Monday, 23 February 2026

Te Hui o Te Kaunihera ā-Rohe o Heretaunga
Hastings District Council
Hearings Committee Meeting

Kaupapataka

Addendum Agenda

Private Plan Change 8 – HBRC Earthworks Exemption (RMA20250089)

Contains Additional Attachments "K" and "L"

Te Rā Hui: Meeting date:	**Monday, 23 February 2026**
Te Wā: Time:	**9.30am**
Te Wāhi: Venue:	**Council Chamber** **Ground Floor** **Civic Administration Building** **Lyndon Road East** **Hastings**
Te Hoapā: Contact:	**Democracy and Governance Services** **P: 06 871 5000 | E:** democracy@hdc.govt.nz
Te Āpiha Matua: Responsible Officer:	**Group Manager: Planning & Regulatory Services - John O'Shaughnessy**

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Hearings Committee – Terms of Reference

Fields of Activity

The Hearings Committee is established to assist the Council by hearing and determining matters where a formal hearing is required in respect of a planning or regulatory function of the Council, including under the provisions of the:

- Resource Management Act 1991
- Building Act 2004
- Health Act 1956
- Dog Control Act 1996
- Litter Act 1979
- Hastings District Council Bylaws
- Local Government Act 1974
- Local Government Act 2002; and
- Hastings District Council Class 4 Gambling Venue Policy.

Membership - Up to 10 Hearings Commissioners (comprising up to 7 elected members of Council and at least 3 external appointed Independent Hearings Commissioners)

- Chair appointed by Council from the membership including external appointed members.
- Deputy Chair appointed by the Council from the membership including external appointed members.
- Under s. 39B of the Resource Management Act, the Chair must be accredited, and unless there are exceptional circumstances, appointees on hearings panels must have accreditation to make decisions on;
  - Applications for Resource Consents.
  - Notice of Requirements given under s. 168 or 189 of the Resource Management Act.
  - Requests under clause 21(1) of Schedule 1 of the Resource Management Act for a change to be made to a Plan (Private Plan Changes).
  - Reviews of Resource Consents.
  - Applications to change or cancel Resource Consent Conditions.
  - Any hearing of an objection under s. 357C of the Resource Management Act.
  - Proposed Policy Statements and plans that have been notified (Council Initiated Plan Changes).

Quorum

a) For Hearings other than Council Initiated and Private Plan Change hearings, a maximum of three members including the Chair (or Deputy Chair, in the Chair's absence) to meet for any one hearing.

b) For Private Plan Change hearings a maximum of five members including the Chair (or Deputy Chair, in the Chair's absence) to meet for any one hearing.

c) For Council Initiated Plan Change hearings, all members may attend and take part in the decision-making process unless the Chair exercises the power of delegation to assign any function, power or duty of the Hearings Panel to any one or more Commissioners.

d) For Hearings other than Council Initiated and Private Plan Change hearings the quorum shall be two members.

e) For Council Initiated and Private Plan Change Hearings, the quorum shall be three members.

f) Members to sit on any hearing other than a Council Initiated Plan Change Hearing shall be selected by agreement between the Chair (or Deputy Chair, in the Chair's absence) and the Group Manager: Planning and Regulatory Services.

g) For the purpose of hearing any objection in respect of the matters detailed under the Dog Control Act 1996 the Hearings Committee will consist of any three members selected by the Chair.

Casting Vote

a) In line with Council's Standing Orders *(19.3)* the Chair would have a casting vote at all hearings, in the event that the vote of the panel was tied.

Monday, 23 February 2026

Te Hui o Te Kaunihera ā-Rohe o Heretaunga
Hastings District Council: Hearings Committee Meeting

Kaupapataka
Addendum Agenda

Ngā mema o te Komiti Panel Members:	**Hearing Panel Members:** Chair: George Lyons (Commissioner Chair - External appointee) Councillors Alwyn Corban (Deputy Chair), Hana Montaperto-Hendry and Heather Te Au-Skipworth
Apiha Matua Officer Responsible:	Group Manager: Planning and Regulatory Services - John O'Shaughnessy
Reporting Planner	Environmental Planner, Policy – Junior Tuakana
Te Rōpū Manapori me te Kāwanatanga Democracy Governance Services	Christine Hilton (chrisah@hdc.govt.nz)

