sup> Crossing the Bar, Joy Hippolite, August 1999. Chapter 3 – Land Taken For Harbour Purposes, page 33 20X047.pdf) from Lambert, p 469; S D ocum 0201%2 Waters, Richardsons of Napier, A Century Of Coastal Shipping 1859-1959, Richardson and Company Ltd, Napier 1959, pp 31-32.

R/ISCHEMESI261 River Mouth/Lapoon and River Mouth Instructions/2024/Lapoon and River Mouth Instructions (DRAFT updated 19 May 2024).docx



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HAWKE'S BAY

#### Lagoon & River Mouth Instructions





Location and Access



Access is available from both sides of the river. From the Northern side go through the gate and follow the track off Kihitu Road (it follows around the toe of the hill). Southern side access is off the end of Whakamahi Road.

Ideal Location of Mouth



R/SCHEMES/261 River Mouths/Lagoon and River Mouth Instructions/2024/Lagoon and River Mouth Instructions (DRAFT updated 19 May 2024).docx



# Appendix Three: HBRC Asset Management Group internal briefing slides June 25, 2024



- <Summary of recommended actions>
- Deploy pumps to Haumpana
- Wairoa River mouth relocation (Hari, JS)
- Monitoring assets.



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Appendix Four: Technical Report Trigger Action Plan for monitoring and managing the Wairoa River mouth.<sup>119</sup>



<sup>&</sup>lt;sup>119</sup> Second Draft Tonkin + Taylor Review, p 24.



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8.2	Predator Free Te Kinga Future Governance
Author	Sue Davies, Predator Free Te Kinga Project Lead; Shanti
	Morgan Group Manager Environmental Science
Authorizer	Darryl Lew, Chief Executive

Public Excluded No

### **Report Purpose**

The purpose of this report is to provide an update to the Resource Management Committee on the Predator Free Te Kinga project and provide recommendations on future options for its governance.

### **Report Summary**

Predator Free Te Kinga (PFTK) is nearing its goal of eliminating possums from Mount Te Kinga. With infrastructure in place and the final removal efforts underway, confirmation of possum eradication is expected by early 2025.

PFTK is approaching the end of its Provincial Growth Fund grant from Predator Free 2050 Ltd., which requires all funds to be allocated by July 2025. However, additional funding is needed, as the rates secured through the Long-Term Plan will only partially cover ongoing operations. Potential future funding sources include biodiversity offsetting, crowdfunding, and philanthropic contributions, none of which are accessible if the project continues to be managed by the Regional Council.

Legal advice has been sought on transitioning PFTK's administration to a charitable entity. This would allow for more flexibility in committing current funds to future work and pursuing external funding from sources like mining and quarrying companies.

Looking ahead, there is a proposal to broaden PFTK's scope by expanding the target species beyond possums, extending the project's geographical reach and reassessing the value proposition to encompass a wider range of outcomes including climate resilience and the value of West Coasts forests in their ability to sequester carbon for New Zealanders. Achieving these long-term goals will require stable and diversified funding.

To maximise funding opportunities and ensure flexibility, transitioning PFTK to a charitable entity is recommended. Council's direction is sought on whether the project

should remain under its governance or establish a new charitable entity for its administration.

### Recommendations

### It is recommended that the Committee:

- 1. Receives the report.
- 2. Approves the recommendation that the PFTK project is administered by the formation of a new charitable trust (Option two)

### **Issues and Discussion**

### Background

PFTK aims to eliminate possums and suppress other predators, such as rats and mustelids, from Mount Te Kinga, thereby enhancing the survival of native flora and fauna and boosting biodiversity and ecosystem health on the mountain. The Project consists of private land 11,200ha, DOC estate 6,000ha, WCRC land 19ha, District council land 23ha and other government land 2,000ha with a total project area of over 17,000ha.

The project follows the Zero Invasive Predators (ZIP) 1080 to Zero protocol for efficient predator removal, using natural and human-made barriers to prevent reinvasion. Lakes Brunner and Poerua act as natural barriers, while rivers like the Crooked River offer additional protection. Farmland serves as a partial barrier, bolstered by an extensive network of traps. Internet-connected traps and monitoring devices around the mountain help quickly detect and address any reinvasion, providing real-time updates to staff. The project layout and infrastructure are detailed in the map shown in Figure 1.

Community engagement has been highly positive, with strong support from local farmers. In return, the project helps manage TB and feral pigs, both of which can negatively affect farming and biodiversity. Lake Brunner School, Papa Taio Earth Care, and Tai Poutini Polytech have also participated through field trips and volunteering, fostering youth involvement in environmental stewardship and the predator-free movement.



Figure 1: Map showing the elements of the Predator Free Te Kinga Project.

## **Current situation**

The funding agreement with Predator Free 2050 Ltd. (PF2050 Ltd.), which covers the project's operational costs, is set to expire on July 20, 2025. Predator Free 2050 Ltd. have confirmed they do not have any funding for the maintenance of the Predator Free Te Kinga project or expansion at this time. It is unlikely that this situation will change during the term of the current government. DOC have also declined to cash fund the project as the area does not rank highly in their Biodiversity Management Unit system. However, DOC are continuing to provide in kind support valued at \$2,000 per year. In kind support is also being provided by the local community, polytech and Papa Taiao earthcare which has been valued at \$135,000 per year.

The project currently holds a capital asset value of over \$585,000 (EXCLGST) in the form of Sentinel traps, DOC150 traps, AT-520Ai traps, FTP Solutions Yarn Mesh System, CeliumCommunicationNode system, 2xUBCO electric farm bikes, drone with thermal camera, firearms and thermal scopes, trail cameras, motolures, backpacks, office and communications equipment, and track building tools which have been purchased through the PF2050 Ltd. grant.

The total funding provided over the five-year period (2020-2025) was \$4.4 million. As of June 30, 2024, \$2.1 million has been spent, and an additional \$1.6 million is expected to be used during the 2024-25 year, leaving a balance of \$700,000. According to the funding agreement, these remaining funds must be fully committed by July 2025. Legal advice has indicated that if PFTK transitions to a separate entity, it could allocate these funds for contracted work with VCS for the 2025-26 period.

To ensure the project has funds to maintain project infrastructure and protect the outcomes it has achieved through the initial PF2050 Ltd. Investment, it is essential that Council decide on how to administer the project within the next three months. This ensures enough time to establish a governing body should the decision require the team to do so.

Two options for the future governance of the Predator Free Te Kinga project have been provided for the Resource Management Committee to consider with Risk and opportunities highlighted.

## Considerations

The two options for future governance of the project are proposed:

- 1. Continue to administer PFTK with council as the governing body
- 2. Create a new charitable entity to administer and govern PFTK

Option one: Continue to administer PFTK with council as the governing body				
Risks	1. Limited Funding Flexibility: Council projects face restrictions			
	on accessing diverse funding sources, such as industry			
	partnerships, philanthropic donations, and crowdfunding, as			
	some donors or corporate partners may be reluctant to			
	contribute to government-run initiatives due to perceived			

	conflicts of interest or unwillingness to support a public institution. Council will not be able to utilize the \$635,000 PF2050 Ltd. funding to pay staff directly, resulting in the requirement to pay back unspent funds <b>Impact:</b> This could limit the project's ability to secure adequate funding, hindering expansion or long-term sustainability.
	<ol> <li>Funding Gap: Rates funding for the PFTK project starts in Year three of the councils LTP, this means no funding is secured for the 2025/2026 FY. Additionally, the funding secured only accounts for 50% of operational costs and therefore an additional \$100,000 will need to be sourced to service project infrastructure and maintain project gains.</li> <li>Impact: Diversified funding will be more difficult if the project is administered by the regional council.</li> </ol>
	<ol> <li>Conflicts of Interest: The council's role in regulating industries such as mining, agriculture, or forestry could create actual or perceived conflicts of interest, particularly if those industries are potential funding partners or stakeholders in predator control efforts.</li> <li>Impact: This may reduce opportunities for private-sector engagement, impacting funding and partnership opportunities.</li> </ol>
Opportunities	<ol> <li>Access to Public Funding: A council-governed project can access public sector funding, including grants, rates, and other government resources that may not be available to independent entities.</li> <li>Benefit: This can provide a stable baseline of funding for operational needs, ensuring continuity of the project.</li> </ol>
	2. <b>Alignment with Broader Environmental work:</b> The council's governance provides a strong alignment with regional and national environmental work, such as biodiversity conservation, water quality, and pest control initiatives.

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**Benefit:** This alignment can strengthen the project's political and regulatory support, as well as facilitate collaboration with other public sector programs. 3. Community Trust and Accountability: As a public institution, the council can offer a high degree of transparency, governance, and accountability, which can help maintain public trust and ensure compliance with legal and environmental standards. **Benefit:** This could enhance community engagement and support, particularly from those who value the council's role in managing regional environmental issues. 4. Long-Term Stability: Council-led projects may benefit from long-term institutional stability, reducing risks of project collapse due to management changes or external economic pressures. Benefit: This could provide a secure foundation for the project to plan and implement long-term goals, such as species reintroductions or habitat restoration.