Te Rārangi Take

Order of Business

Apologies & Leave of Absence – *Ngā Whakapāhatanga me te Wehenga ā-Hui*

1.0 At the close of the agenda no requests for leave of absence had been received from the panel.

Addendum Agenda - Plan Change 8 - HBRC Earthworks Exemption

2.0 **ADDITIONAL DOCUMENTS CIRCULATED FOR HEARING - COMPILED AS ONE DOCUMENT**

Monday, 23 February 2026

Te Hui o Te Kaunihera ā-Rohe o Heretaunga
Hastings District Council: Hearings Committee Meeting

Item 2

Te Rārangi Take

Report to Hearings Committee

Nā: From:	**Christine Hilton, Democracy and Governance Advisor**
Te Take: Subject:	**Addendum Agenda - Plan Change 8 - HBRC Earthworks Exemption**

1.0 Purpose and summary - *Te Kaupapa Me Te Whakarāpopototanga*

1.1 This is a covering report to enable two additional attachments to be circulated in an addendum agenda for Proposed Hastings District Plan hearing – Plan Change 8 – HBRC Earthworks Exemption.

1.2 Two attachments had been inadvertently omitted from the original agenda documents. The references for these have been included as Attachments "K" and "L" so that they have attachment references that fit at the end of the original agenda documentation.

1.3 One of the omitted attachments was the Mana Whenua Engagement Framework (Attachment "K") and the other is the HBRC Description of Environmental Effects (Attachment "L").

1.4 This Addendum document can be viewed on the Council's website.

2.0 Recommendations - *Ngā Tūtohunga*

This covering report titled Addendum Agenda - Plan Change 8 - HBRC Earthworks Exemption and associated attachments, dated 23 February 2026, are to be put onto the Council website so it can be viewed by the public.

Attachments:

A⇩	Mana Whenua Engagement Framework	RMA20250089#0050
B⇩	HBRC Description of Environmental Effects PPC8	RMA20250089#0051

Mana whenua engagement framework

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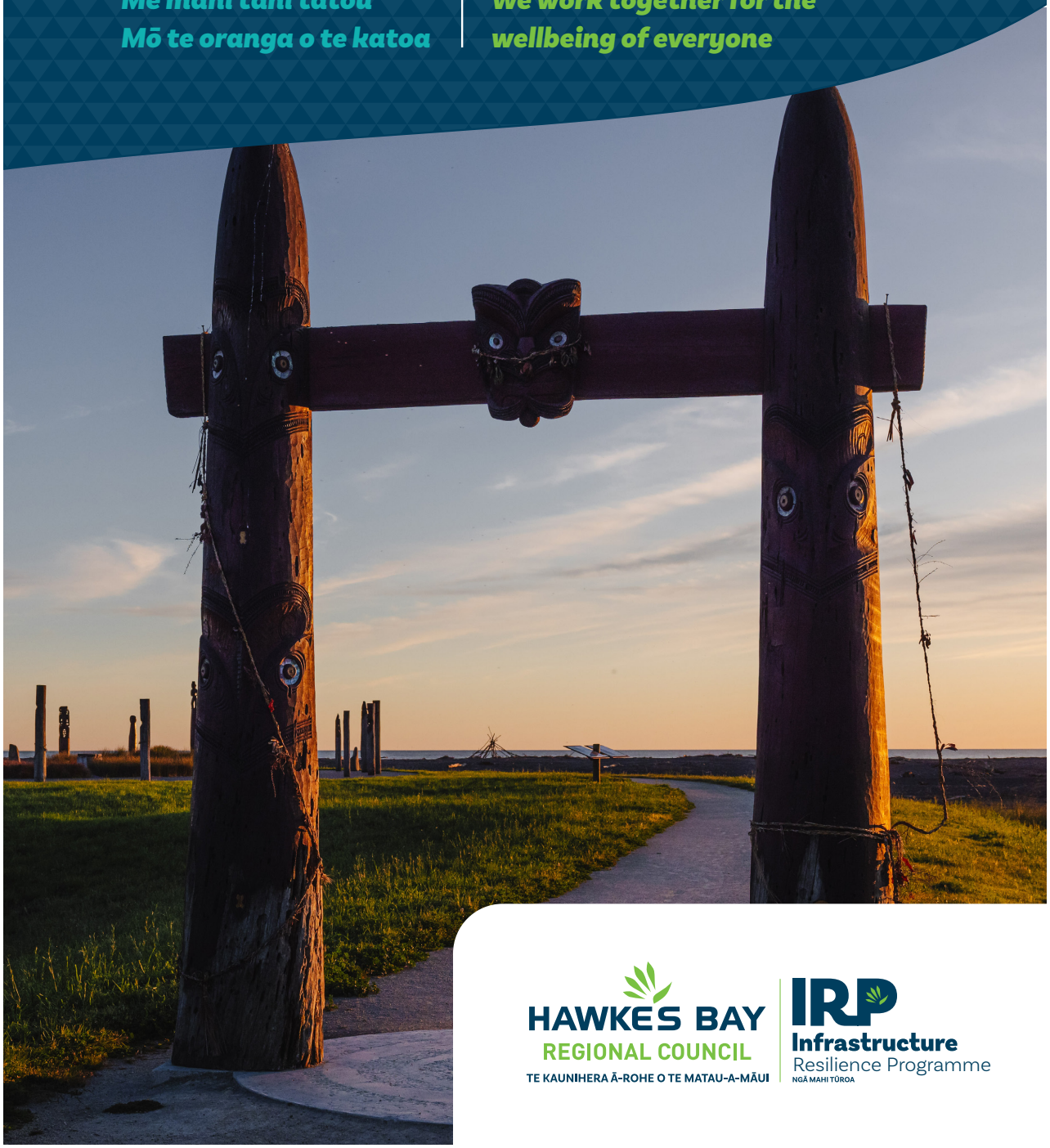