Option two: Create a new charitable entity to administer and govern PFTK					
Risks	<ol> <li>Administrative and Legal Burden: Establishing a new charitable entity requires significant administrative effort, including legal registration, governance structuring, financial reporting, and compliance with regulations such as the Charities Act 2005.</li> <li>Impact: The process can be time-consuming and resource-intensive, diverting focus from conservation work to administrative tasks, particularly in the initial stages.</li> </ol>				
	<b>2. Start-Up Costs and Overhead:</b> Setting up and maintaining a charitable organization involves ongoing costs, including accounting, auditing, legal advice, and				

	3.	staff or volunteer management. These overheads may consume a portion of the project's available funds. Impact: If not managed efficiently, start-up and operational costs could strain resources, potentially impacting the funding available for on-the-ground predator control activities. Capacity and Expertise Challenges: Running a charitable entity requires strong governance and operational expertise in areas such as fundraising, accounting, legal compliance, and human resource management. A lack of capacity in these areas could hinder the effectiveness of the new entity. Impact: This could result in mismanagement of funds, legal risks, and difficulties in attracting donors or partners, undermining the long-term sustainability of PFTK.					
	4.	<b>Difficulty in Establishing Reputation:</b> As a new organisation, the charitable entity would need to build its reputation from scratch. It may face challenges in gaining donor trust, securing partnerships, and establishing credibility within the conservation community. <b>Impact:</b> Delays in establishing a strong reputation could affect fundraising efforts and limit the project's ability to attract volunteers and community support.					
	5.	<b>Governance Complexity:</b> Developing an effective governance structure, including forming a board of trustees and defining roles and responsibilities, can be complex.Poor governance could lead to internal conflicts, slow decision-making, or unclear leadership. <b>Impact:</b> Ineffective governance may hinder the entity's ability to make strategic decisions, secure funding, or implement the project efficiently.					
Opportunities	1.	<b>Greater Autonomy and Flexibility</b> : A new charitable entity would provide PFTK with full autonomy over decision-making, project management, and strategic					

direction. This would allow the project to set its own priorities and timelines, free from external influence. **Benefit**: This autonomy could lead to more efficient project execution, as decisions can be made quickly and aligned directly with the project's long-term goals.

2. Access to Diverse Funding Sources: As a registered charity, the new entity would be able to access a wider range of funding streams, including philanthropic donations, grants from charitable foundations, corporate sponsorships, and crowdfunding. Tax benefits for donors would further encourage contributions.

**Benefit**: This could significantly increase financial stability, enabling the project to grow, expand geographically, or broaden its scope to include the control of other predator species.

- 3. Strong Community and Stakeholder Engagement: A locally governed charitable entity could foster strong community ownership and involvement. It would likely appeal to local stakeholders, volunteers, and businesses, enhancing collaboration and support for the project. Benefit: This could increase community buy-in, leading to more volunteer participation, local donations, and partnerships with businesses or educational institutions, helping to create a stronger foundation for long-term success.
- 4. **Tailored Governance Structure**: By creating a new charitable entity, PFTK can establish a governance structure that aligns with its specific needs and goals. The project could appoint a board of trustees with expertise in

conservation, fundraising, legal compliance, and community engagement. **Benefit:** A well-designed governance structure would ensure effective leadership, clear roles and responsibilities, and accountability, ultimately leading to better management and oversight of the project. 5. Brand Building and Visibility: Creating a standalone charitable entity allows PFTK to build its own brand, separate from any other organization or government body. This would give the project a distinct identity, which can be promoted to the public, donors, and media. **Benefit:** A strong brand identity would help PFTK gain recognition and support at local, national, and even international levels, potentially opening doors to partnerships, media attention, and high-profile donors. 6. Long-Term Sustainability: A dedicated charitable entity focused exclusively on PFTK's goals can ensure the longterm sustainability of the project. The entity can pursue multi-year funding agreements, develop an endowment, or secure long-term partnerships to ensure ongoing predator control and biodiversity enhancement efforts. Benefit: This could provide a stable foundation for expanding the project's scope, ensuring that the goal of predator eradication and ecosystem restoration remains achievable over the long term.

When evaluating the two options the best recommendation depends on balancing flexibility, funding potential, community engagement, and long-term sustainability.

With this considered, option two, the creation of a new charitable entity offers the greatest long-term benefits for PFTK, aligning with its unique needs while providing the autonomy and flexibility necessary for achieving its conservation goals.

This option offers the right balance of autonomy, funding potential, and community engagement to ensure long-term success. This model will give PFTK the independence it needs to expand, attract diverse funding sources, and continue making a meaningful impact on predator control and biodiversity on Mount Te Kinga. The risks of administrative burden and initial reputation-building can be mitigated through careful planning, experienced leadership, and leveraging existing community relationships. Additionally, the ability to seed fund the start up through committing funds within the existing PF250 Ltd contract significantly reduces the risks.

### Significance and Engagement Policy Assessment

There are no issues within this report which trigger matters in this policy.

8.3	Consents Quarterly Report
Author	Leah Buchanan Consents & Compliance Business
	Support Officer; Steven May, Consents Manager
Authoriser	Jocelyne Allen, Group Manager – Regulatory & Policy;
	Darryl Lew, Chief Executive
Public Excluded	No

### **Report Purpose**

The purpose of this report is to update the Resource Management Committee regarding the activities in the Consents department for the month of July, August and September 2024 and to provide an update on current matters.

### **Report Summary**

Consents quarterly report to advise the Council of recent consenting actions made under regional plans and the Resource Management Act 1991, in accordance with Council procedures and delegations.

### Recommendations

### It is recommended that the Committee resolve to:

1. Receive the report.

### **Consent Processing Quarterly Statistics**

Applications lodged	-	60
Applications withdrawn	-	2
Applications returned incomplete	-	2
Decisions granted	-	47
Processed within statutory timeframe	-	31
Section 37A(4) approvals provided	-	13
Section 37A(5) approvals provided	-	3

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# Issues and Discussions

# Site Visits

15/07/2024	RC-2024-0085 Sanlac Holdings Ltd Kokatahi	Site visit for agricultural discharge associated with a consent application.
15/07/2024	RC-2024-0083 Weststone 2012 Limited Kanere Tramway	Site visit associated with the application for dry bed gravel consent.
24/07/2024	RC-2024-0090 Charelston to Westport Coastal Trail Trust Westport	Site visit for the final section of the Kawatiri cycle trail, undertaken with Rachel Clark and Rebecca Inwood representing BDC
25/07/2024	Pre-application site visits Goldriver Limited	Site visit for gold mining activities application not lodged due to no payment being made.
01/08/2024	RC-2024-0091 Western Dynasty Holdings Ltd	Site visit with Compliance officer associated with consent and mine Manager to observe progress on site.
06/08/2024	RC-2019-0012-V2 AJ Gillman Kaniere	Site visit associated with resource consent application for Gold mining activities.
06/08/2024	RC-2024-0089 Westland Schist Ltd Hokitika, Kaniere Tramwa	Site visit to investigate Gravel extraction. Y
06/08/2024	RC-2020-0143 Phoenix Mining Ltd Stafford	Site visit to assess the affected parties.
15/08/2024	RC-2024-0100 MS Moore Contracting Buller River	Site visit associated with resource consent application for Gravel extraction.

15/08/2024	RC-2024-0082 Buller District Council Darkies, Charlston	Site visit associated with road reinstatement works.
15/08/2024	RC-2024-0106 Cherie Inglis Kaiata	Site visit to investigate application to discharge onsite sewage effluent
19/08/2024	WDRC-2024-0098 Rocky Mining Ltd Takutai area	Alluvial gold mining Site visit with applicant to discuss proposal.
23/08/2024	RC-2024-0099 Climo Family Trust Stuart Chapman Drive	Site visit to investigate the application for erosion potential and mitigation.
29/08/2024	RC-2024-0105 GC Smith Contracting Ltc Stillwater	Site visit associated with resource aconsent application for Gravel extraction.
10/09/2024	RC-2024-0108 Maruia Hot Springs Maruia	Site visit associated with consent application for water take for Hydro electricity and general use.
13/10/2024	Preapplication Marty von Ah Kotatahi	Site visit for composting proposal.
20/10/2024	RC-2024-0115 Rollem Covers Limited Lake Brunner	Site visit to investigate the site and wetlands.

## Non-notified Resource Consents Granted

Thirty-eight non-notified resource consent applications were granted between 01 July to 30 September 2024.

WDRC-2024-0080	То	under	rtake minin	g, includiı	ng earth	nworks,
H & N Mining Partnership	in	the	Westland	District,	Adair	Road,
Adair Road, Ruatapu	Ruc	atapu	•			

RCF-2024-0059 Caanan Farming Dairy Limited Wallace Road, Haupiri To discharge dairy effluent to land where it may enter surface and groundwater for stockholding areas, DS405 Haupiri.

RC-2024-0074 NZ Transport Agency Waka Kotahi State Highway 6, Awarua, Haast River To disturb the bed of the Awarua/Haast River to undertake river protection works.

To permanently divert water in the Awarua/Haast River associated with river protection works.

To temporarily discharge sediment to water associated with protection works, Awarua/Haast River.

RC-2023-0105 West Coast Regional Council Hokitika River Stopbank Stage 1b To undertake earthworks associated with upgrading and reinforcing the Stage IB section of the Hokitika River flood protection stopbank.

To remove vegetation and undertake earthworks within the riparian margin of an unnamed creek associated with the works.

To remove vegetation and undertake earthworks within the riparian margin of an unnamed creek associated with the works.

Incidental discharge of sediment to an unnamed creek associated with the upgrading works. RC-2024-0084 Dr Michael Snowden Haast-Jackson Bay Road To undertake earthworks, Haast-Jackson Bay Road, Okuru.from a domestic dwelling at 655 Marsden Road, Greymouth.

RC-2024-0077 KiwiRail Holdings Limited Rail bridge 45 Stillwater-Ngakawau Line, Blackwater River To undertake earthworks and vegetation clearance, including in riparian margins, to construct a new rail bridge and remove the old one, Blackwater River.

To disturb the bed and banks of the Blackwater River including erection of structures and scour protection works, associated with the removal of the old bridge and construction of a new bridge and temporary crane pad, Blackwater River.

To temporarily and permanently divert water while constructing the new rail bridge and removing the old bridge and from river protection structures, Blackwater River.

RC-2024-0069 East West Developments Limited Main South Road, Paroa To discharge stormwater to land in circumstances where contaminants may enter water from a subdivision at Paroa.

RC-2024-0066 Samuel O'Connell & Daya Mason 114 Beechwater Drive, Moana To discharge treated onsite sewage wastewater to land in circumstances which may result in contaminants entering water from a dwelling at Beechwater Estate, Moana.

RC-2024-0087 Michael Sullivan Bullock Creek, South Westland To disturb and excavate the dry bed of Bullock for the purpose of removing gravel.

RC-2024-0072 NZ Transport Agency Waka Kotahi State Highway 6, Mahitahi River To disturb the bed of the Mahitahi River to undertake river protection works.To divert Buller River water from river protection works. To permanently divert water in the Mahitahi River associated with river protection works.

To temporarily discharge sediment to water associated with protection works, Mahitahi River.

RC-2024-0085 Sanlac Holdings Limited Kokatahi To discharge dairy effluent to land in circumstances which may result in contaminants entering water near DS285, Kokatahi

RC-2024-0064 Darrin Hampton Fuchsia Creek Road Marsden To undertake earthworks associated with alluvial gold mining at Fuchsia Creek Road and No Name Road, Marsden, and within MP 60982.

To take and use surface water for alluvial gold mining activities within MP 60982 at Fuchsia Creek Road and No Name Road, Marsden.

To take and use ground water for alluvial gold mining activities within MP 60982 at Fuchsia Creek Road and No Name Road, Marsden.

To discharge sediment-laden water to land associated with alluvial gold mining within MP 60982 in circumstances where it may enter water at Fuchsia Creek Road and No Name Road, Marsden. Agenda Resource Management Committee

RC-2023-0069 Westreef Services Limited Section 10 and Parts 8-9 Block XII Rahu Survey, Springs Junction To discharge sewage effluent including greywater from the Springs Junction public toilets to land at Section 10 and Parts 8-9 Block XII Rahu Survey, Springs Junction.

RC-2024-0097 Mervyn Flemming Unnamed dredge pond, Stafford. To take and use surface water for alluvial gold mining purposes, Stafford.

RC-2024-0078 Andrew & Heather Eggers 11 Fairburn Way, Charleston To discharge treated onsite sewage wastewater to land in circumstances which may result in contaminants entering water from a dwelling at 11 Fairburn Way, Charleston.

RC-2024-0075 Grey Gravels Limited Dredge Road, Grey River Bed To excavate and disturb the dry bed of the Grey River for the purpose of gravel extraction (area defined as 'Grey River Dry Alluvial Deposits' in Annexure 1).

To excavate and disturb the associated 'gravel fan dry bed' of the Grey River for the purpose of gravel extraction (area defined as 'Gravel Fan Deposits' in Annexture 1).

RC-2024-0081 Peter & Jackie Gurden 53 Rutherglen Road, Paroa To discharge treated onsite sewage wastewater to land in circumstances which may result in contaminants entering water from a dwelling at 53 Rutherglen Road, Paroa.

RC-2022-0129 Da Ba Jin Kuang Ltd Cape Terrace Road, Kumara	To undertake earthworks associated with alluvial goldmining activities at Cape Terrace Road, Kumara.
	To take and use groundwater (via seepage into a pond) for alluvial gold mining processing purposes.
	To discharge water containing contaminants (sediment) to land in circumstances where it may enter groundwater.
RC-2023-0117 Pouakai Timbers Limited Cascade River	To disturb the wet and dry bed of the Cascade River associated with the removal of logs.
	To temporarily discharge sediment to water associated with the removal of logs from the Cascade River.

RC-2023-0028 Arthur Gillman Mahitahi River To disturb the bed of the Mahitahi River associated with log salvage.

RC-2024-0089 Westland Schist Limited Hokitika River and Kokatahi River To disturb and excavate the dry bed of the Hokitika River for the purpose of extracting gravel.

To disturb and excavate the dry bed of the Kokatahi River for the purpose of extracting gravel.

RC-2024-0095 Big Ball Holdings Limited

To disturb the bed of an unnamed tributary of the Waitangitahuna River, near Whataroa

Whataroa associated with culvert replacement/construction.

To undertake earthworks within the riparian margin of an unnamed tributary of the Waitangitahuna River, near Whataroa associated with culvert replacement/construction.

To replace/construct a culvert in the bed of an unnamed tributary of the Waitangitahuna River, near Whataroa.

RC-2023-0125 Waiatoto River Safaris Limited Waiatoto River To undertake earthworks and vegetation clearance within riparian margins to construct and maintain a boat ramp and gabion baskets, Waiatoto River.

To disturb the bed of the Waiatoto River to construct and maintain structures including a boat ramp and gabion baskets.

RC-2024-0100 M S Moore Contracting Limited Berlins, Buller River Bed To excavate and disturb the dry bed of the Buller River for the purpose of gravel extraction.

RC-2024-0102 NZ Transport Agency Waka Kotahi State Highway 6, Waikukupa River To disturb the bed of the Waikukupa River to undertake river protection works.

To permanently divert water in the Waikukupa River associated with river protection works.

To temporarily discharge sediment to water associated with the maintenance of river protection works, Waikukupa River.
RC-2024-0082 Buller District Council Darkies Terrace Road, Charleston	To undertake vegetation clearance and earthworks, including on slopes in excess of 25 degrees, associated with road reinstatement works, Darkies Terrace Road, Charleston.
RC-2024-0096 Forest Habitats Limited Hokitika River	To disturb and excavate the dry bed of the Hokitika River for the purpose of extracting gravel.
RC-2024-0018 Department of Conservation Kahurangi National Park, Heaphy Grea Walk	To discharge onsite sewage wastewater to land in circumstances which may result in contaminants entering water at the Heaphy Staff Hut.
	To discharge onsite sewage wastewater (blackwater) to land in circumstances which may result in contaminants entering water at the Lewis shelter Hut.
	To discharge onsite sewage wastewater (blackwater) to land in circumstances which may result in contaminants entering water at the Lewis shelter Hut.
RC-2024-0094 Buller District Council Punakaiki Beach Camp	To discharge treated sewage effluent to land in circumstances which may result in contaminants entering water from the Punakaiki Beach Camp.
RC-2024-0065 NZ Transport Agency Waka Kotahi State Highway 7, Snowy River	To disturb the bed of the Snowy River to undertake river protection and diversion works.

To temporarily and permanently divert water in the Snowy River associated with river protection and diversion works.

To temporarily discharge sediment to water associated with protection and diversion works, Snowy River

To disturb and excavate the dry bed of the Taramakau River for the purpose of removing gravel.

RC-2024-0105 GC Smith Contracting Limited

Stillwater, Grey River Bed

MBD Contracting Limited

RC-2024-0103

Taramakau River

To excavate and disturb the dry bed of the Grey River for the purpose of gravel extraction.

RC-2024-0113 Angus Bisset Haast River, South Westland

RC-2024-0062 Stafford Green Ltd Buller River To disturb and excavate the dry bed of the Haast River for the purpose of removing gravel.

To disturb and excavate the dry bed of the Buller River for the purpose of removing gravel.

To disturb and excavate the wet bed of the Buller River for the purpose of removing gravel.

RC-2024-0090 Charleston to Westport Coastal Trail Trust Section 7 of the Kawatiri cycle trail from the Totara River to the Nile River.

To undertake earthworks and vegetation clearance including within 50m of the Coastal Marine Area and within riparian margins associated with the construction and maintenance of a section of cycle trail, Totara River to Nile River

To disturb the bed of an unnamed creek associated with the construction and maintenance of a section of cycle trail, Totara River to Nile River.