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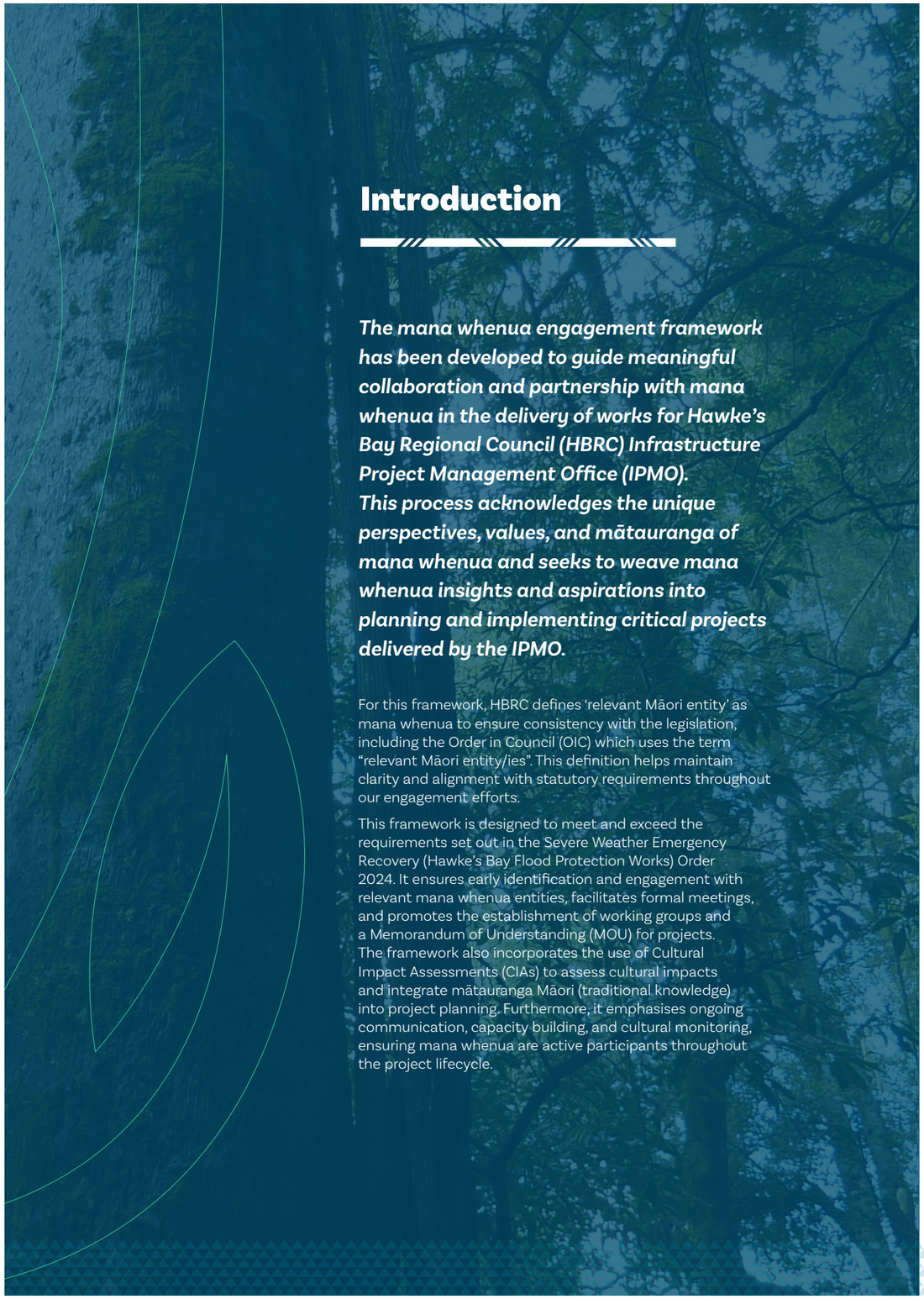
IRP Infrastructure Resilience Programme
NGĀ MAHI TŪROA