RC-2024-0099 KJ & KH Climo Family Trust Greymouth

To undertake earthworks and vegetation disturbance within the Greymouth Stuart & Chapman Drive, Karoro – Earthworks Control Area at 48B Stuart & Chapman Drive.

River from river protection works.

RC-2024-0073	To disturb the Coastal Maring Area for the
Watersedge Stoneweavers Ltd	purpose of stone removal, at 3 Mile Beach.
3 Mile Beach- Houhou to Kaihinu	

RC-2024-0112	To disturb the bed of the Grey River to	
KiwiRail Holdings Ltd	construct and occupy space with river	
Grey River, Dobson	protection works.	
	To permanently divert water in the Grey	

## **Changes to Consent Conditions**

Atarau

Nine applications to change consent conditions were granted in the period 01 July to 30 September 2024.

VS-2017-1374-V1 Variation to change the stand de		
Cecil Sell		
Arawhata River		
RC-2015-0078-V3	Variation to include approved organic	
Araitika Farm Limited Partnership	biomass types.	

WS-2017-984-V1 Sam & Daniel Ash Hokitika River	Variation to change the stand design.
RC-2022-0047-V1 SM Lowe Contracting Limited Mokihinui River	Variation to increase gravel take.
RC-2020-0141-V1 Westroads Limited Old Christchurch Road	Variation to decrease gravel take.
RC-2021-0155-V2 Westroads Limited Taramakau, Hokitika & Turnbull Rivers	Variation to decrease gravel take.
RC-2016-0104-V1 Blacktopp Mining Ltd Stafford	Variation to change mining number
WS-2017-1493-V1 Elon Young & Allan Clark Arawhata River	Variation to change stand design
RC-2024-0016-V1 Richard & Sandy Lockhart Lake Kaniere Road	Variation to change the location and size of sand trench.

## Consents processed and granted on behalf of Westland District Council

Three consents granted for the period 1 July to 30 September 2024.

WDRC-2024-0080 H & N Mining Partnership Adair Road, Ruatapu	To undertake mining, including earthworks, in the Westland District, Adair Road, Ruatapu.
RC-2024-0097 Mervyn Flemming Unnamed dredge pond, Stafford.	To take and use surface water for alluvial gold mining purposes, Stafford.
RC-2022-0129	To undertake earthworks associated with

Da Ba Jin Kuang Ltd Cape Terrace Road, Kumara alluvial goldmining activities at Cape Terrace Road, Kumara.

## Four Consent applications lodged still yet to be finalised on behalf of Westland District Council

RC-2024-0091 Western Dynasty Ltd Stafford Loop Road	Gold mining activities
WDRC-RC2024-0098 Rocky Mining Limited Staffor Loop Road	Gold mining activities
RC-2024-0120 Geoff Mills Awatuna	Gold mining activities
RC13071-V2	Variation to increase mining area

## Considerations

Humpries

## Implications/Risks

Henry Adams Contracting Limited

There are no implications/risks associated with this report.

#### Significance and Engagement Policy Assessment

There are no issues within this report which trigger matters in this policy.

#### Tangata whenua views

In line with the implementation of Paetae Kotahitanga ki Te Tai Poutini Partnership Protocol in the Mana whakahono ā Rohe Resource Management Act Iwi Participation Arrangement, Poutini Ngāi Tahu are provided with the weekly consent applications received report.

This provides opportunity to alert Council of any resource consent applications received in the weekly table that are of particular interest to them. Iwi do alert

Council of their interest in applications and are provided a copy of applications and made affected parties where appropriate.

## **Financial implications**

There are no financial implications associated with this report.

## Legal implications

All consents are prepared in accordance with the Resource Management Act and appropriate staff reports compiled to show the reasoning towards granting the consent.

Legal implications for all consents are a risk of judicial review by any party. A judicial review would involve the court reviewing a decision made by the Council and determining if correct process was followed or not. Should a review find that the correct process was not followed then the Court would recommend the process be revisited and reassessed. The main implications would be additional cost to the Council and reputational damage.

No judicial reviews have been instigated to date.

8.4	Compliance Monitoring Quarterly Report		
Author	Chanelle van Rooyen, Senior Compliance Officer;		
	Chris Barnes, Manager Compliance		
Authoriser	Jocelyne Allen, Group Manager, Regulatory & Policy		
Public Excluded	No		

## **Report Purpose**

For the Resource Management Committee to be kept informed of activities in the Compliance and Monitoring section, and to provide an update on current matters.

## **Report Summary**

Compliance and Monitoring quarterly report.

## Recommendations

#### It is recommended that the Committee resolve to:

• Receive the 21 June 2024 to 25 September 2024 report of the Compliance Group.

#### **Issues and Discussion**

#### Site Visits

A total of 258 site visits were undertaken during the reporting period, which consisted of:

Activity	Number of Visits
Resource consent monitoring	124
Miningcompliance & bond release	61
Complaints	50
Territorial Authorities consent monitoring	23
Dairy farm	0

This report covers the period of 21 June 2024 to 25 September 2024.

• A total of 50 complaints and incidents were recorded.

#### **Non-Compliances**

There were 10 non- compliances that occurred during the reporting period. Activity	Description	Location	Action/Outcome	INC/Comp
Black Sand Mining	Unconsented "night-time" mining with sand being removed from beach.	Hokitika	Meeting held with those involved and educated them with Rules. Compliance staff will keep monitoring.	Complaint
Tyres	Dumping and burial of tyres and vehicle on private property.	Mitchells	Tyres and vehicle removed – verbal warning issued.	Complaint
Fuel Station	Accidental fuel spill. Fuel entered the stormwater and creek, killing fish and crawlies.	Kumara	Ongoing enquiries underway. Property owner had already undertaken remedial actions to prevent reoccurrence.	Incident
Sand/gravel take from beach	Buckets of sand/gravel removed from beach with tractor.	Paroa	An educated approach was taken.	Complaint

Gravel extraction	Gravel extracted as permitted activity, however, conditions for permitted activity rule not met.	Haast	An educated approach was taken.	N/A – Staff observation
Gravel extraction	Gravel observed being extracted from wet riverbed.	Greymouth	Officer visited the site and found the extraction was in breach of consent conditions. Enforcement action has been taken.	Complaint
Gold mining	Notification of sediment laden water discharged from mine.	German Gully, Awatuna	Compliance Officers visited the site and are currently making further enquiries.	Complaint
Gold mining	Dirty water discharge from old mine tunnel	Arthurs- town	Compliance Officer visited site – Consent holder advised they will seal off the old mine tunnels with gravel. Recommendatio n on enforcement action to follow.	Complaint

Landfill	Notification from public that mud from a slip is being discharged into Mill Creek.	Mill Creek, Paroa	Compliance staff visited site and found thick mud being tipped where it entered a waterway, flowing into Mill Creek. Enforcement action was taken.	Complaint
Gold Mining	Area of disturbance exceeded limit allowed in consent.	Goldsbo- rough	Compliance Officer visited and found disturbed area being exceeded by nearly 6HA. Enforcement action recommendatio n to follow.	N/A – Staff observation

## Other Complaints/Incidents

Note: These are the complaints/incidents assessed during the reporting period whereby the activity was found to be compliant, or non-compliance is not yet established at the time of reporting.

Activity	Description	Location	Action/Outcome	INC/Comp
Landfill	Discharge of odour to air	Coal Creek, Greymouth	An Officer visited the area and the notifier, no odour could be detected.	Complaint
Whitebait	Resident concerned about a structure been built next to the Saltwater Creek, believes it is part of a whitebait stand.	Paroa	Officers visited the site and found that a structure had been built well back from the river on road reserve, this was in line with their LTO with the DC.	Complaint
Farming	2 x dead cows dumped in Creek	Barrytown	Compliance Officer advised that Notifier, due to heavy rain that they would have washed down and that it was just the insides of the cow mainly, not a whole carcass as seen in the photos sent in. Advised notifier to let us know if still there after heavy rain and if it happens again.	Complaint
Landfill	Notification of objectionable odour coming from landfill site	Coal Creek, Greymouth	An Officer visited the area and the notifier, no odour could be detected.	Complaint

River works	Call received around concerns that digger might be working in riverbed to divert river.	Maruia	Officers visited the site and found that no digger work had been undertaken and no sign of digger in the river. Advised property owner of consent requirements if they were to divert the river.	Complaint
Freighting	Report of effluent in roadside drain.	Hokitika	Officers visited site and found no evidence of effluent present in drain, but potential for run off from wash down area. Notice of inspection left for owners to contact Officer to discuss washdown area.	Complaint
Landfill	Notification of objectionable odour coming from landfill site	Coal Creek, Greymouth	An Officer visited the area and the notifier - no odour could be detected.	Complaint
Gold mining	Resident concerned a mine is blocking her view and they are not rehabilitating as they go.	Hokitika	Compliance Officer is making arrangements for a site visit.	Complaint
Gravel	Notification of sediment & dead mussels near Shenandoah River	Hokitika	Officers visited site, could not locate dead shellfish in sediment, river appeared in good condition.	Complaint

Farming	Notification about potential effluent in Blackwater Creek	Blackwater Creek	Officer visited site; effluent was not reaching creek but had potential to. In communication with farmer to manage the risk.	Complaint
Earthwork s	Notification of earthworks in riverbed.	Dee Creek, Buller River	Officer visited site, could not see any works being done in the creek, but some clearing has occurred either side of the bridge on the side of the road.	Compliant
Trade	Notification of rubbish being burned on trade yard	Gladstone	Officers visited site, no one on site and fire put out. Content appeared to be cardboard, glass bottles and soda cans. Contacted company owner and advised of Rule 17 in Air Quality Plan – he would advise his staff.	Complaint
Fishing	Resident notification of rotting fish smell coming from fishing company, for over 2 hours.	Westport	Officer visited site, no smell detected. Noted that this site has no consent with WCRC.	Complaint

Gold mining	Potential unconsented mining in remote location	Milltown	Officers, accompanied by MBIE staff visited site. No one on site and no evidence of site being operational at time of visit. Notice of inspection left in digger.	Complaint
Unknown	Notification of dirty water in Little Grey River and Casolis Creek	Mai Mai	Site visited, water running clear, no one around undertaking any works. Phone message left with farm manager to follow up.	Complaint
Residentia I	Resident notified neighbour had raised their land by 2m, now flooding her property.	Hokitika	Advised the homeowner, in the first instance she is to contact the contractor, who installed the raised foundation and question them about why the drainage is no longer working, and secondly to contact the WDC and advise them of the flooding and the fact that the sewer pipe is now covered over and do they need a consent to undertake the work. Also requested that she sends photographs of the flooding after the next big rain.	Complaint

Transport	Effluent discharge from stock truck on side of road	Otira	Transport company contacted and site visited. Discharge was minimal and away from the river.	Complaint
Mining	Notification of dirty water with scum on the surface in Fox Creek.	Arahura Valley	Officer attended site, found a small slip upstream by mining site. Dirty water being pumped into creek and heavy rain caused pump to be covered. Pump turned off immediately. Downstream clear the following days.	Complaint
Sand removal	Notification of tractor removing black sand from beach	Stafford Beach	Tractor operator was spoken to, and it was established that the sand was taken from the private land and not the beach and this was confirmed with an investigation at the open bund which showed clearly that the tractor had not been down on the beach collecting sand.	Complaint
Unknown	Notification that water was running dirty in Little Grey River	Little Grey	Officer investigated and found the river running clean in different locations.	Complaint

Gravel	Notification that gravel extraction took place with riparian margin pushed back and vegetation being destroyed.	Mokihinui River	Officer visited site and found the concerns to be valid. Enquiries are under way.	Complaint
Unknown	Notification of possible sewage going into creek.	Runanga	Officer visited site, could not see or smell sewage, only slight sulfur smell detected.	Complaint
Unknown	Notification of container with acid left near lagoon	Westport	Officer visited, found container, unable to identify who it belonged to. Container removed by Officer and disposed off at approved landfill.	Complaint
Demolition	Concern raised by resident that waste from demolition site is being taken to a farm past Shantytown.	Shantytown	Officer visited site – consented landfill and site assessed as compliant at the time of visit.	Complaint
Gold mining	Notification that neighbouring mining company is dumping rocks on new fence and flooding her property.	Adair Road	Site visited by Officers. Fence line found to be within consented area. Miner agreed to remove rock and dirt from the fence and will drain water from paddock. Officer will do follow up visit.	Complaint

Unknown	Notification received of rainbow/oil film in water	Blaketown Lagoon	Site visited by Officer, could see a residue/film on the water at the slipway and the rocks were all greasy. Source not identified. Follow up visit showed water cleared up.	Complaint
Trade – air pollution	Complaint received regarding fumes from a boat repair business	Blaketown	Officer visited the site, they found a makeshift spray booth set up with an air extraction pipe discharging out the door, the job that they were carrying out was completed. The business was educated on the rules around discharging and that if they wanted to carry this out again they would need to consider a resource consent if they cannot contain the fumes.	Complaint
Farming	Notification of 400L of curdled milk discharged into Harris creek	Kaniere- Kowhitirangi	Officer visited site – creek had cleared up. Spoke to alleged offender and took an education approach.	Complaint

Mining	Notification received, stating that unconsented mining was occurring at the Hokitika airport.	Hokitika	Officer spoke with mine manager who stated they are just preparing the area to be mined while they are waiting for the consent to be approved.	Complaint
Transport	Self-notified – truck carrying 20 tonnes of coal had rolled its trailer on the Buller gorge.	Buller Gorge – Berlins	Officer attended – vehicle retrieved, and no coal entered the river.	Incident
Gold mining	During Compliance monitoring visit, Officers found sediment laden water being discharged directly into the Grey river.	Mai Mai	Water samples were taken, and enquiries are now being made.	N/A

## Update on Previously Reported Ongoing Complaints/Incident

Activity	Description	Location	Action/Outcome	INC/Comp
Dairy Farming	During a routine visit to a dairy farm, it was found that three of the farm's stock crossings had not been bridged.	Rotomanu	The farmer is currently in the process of applying for resource consent to address this issue.	N/A
Tourism	The Council was notified regarding a concrete slip way constructed in the Waiatoto River and the earthworks involved.	Waiatoto	A tourism operator constructed a concrete slipway and undertook earthworks in the Waiatoto River without obtaining the necessary resource consent. While the operator has been offered the opportunity to apply for a retrospective consent, it has not yet been granted. Further communication is ongoing to determine their intentions.	Complaint

River Works	The Council was notified about a bulldozer working in McCullough's Creek.	Hari Hari	The site was visited. It was found that a bulldozer had moved a small amount of gravel to the creek bank to form bank protection. Since this has happened, the persons carrying out this work have submitted a consent application to be able to continue any works in the creek bed. The applicant still is to have affected parties sign off.	Complaint
Gold Mining	While investigating an illegal discharge to a waterway, Compliance Officers discovered a second unauthorised discharge into Waimea Creek through another tributary.	Awatuna	This breach as well as several other breaches by this company are still under investigation.	N/A
Meat Processing	Self-notification from the operator relating to their yearly environmental reports not being credible for the past three years.	Kokiri	The breaches by this company are still under investigation.	N/A

Green waste	During a proactive visit to the area, it was observed that a green waste dumping area continued to operate adjacent to a District Council transfer station in Ross.	Ross	The community group has since submitted a resource consent application for processing. Currently awaiting affected parties' approval.	N/A
Flood Protection Works	During a proactive gravel extraction visit, a Compliance Officer found that demolition waste had been deposited into the riverbed behind recent flood protection works.	Sergeants Hill	The investigation is still active.	N/A
Landfill	A complaint was made regarding odour emanating from a landfill in Coal Creek.	Coal Creek, Greymouth	The EPA has issued the company abatement notices to cease the discharge and remove the unlined treatment pond. The EPA has now concluded its enquiries with this consent holder.	Complaint

Creek Diversion	An applicant for a creek diversion was found to have completed the diversion without a resource consent being granted.	Dobson	The applicant is working with the district council to resolve this issue.	N/A
Ford Crossing	The installation of a ford crossing with multiple culverts at a creek crossing point has been found to not comply with National Environmental Standards for Freshwater regulations.	Waitangita huna River, Whataroa	During a site visit, a Compliance Officer and a Consenting Officer observed that the ford is eroding the creek bed, likely reducing fish passage. An investigation is currently underway to determine the full extent of the issue.	Complaint
Gold Mining	Notification of the mining operation exceeding noise requirements.	Hokitika	The site has had several site visits with no record of excessive noise being determined, the consent conditions and the consent application are being reviewed to determine if the site is complying, the investigation is ongoing at the time of reporting.	Complaint

Sewage Discharge	The Council was contacted about a septic tank outlet pipe near a creek emitting a foul smell.	Te Miko, Punakaiki	Two Officers located the pipe and found that nothing was emitting from it, further enquires are still to be made at the time of preparing this report	Complaint
			preparing this report	

## Mining Work Programmes and Bonds

The Council received 11 mining work programmes during the reporting period.

Date	Mining Authorisation	Holder	Location	Approved Y/N
15/07/2024	RC-2017-0003	Elect Mining Limited	German Gully	Ν
01/08/2024	RC09059	P&R Mining	Waiuta Road, Blackwater	Ν
27/08/2024	RC-2022-0133	Elect Mining Limited	Chesterfield	Ν
29/08/2024	RC12212	S,R,M& S Rothera, Marshall, Craw and Craw	Chinaman's Terrace	Y
30/08/2024	RC-2023-0008	Phoenix Minerals Limited	Quinns Terrace, Kumara	Ν
02/09/2024	RC-2017-0092	Fitzherbert Investments Limited	Southernwood Road, Arthurstown	Ν
03/09/2024	RC-2017-0003	Elect Mining Limited	Awatuna	Ν
05/09/2024	RC-2021-0096	Arahura Resources Limited	Kennedy Creek/Palmers Creek Road	Y
06/09/2024	RC-2014-0174	M&M Aggregates Limited	New River Road, Camerons	Ν
13/09/2024	RC-2022-0129	Da Ba Jin Kuang Limited	Cape Terrace Road, Kumara	Ν
11/09/2024	RC-2022-0128	Blacktopp Mining	Adairs Toad	N

Further information has been requested for the Mining Work Programmes above, showing as not yet approved.