Introduction

The mana whenua engagement framework has been developed to guide meaningful collaboration and partnership with mana whenua in the delivery of works for Hawke's Bay Regional Council (HBRC) Infrastructure Project Management Office (IPMO). This process acknowledges the unique perspectives, values, and mātauranga of mana whenua and seeks to weave mana whenua insights and aspirations into planning and implementing critical projects delivered by the IPMO.

For this framework, HBRC defines 'relevant Māori entity' as mana whenua to ensure consistency with the legislation, including the Order in Council (OIC) which uses the term "relevant Māori entity/ies". This definition helps maintain clarity and alignment with statutory requirements throughout our engagement efforts.

This framework is designed to meet and exceed the requirements set out in the Severe Weather Emergency Recovery (Hawke's Bay Flood Protection Works) Order 2024. It ensures early identification and engagement with relevant mana whenua entities, facilitates formal meetings, and promotes the establishment of working groups and a Memorandum of Understanding (MOU) for projects. The framework also incorporates the use of Cultural Impact Assessments (CIAs) to assess cultural impacts and integrate mātauranga Māori (traditional knowledge) into project planning. Furthermore, it emphasises ongoing communication, capacity building, and cultural monitoring, ensuring mana whenua are active participants throughout the project lifecycle.

Importance of engagement with mana whenua

HBRC recognises the integral role that engagement with mana whenua plays in fostering partnerships and enhancing the wellbeing of our communities. Effective engagement is not the responsibility of a single group within the organisation but a collective effort that reinforces the overarching relationship and partnership HBRC maintains with mana whenua.

The IPMO, like all groups within HBRC, contributes to this broader objective by ensuring strong relationships with mana whenua, incorporating their perspectives and values, and respecting and integrating their unique insights across the activities undertaken by the IPMO. Engagement with mana whenua is crucial for ensuring the success and sustainability of infrastructure projects. It recognises and respects the unique perspectives, values, and rights of mana whenua, fostering a partnership that benefits both the community and the project. Effective engagement ensures that mana whenua voices are heard, their cultural values are integrated, and their role as kaitiaki is upheld. This collaborative approach leads to more informed decision-making, enhances cultural understanding, and contributes to the wellbeing of everyone involved.

Engaging with mana whenua is also mandated by various New Zealand laws, ensuring their rights and interests are considered in decision-making processes. These laws include obligations to consult and involve mana whenua in regional planning, resource management, and transport strategies. Additionally, the OiC sets specific requirements for involving mana whenua in infrastructure projects.

1. **Local Government Act 2002 (LGA)**

   Section 81: Requires local authorities to establish processes for Māori to contribute to decision-making, fostering Māori capacity for participation.

   Section 82: Outlines principles of consultation, ensuring affected individuals can present their views.

2. **Resource Management Act 1991 (RMA)**

   Part 2 (Sections 6, 7, 8): Recognises the relationship of Māori with their ancestral lands and requires consideration of kaitiakitanga and Treaty principles.

   Section 35A: Emphasises informed decision-making, including consultation with Māori.