Date	Mining Authorisation	Holder	Location	Amount
30/08/2024	RC-2022-0129	Da Ba Jin Kuang Limited	Cape Terrace Road, Kumara	\$7,000
02/09/2024	RC-2021-0161	BRM Developments Limited	lanthe Forest	\$400,000
04/09/2024	RC-2015-0133	Grifis Mining Limited	Sergeants Hill	\$10,000

## The following bond is recommended for release:

Mining Authorisati on	Holder	Location	Amount	Reason For Release
RC-2021- 0100	Charleston Coal Limited	Charleston Darkies Creek Mine	\$20,000 surety bond	Final restoration has been carried out and approved by the landowners and assessed by a compliance officer as meeting the consent requirements.

## Considerations

## Implications/Risks

There are no implications/risks associated with this report.

## Significance and Engagement Policy Assessment

There are no issues within this report which trigger matters in this policy.

## Tangata whenua views

Compliance monitoring and enforcement activities are carried out in line with the implementation of Paetae Kotahitanga ki Te Tai Poutini Partnership Protocol in the Mana whakahono ā Rohe Resource Management Act Iwi Participation Arrangement.

## **Financial Implications**

There are no financial implications associated with this report.

## Legal implications

All compliance activities are carried out in accordance with the Resource Management Act.

Staff recommendation reports are compiled for any enforcement and reviewed by Management.

Enforcement actions are subject to appeal provisions. No appeal/s against enforcement actions have been instigated during this reporting period.

8.5	Quarter One Biosecurity Report
Author	Shanti Morgan, Group Manager Environmental
	Science; Emily Rutherford-Jones, Biosecurity Co-
	ordinator
Authoriser	Darryl Lew, Chief Executive
Public Excluded	No

## **Report Purpose**

The purpose of this report is to provide councils Resource Management Committee with a quarter one update on the WCRC biosecurity annual operating plan 2024/2025.

## **Report Summary**

The West Coast Regional Council have developed an annual operating plan to deliver the objectives set within the Regional Pest Management Plan 2018-2028.

The intent of this report is to ensure that councils Resource Management Committee are informed on the delivery of projects and of any emerging risks and issues.

The 2024/2025 biosecurity annual work programme includes 13 objectives, all of which are On Track (Green) to be completed by June 30, 2025.

Additionally this report provides councillors with the Memorandum of Understanding signed by the Regional Council sector, Department of Conservation and Biosecurity NZ (MPI).

## Recommendations

## It is recommended that the Committee:

- 1. Receives the report.
- 2. Notes the progress on the annual Biosecurity operational plan
- 3. Notes the Regional council, Biosecurity NZ & DOC MOU (Attachment three)

## Issues and Discussion

#### Background

The West Coast Regional Council has a regional leadership role under the Biosecurity Act to implement the regions, Regional Pest Management Plan (RPMP). The purpose of the plan is to minimise the actual or potential impacts of identified pests to the region's economic, social, cultural, and environmental values.

The West Coast Regional Council's RPMP intends for the council to provide regional biosecurity leadership by promoting alignment of pest control operations, promoting public support for pest management, administering the RPMP, and facilitating communication and co-operation between all parties involved in pest management both within the region and externally.

## **Current situation**

To improve biosecurity leadership within the region the biosecurity team have been working to deliver thirteen objectives with 45 deliverables\* and 64 Key Performance Indicators under the biosecurity annual operating plan. Commentary has been provided under each objective with a Red, Amber, Green (RAG) status to indicate how each objective is tracking against the plan.

\*Deliverables that are '**On Track'** with no update for this quarter have been removed from the table of each objective.

**Objective one:** To detect incursions of introduced aquatic weeds within the West Coast Lakes.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Annual lake	Number of lakes	Eight	On	This quarter the staff met with
surveillance	surveyed		Track	project partners from DOC, to
				identify priority lakes for
				surveillance, 13 lakes were
				identified. At six of the 13 lakes
				eDNA will be used as a
				complementary survey method.

		Next quarter the team will
		procure diver services, and the
		lake surveillance operations are
		scheduled for quarter three.

**Objective Two:** To operate an annual surveillance program to detect incursions of introduced marine species in priority areas.

Deliverable	КРІ	Annual	Status	Commentary
		Target		
Annual Marine	Number of locations	One	On	The Westport Harbor has been
surveillance	surveyed for marine		Track	selected, with this year's
	pests			surveillance being a baseline.
				Methods will involve a general
				scan of the area and any
				structures present. Reference
				plots will also be established to
				monitor changes over time.

**Objective three:** To identify new or upcoming pest threats to the region.

Staff received reports of breeding wild guinea pig population of approximately 30 individuals in the Blackball township (figure 1). The local DOC office was contacted, and a brief risk analysis suggests this population does not pose a significant biosecurity threat.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Identify and	Percentage of	100%	On	Species searched for include Old
map pest	identified new to		Track	man's beard, Gunnera, Darwin's
species of	region pest plants			Barberry, Knotweed, Chocolate
interest, new to	mapped in the			vine, & Woolly Nightshade.
region or	Biosecurity GIS			
otherwise.	system			Staff also conducted a search
				for aquatic invasive species
				Alligator weed (not known to be
	Percentage of			present in the Region) following
	identified RPMP	100%		a positive eDNA detection.

	exclusion and		Preliminary results suggest this is
	eradication		a native species of the same
	species mapped		genus.
	in the Biosecurity		
	GIS system		
Identify and	Percentage of	100%	All Illegal green waste dumping
map sites where	identified green		locations found were mapped
green waste is	waste sites		using the GIS collection field tool.
illegally dumped	mapped		
Wilding kiwifruit	Percentage of	100%	Staff have provided all known
locations –	known wilding		Wilding Kiwifruit locations to
record locations	kiwifruit sites		Kiwifruit Vine Health.
of wilding	provided to		
kiwifruit and	Kiwifruit Vine		
provide to	health with		
Kiwifruit Vine	landowner		
Health	permission		
Pest plant	Number of	2	Surveillance visits this quarter
surveillance at	surveillance visits		have occurred in the following
key risk areas	at key risk areas in		management areas: Westport,
	each		Inangahua, Greymouth and
	management unit		Brunner – Haupiri.
	to determine the		
	presence of new		
	pest plant		
	infestations.		
Identify	Percentage of	50%	Two management units,
containment	Management		Waitaha and Harihari, have
boundaries for	units where		been surveyed for Wild Cherry
wild cherry	containment		infestations. Within these areas
(Prunus	areas are		only three locations identified
serrulata)	mapped		showed evidence of wilding
			populations likely spread by
			natural means rather than
			human activity.
			Based on current knowledge of
			infestation extent a containment
			boundary for Wilding Cherry
			populations will to be

		established south of the
		Waitaha River.



Figure 1: Photos taken from Main Street Blackball of wild guinea pig population of about 30 individuals.



Figure 2: Invasive alligator weed (*Alternanthera philoxeroides*) - not known to be present in the West Coast Region and very limited distribution across the South Island.

# **Objective Four.** Provide general information, advice, and awareness on identification, impacts and control of biosecurity threats to the West Coast Region

Biosecurity staff are developing information resources on the region's priority pest plants. These resources will be provided to local contractors who conduct parks and vegetation maintenance for the district councils. The information will also be included in new homeowner packages, alongside stormwater and septic tank information.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Deliver	Number 'Weed of	Ten	On	Three "Weed of the Month"
Biosecurity	the Month' articles		Track	articles have been published to
media	published to the			the Newspaper. Pest plants
releases	Newspaper and			highlighted include Banana
	WCRC social media			Passionfruit, Chocolate Vine and
	channels by June			Gunnera (Figure 3)
	2025			
	Number of	Two		An article on eradication pest
	biosecurity articles			Woolly Nightshade was included
	in rates newsletters			in the most recent rates
				newsletter.



Figure 3: Two of the 'Weed of the month' articles posted to the messenger this quarter

**Objective Five**: To prevent the spread of freshwater weeds and pests by influencing the behavior of high-risk users.

Deliverable	КРІ	Annual	Status	Commentary
		Target		

Raise	Maintain and Place	75%	On	Biosecurity New Zealand have
awareness of	CCD signage at		Track	been holding meetings
freshwater	angler access points			providing up-to-date
pests	and boat ramps			information and resources to
threatening	across the region.			regional councils and requesting
our water				feedback on long term
bodies	Number of Biosecurity			management of Exotic
amongst	NZ advocacy	10		Corbicula (Golden clam). The
landowners	materials distributed			CCD project co-funding from
and visitors in	to tourist operators			Biosecurity NZ funding is yet to
our region.	Number of face-to-			be confirmed.
	face interactions with			
	local water users at			The Polytech have been
	freshwater-related	100		engaged with regarding the
	events and popular			implementation of the in-person
	waterbodies.			Check, Clean, Dry advocacy
				work. The idea being high risk
				users are activity based, making
				it well suited to students
				undertaking the Outdoor
				Education course.
				Details on the implementation
				year's advocacy program will be
				finalized in quarter two.
				· ·

**Objective Six:** To exchange information with other Regional Councils on all aspects of biosecurity, including policy, management, funding and research opportunities.

Staff attended the New Zealand Biosecurity Institute's annual NETS (National Education and Training Seminar) conference hosted this year in Invercargill. The Group Manager Environmental science presented on the work that the Vector Control Services have undertaken over the past 20 years and the contribution the council has made to controlling possums on the West Coast.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Ensure attendance at all	Percentage of	75%	On	One Biosecurity Working
scheduled Biosecurity	scheduled		Track	Group meeting was

Working Group (BSWG)	BSWG		attended in Wellington this
meetings.	meetings		quarter.
	attended		
Ensure attendance at all	Percentage of	75%	One Bio-managers meeting
scheduled Bio	scheduled Bio		was held this quarter and
Managers Working	managers		was attended online.
Group meetings.	meetings		
	attended.		

**Objective Seven:** Facilitate collaboration and knowledge exchange among entities managing landscape-level weed control on the West Coast, including DOC and WCRC, to develop best practices and align biosecurity efforts.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Ensure Weeds	The number of Weed	Four	On	One Weeds Working Group
Working	working group		Track	meeting was held this quarter.
Group	meetings held per			Attendees included DOC, District
meetings are	year.			Council and Local Contractors
held regularly	Percentage of			who conduct pest plant control
though the	Biosecurity reports	100%		in the Region. Upcoming work
year.	provided to weed			plans, Advocacy resources and
	working group			innovations were discussed.

**Objective eight:** Over the duration of the RPMP, prevent the establishment of any of the listed pests within the West Coast, to prevent any adverse effects on economic wellbeing, the environment, human health, or recreational values.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Record all	Percentage of	100%		No exclusion species were
exclusion pest	exclusion pest plant			observed while conducting
plant	reports recorded			regular surveillance this quarter.
sightings	Percentage of reports			
	followed up on	100%		No sightings of exclusion pests
				were reported to staff this
				quarter.

**Objective nine:** Over the duration of the Plan eradicate all listed pests from the West Coast to eliminate adverse effects on economic wellbeing, the environment, human health and recreational values.

Deliverable	КРІ	Target	Status	Commentary
Record all	Percentage of	100%	On	No new eradication species
Eradication	Eradication pest plant		Track	were observed while conducting
pest plant	reports recorded			regular surveillance this quarter.
sightings	Percentage of reports			No sightings of eradication pests
	followed up on	100%		were reported to staff this
				quarter.

**Objective Ten:** Contain the listed pests into land already infested by these pests and reduce the population in these areas over time. The progressive containment program acknowledges that some areas of pest species are more widespread than others.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Record	Percentage of	100%	On	All new locations of progressive
Progressive	progressive		Track	containment pests reported this
containment	containment			quarter were recorded.
pest plant	pest plant			
reports	reports			
	recorded			

**Objective eleven:** Contain the progressive containment species within the Priority Management Areas and reduce the population in these areas over time.

Deliverable	KPI	Annual	Status	Commentary
		Target		
Record	Percentage of	100%	On	All new locations of progressive
Progressive	reported		Track	containment pests observed this
containment	progressive			quarter were recorded using
(PMA) pest plant	containment			field GIS collection tools.
sightings	(PMA) pest plant			
	reports recorded			

**Objective Twelve:** Utilize Biocontrol to manage pest plants in the region beyond standard management practices (manual and chemical control).

Deliverable	KPI	Target	Status	Commentary
Release and	Number of	One	On	This year two biocontrol agents for
transfer biocontrol	new		Track	Old Man's Beard (RPMP progressive
agents.	biocontrol			containment species), are available
	agents			to NBC members purchase from
	released			Manaaki Whenua Landcare Research
	and/or			(MWLR).
	transferred			
	within the			One agent is a gall-forming mite,
	region			expected to slow the plant's growth
Monitor	Number of	Three		and cause premature dieback of
establishment of	biocontrol			shoots, And the other d Sdw Fly whose
agents.	sites			larvae leed on and damage the
-	monitored			agents intend to reduce the overall
				invasiveness of Old Map's Reard and
				support a transition to long-torm
				management of the species (Figure
				4).
				The intention is to purchase an agent
				co-funded by the Department of
				Conservation and aims to
				complement DOC's long-standing
				aerial control efforts in the Buller
				Gorge.
				, in the second s
				This Quarter staff conducted field
				surveys at 3 sites in the Buller gorge
				and 2 sites around Greymouth to
				identify and select locations suitable
				for the release. Old man's beard
				samples were collected and sent to
				MWLR for analysis to confirm absence
				of the gall-forming mite agent in the
				region and the need for a release.

			Results from the surveys found the
			OMB mite had self-introduced to the
			region from releases that took place
			in Canterbury. Found in low numbers 1
			site in the buller gorge and even
			lower numbers at 1 site in Greymouth
National Biocontrol	Attend	100%	Staff have provided input into the
Collective (NBC)	annual NBC		National Biocontrol prioritisation
and provide input	meetings to		tool ranking 189 pest plant species
for the NBC	discuss		with relevance to the West Coast
prioritisation tool	national		Region.
which ranks pest	biocontrol		
plants of	efforts with		Annual Collective meeting is to
importance to	other		occur next quarter in October.
members and	members		
guides research	regional		
and development	councils.		
of new agents.			



Figure 4: (left) showing Old man's Beard Sawfly Larve damaging an Old man's beard leaf. (right) showing impact of Old Man's Beard Gall mite to new shoots.

**Objective Thirteen:** The Council will undertake control work on these pests as they are identified within the region.

Contracted services have been procured and control work is scheduled to take place from quarter two onwards.

Deliverable KPI	Target	Status	Commentary	
-----------------	--------	--------	------------	
Progressively	Percentage of	100%		Five large infestations of Purple
---------------	-----------------------	-------	-------	-----------------------------------
contain	identified sites			Pampas have been controlled
purple	controlled at least		On	using a drone north of Hector.
pampas	once north of Hector		Track	
across the				
West Coast	Percentage of			
	identified sites			
	controlled at least			
	once south of the	100%		
	Wanganui River on			
	private land			
	Percentage of			
	identified sites			
	controlled at least			
	once on private land			
	in the Brunner-	75%		
	Haupiri, Grey Valley,			
	Reefton, Inangahua,			
	Maruia, and Coast			
	Road Management			
	Units controlled			
Progressively	Number of control	Three		First round of control in the
contain	operations in			Kongahu Swamp is planned for
Parrots	Kongahu			late October.
Feather				
across the				
West Coast	Percentage of			
	known sites where	100%		
	control is			
	undertaken at least			
	once			

#### Considerations

#### Significance and Engagement Policy Assessment

There are no issues within this report which trigger matters in this policy.

#### Attachments

Attachment One: Information on the Old Man's Beard Mite

Attachment Two: Information on Old Man's Beard Sawfly

Attachment Three: Regional sector Biosecurity MOU

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#### OLD MAN'S BEARD MITE Aceria vitalbae



The Biological Control Of Weeds Book - Te Whakapau Taru: A New Zealand Guide

ISBN 0-478-09306-3

#### History in New Zealand

The old man's beard mite is native to Europe from France to Romania. It was first imported into containment by Manaaki Whenua - Landcare Research in 2011. However, it was difficult to establish a colony in the laboratory, so host specificity testing was carried out in Serbia. Permission to release this mite was granted by the EPA in 2018. The first viable laboratory colony was established with the importation of new material from Serbia in 2019, and was removed from containment after receiving MPI approval a few months later. This mite has not been used as a biocontrol agent anywhere before. Field releases began in August 2021 and will continue until the mite is widely established.

#### How would I find/recognise it and what is its lifecycle?

You won't be able to see these microscopic mites with the naked eye. Under a microscope, they are creamywhite in colour and cigar-shaped. The best way to detect their presence is to look for the distinctive deformed leaflets that form as a result of the mites' feeding.

Due to their small size, the life cycle of this mite is not yet well known. Nonetheless, it is expected that several overlapping generations of mites live, breed and feed in the buds of old man's beard over spring and summer when the shoots and leaves are growing. The mites will disperse by a phenomenon known as 'ballooning' where they move with air currents to colonise new old man's beard plants. We already have evidence that the mites can travel at least 100 m from the original colony. In winter, when old man's beard is dormant, the mites live predominantly inside the stem buds.

There are other species of larger mites naturally found on old man's beard in New Zealand that are visible with the naked eye. The only way to confirm the presence of the old man's beard mite is to look for the leaf growth abnormalities.



Mites shown under a microscope



Deformed leaflet



How does it damage old man's beard?

Feeding by the mites induces growth abnormalities, or galls on the old man's beard developing shoot tips and leaves. The leaves will look atrophied and curled. The formation of galls reduces the growth rate of the weed and may cause shoots to die off prematurely. The deformed leaves can easily be confused with damage done by late-frost events and leaf roller caterpillars. The deformed leaflets are easy to differentiate from other old man's beard agents.