   NPSFM 2020: Mandates involvement of mana whenua in freshwater management, emphasising Te Mana o te Wai.

3. **Land Transport Management Act 2003 (LTMA)**

   Section 16: Requires consultation with Māori for Regional Land Transport Plans and mandates a cultural representative in the Regional Transport Committee.

4. **Treaty of Waitangi Settlements**

   Statutory acknowledgements: Require councils to consult with iwi and hapū on relevant issues.

5. **Severe Weather Emergency Recovery (Hawke's Bay Flood Protection Works) Order 2024**

   Mandates early and continuous engagement with mana whenua for flood protection works, including Cultural Impact Assessments.

OiC summary

The Severe Weather Emergency Recovery (Hawke's Bay Flood Protection Works) Order 2024 outlines requirements for engaging with mana whenua in planning and implementing flood protection works. It mandates early and continuous engagement, using a CIA, and formal agreements with mana whenua entities.

For mana whenua, the key points of the OiC are:

- **The OiC provides a framework for the resource consent process and delivery of the project.**
- **Mana whenua has mandated involvement in both the resource consent process, and the process in finalising a construction environmental management plan.**
- **The OiC provides for the requirement to undertake an assessment of effects on cultural values and on culturally significant land. A CIA is one way to achieve this in a formal and documented way.**

These measures ensure that mana whenua perspectives and values are integrated into the recovery efforts.

This framework seeks to meet these requirements and more.

Key values for engaging with mana whenua

Whanaungatanga (relationships)

Foster a relationship, respect, and trust through open and honest communication, active listening, and a genuine commitment to building lasting relationships.

Manaakitanga (respect)

Demonstrate respect for mana whenua by acknowledging their history, past grievances, mana, tikanga, mātauranga, and cultural practices, and provide a welcoming and inclusive environment for engagement.

Rangatiratanga (leadership and self-determination)

Recognise and uphold the authority, autonomy, and self-determination of mana whenua in decision-making processes that affect their lands, resources, and wellbeing.

Kaitiakitanga (guardianship)

Understand and support the role of mana whenua as kaitiaki, or guardians, of their ancestral lands, waters, and taonga, and incorporate mātauranga and aspirations to protect, restore and enhance the taiao into project planning and implementation.

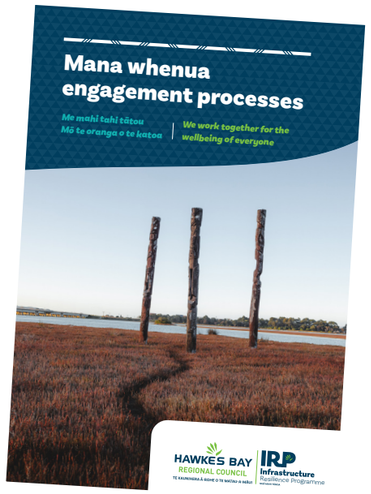
Outcomes

- Ensure collaboration with mana whenua by integrating their voices, perspectives, and aspirations into the decision-making processes and project outcomes, reflecting the spirit of partnership.
- An increased understanding and appreciation of mana whenua values, tikanga, and cultural practices, leading to more culturally responsive and sustainable flood resilience solutions.
- Empowerment of mana whenua communities through active participation and shared decision-making, fostering a sense of ownership and commitment to the long-term success of the projects.
- Preservation and enhancement of cultural landscapes, sites of significance, and taonga, ensuring the protection of mana whenua heritage and cultural identity.

Mana whenua engagement process

The Mana whenua engagement processes document outlines the procedures for engaging with mana whenua in the context of infrastructure projects.

It emphasises the importance of early and respectful engagement with relevant hapū, marae, and Post-Settlement Governance Entities (PSGEs). The processes include establishing formal agreements, conducting CIAs, and ensuring ongoing relationship management throughout the project. The goal is to integrate cultural values into project planning and implementation, fostering mutual understanding and successful project outcomes. For detailed processes and guidelines, please refer to the full document. Additionally, Te Arawhiti offers excellent cultural capability frameworks that can further guide our approach.



Cultural capability and cultural safety

The IPMO team is committed to enhancing cultural capability and ensuring cultural safety in our engagement with mana whenua.