See old man's beard leaf fungus, old man's beard leaf miner and old man's beard sawfly.

#### Will it attack other plants?

The old man's beard mite is highly host specific and it is highly unlikely that it will attack anything other than old man's beard (*C. vitalba*). An exotic, ornamental *Clematis* species (*Clematis stans*) may be attacked to a lesser degree. Host specificity tests indicate that the risk to native *Clematis* species and other ornamental species is insignificant.

#### How effective is it?

It is too soon to know what impact these mites will have in New Zealand. However, the closely related broom gall mite, *Aceria genistae* has started to have major impacts on broom since it was introduced in 2008. We hope to see similar results with the old man's beard mite in coming years. Eriophyid mites (such as the broom gall mite and the old man's beard mite) have been increasingly studied for their use in biological control programmes around the world and are now viewed as potentially highly host-specific and damaging agents.

#### How can I get the most out of it?

The mites disperse by ballooning on wind currents. Like the broom gall mite, we believe the old man's beard mite will readily and quickly disperse to surrounding infestations from the original release sites.

#### How do I select a release site?

Read *Guidelines for selecting release sites for biocontrol agents* and *Guidelines for releasing old man's beard mite.* 

#### How do I collect it for release at other sites?

Redistribution strategies are still to be developed. It is not advisable to cut infected plant material to relocate the mites because they will die very quickly on cut shoots as they dry out. Instead, it is likely that whole infested plants will need to be moved, and perhaps that potted plants will need to be grown especially for this purpose, an activity which will require an MPI exemption.

#### How do I manage the release sites?

Avoid any activities that will interfere with the mites, such as herbicide application. If you need to undertake control measures, then avoid the release site.

For further information contact: Arnaud Cartier Manaaki Whenua - Landcare Research PO Box 69040 Lincoln 7640 NEW ZEALAND Email: cartiera@landcareresearch.co.nz Ph (03) 321 9891



#### **OLD MAN'S BEARD SAWFLY** Monophadnus spinolae



The Biological Control Of Weeds Book - Te Whakapau Taru: A New Zealand Guide

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#### **History in New Zealand**

Old man's beard sawflies were first imported into containment by Manaaki Whenua - Landcare Research in 1997 from central Europe, after being approved for release in New Zealand in 1996. Field releases began in 1998, but difficulties with massrearing this agent meant that it was only released at a limited number of sites. In 2015, a survey found a population of the sawfly established at one site near Nelson where it remains rare. The reasons for poor establishment of the sawfly are not well understood, but predation by wasps and/or genetic bottlenecks during the rearing process could have hampered successful establishment.

In 2018, a new population of the sawfly from Serbia was imported into containment at Lincoln. Improvement of the rearing method led to the release of thousands of larvae in the Canterbury Region, in the Waipara District. This population established successfully, and growing number of adults and larvae have been observed over recent vears. Collection and redistribution to other sites have started in 2023. The sawfly has not been used as a biocontrol agent anywhere else in the world.

#### How would I find/recognise it and what is its lifecycle?

Adult females sit on the undersides of the leaves and are often hard to see. You are more likely to see the males when they are swarming around the plant searching for females to mate with. It is easy to tell the sexes apart. The males are smaller (about 5-6 mm long) than the females (about 6-8 mm). Both look like small black flies, but their body colouration is different. Female sawflies have a chunky orange thorax and yellow abdomens with a black saw-like ovipositor that looks like a sting at the tip of their abdomen. The males have a small, dark-coloured thorax and their abdomens are black above and yellow below. The first generation of adults can be seen flying during warm days in November and the second generation can be seen from early February to mid-March, while larvae can be found until April.

Adult females live for 2 to 3 weeks, producing 50-60 whitish eggs laid singly on the underside of leaves. Although quite large (2 mm), the eggs are not easy to find. Larvae hatch after about 2 weeks, resembling creamy white caterpillars with 3 dark dots on the head, growing up to 2.5-3 cm long.





Sawflies are easiest to spot at this stage and, being white, the larvae stand out quite easily against a green backdrop. Search in areas where you can see damaged leaves and balls of black frass. The only insect on old man's beard that you could confuse the larvae with is the occasional pale green leafroller caterpillar. However, sometimes other insects damage the leaves in a similar way, so to be sure that the old man's beard sawfly is responsible, you would also need to see the white larvae and/or their black frass.

In southern central Europe the old man's beard sawfly has two generations per year. The first generation of larvae produced in the spring, drop to the ground and pupate for a few weeks, emerging as adults by mid-summer. The second generation remain in their pupating cocoons from late summer right through until the following spring. In the milder oceanic climate of New Zealand, there may be sufficient time for the sawflies to complete a third generation.

#### How does it damage old man's beard?

The larvae are the damaging life stage. The adults do not feed on old man's beard. Larvae usually start feeding on the leaf edges and make semicircular cuts along the leaf margins. A single larva may eat several leaves, sometimes leaving only the central vein intact.

See Old man's beard leaf fungus, Old man's beard leaf miner and Old man's beard mite.





Larvae damage and frass

#### Will it attack other plants?

No, old man's beard sawflies are extremely unlikely to attack any plants other than old man's beard (*Clematis vitalba*).

#### How effective is it?

It is too early to know what impact this new Serbian population will have on old man's beard at the sites where it has established. However, sawflies can be highly damaging if they can build up large populations. For example, the willow sawfly (*Nematus oligospilus*), an exotic invader, can cause severe damage to willow trees.

#### How can I get the most out of it?

Recent attempts to relocate it from the nursery site in the Waipara District to other areas has just started in 2023. We will continue to monitor the new release sites to assess the potential for collection and redistribution to new sites if they start to build up large numbers.

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# Memorandum of

# Context

eradication or management of pests (terrestrial, freshwater, and marine diseases and disease vectors, such economic, environmental, cultural, social and human health (zoonotic and diseases that pose a risk to as mosquitos and ticks) values. offshore, border and domestic The biosecurity system spans activities across all domains Biosecurity is the exclusion, environments).

Critical roles to play in mitigating Signatories to this MOU have:

- biosecurity activities are deliver and managing biosecurity risk Common interest in ensuring
- opportunities for coordination and efficiently and effectively and that collaboration are acted upon.
  - Different biosecurity mandates and drivers, and financial and stakeholder considerations.

Effective trust-based working relationships are essential for success.

## Scope

and activities (including diagnostics management) and the transitions to Domestic biosecurity relationships and from the different states along readiness, response, long-term surveillance, investigation this continuum.

prioritisation and delivery to address issues and opportunities in planned and reactive work in a timely collaborative work planning, Relationship principles and manner.

This three-way MOU with BNZ takes roles, accountabilities and interests Note: Signatories are also expected precedent for biosecurity-related agencies, Maori and Governmen overlap. DOC and Te Uru Kahika bilateral working arrangements. others (e.g., other government signatories) where biosecurity have a separate MOU covering Industry Agreement industry to work collaboratively with working arrangements.

# Purpose

biosecurity matters.

### Principl Foundatio

es

- positive relationship. 2.
- duties of each Signatory. с.
  - biosecurity risks. 4.

# **Decision-making**

framework or process to ensure: resourcing and

- A Treaty grounded approach. accountabilit Appropriate
- Support fair
- decisions will be upheld.

- Signatories to
- and reporting.
- shared-access repository.

**Oversight and** 

- A nominated
- drive joint

#### WEST COAST REGIONAL COUNCIL

#### To: Chair, West Coast Resource Management Committee

I move that the public be excluded from the following parts of the proceedings of this meeting, namely – **item 10 to 12 (all inclusive)** due to privacy and commercial sensitivity reasons and that:

 Darryl Lew, Jo Field, Jocelyne Allen and Chris Barnes, be permitted to remain at this meeting after the public have been excluded due to their knowledge of the subjects. This knowledge will be of assistance in relation to the matters to be discussed; and

ltem No	General Subject of	Reason for passing this	Ground(s) under section 7 of
	each matter to	resolution in	LGOIMA for the
	be considered	relation to	passing of this
		each matter	resolution
10.1	Confidential	The item	To protect
	Minutes of	contains	commercial and
	Meeting – 10	information	private information
	September 2024	relating to	and to prevent
		commercial,	disclosure of
		privacy and	information for
		security matters	improper gain or
			advantage (s7(2)(a),
			s7(2)(b), and
			s7(2)(j)).
11.1	Actions List	The item	To protect
		contains	commercial and
		information	private information
		relating to	and to prevent
		commercial,	disclosure of
		privacy and	information for
		security matters	improper gain or
			advantage (s7(2)(a),
			s7(2)(b), and
			s7(2)(j)).

2. That the minute taker also be permitted to remain.

12	Compliance	The item	To protect
	Matters (Verbal	contains	commercial and
	Update)	information	private information
		relating to	and to prevent
		commercial,	disclosure of
		privacy and	information for
		security matters	improper gain or
			advantage (s7(2)(a),
			s7(2)(b), and
			s7(2)(j)).