To support this, several initiatives are in place including the appointment of a Mana Whenua Engagement Lead who is supported by the Māori Partnerships team, cultural and language support, cultural safety practices and adopting a continuous learning approach. More information is outlined in the ***Mana whenua engagement processes*** document.

Agile and flexible approach

It is important to recognise that not all mana whenua groups will have the same capacity, resources, or preferred engagement methods.

This process is designed with flexibility in mind, allowing for adaptations to accommodate the unique circumstances and needs of each mana whenua rōpū.

This engagement process should not be viewed as a strictly linear sequence but as a series of interconnected and concurrent steps. For example, CIAs may be initiated concurrently with other engagement or project activities as deemed appropriate and necessary.

Additionally, it is essential to be mindful of the capacity and resources available to mana whenua for engagement. Proactive measures should be taken to support and facilitate their involvement, recognising the potential limitations they may face in terms of time, personnel, and resources.

Budget appropriately for mana whenua

Each project will have its own requirements for mana whenua engagement.

Some will require a higher level of engagement, while others may only require a light touch. The fees and costs associated with the engagement will be specific to each project depending on the scope of work, with associated deliverables and timelines.

Providing opportunities in the project

Providing opportunities for direct involvement of mana whenua in flood resilience projects is essential for recognising indigenous rights, valuing traditional knowledge, building true collaboration with mana whenua, and ensuring culturally appropriate and sustainable outcomes.

By actively engaging mana whenua representatives, experts, and communities throughout the project lifecycle, we acknowledge their inherent right to self-determination, uphold their role as kaitiaki, integrate invaluable traditional ecological knowledge, foster a sense of shared ownership and commitment, empower through capacity building, promote cultural awareness and sensitivity, contribute to reconciliation efforts, and align project outcomes with local values, aspirations, and cultural heritage, ultimately increasing the likelihood of long-term acceptance and success.

HBRC is adopting a progressive procurement policy for its flood mitigation projects and will adopt this for all engagements, including mana whenua. This includes exploring ways to provide mahi for mana whenua, provide training and capacity building opportunities, resourcing mana whenua to work alongside the project team, facilitating cultural monitoring and site visits, incorporating mātauranga and tikanga and providing opportunities for cultural expression and interpretation. Detailed guidelines are available in the ***Mana whenua engagement processes*** document.

Associated documents

A. Mana whenua engagement processes
B. Memorandum of Understanding (MOU)\
C. Template scope of works for Cultural Impact Assessment
D. Cultural impact pre-assessment tool

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Mana whenua engagement processes

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Purpose of this document

This document has been prepared to support the ***Mana whenua engagement framework document***, which outlines the approach Hawke's Bay Regional Council (HBRC) Infrastructure Project Management Office (IPMO) will take when collaborating and partnering with mana whenua.

It provides more detailed and specific guidance for staff on how to implement the framework and ensure mana whenua insights and aspirations are incorporated into the planning and delivery of these critical infrastructure repairs and upgrades following Cyclone Gabrielle.

Planning

1.

Project context and historical background

It is essential to thoroughly understand the project and its geographic area when planning each project.

This includes identifying historical or cultural narratives related to the project site. Research should include identifying relevant settlement references, areas of significance, and reviewing hapū management plans. Use existing HBRC records and plans to help gain a comprehensive understanding of the cultural context of the area.

This work should be done before meeting with mana whenua to understand both the cultural and historical context of the area and to demonstrate respect, foster trust, and ensure meaningful engagement.

Historical context is important because it highlights the significance of past events and the ancestral connection to the land, helping to avoid missteps that could affect relationships. It's also crucial to know in advance if there are existing values assessments or hapū management plans for the area that outline mana whenua's priorities, values, and environmental stewardship goals to guide respectful decision-making that aligns with their aspirations.

2.

Cultural capability and cultural safety

The IPMO team is dedicated to strengthening cultural capability and upholding cultural safety in all mana whenua engagement.

Mana Whenua Engagement Lead

We have a dedicated Mana Whenua Engagement Lead to coordinate and facilitate meaningful interactions with different mana whenua groups.

Cultural and language support

Te reo Māori courses are available for team members to enhance language skills and cultural understanding. Ongoing cultural advice and support will be provided to ensure we uphold culturally appropriate practices.

Intellectual property and confidentiality

To further support cultural safety, all intellectual property (IP)—including mātauranga Māori and other proprietary information shared by mana whenua—remains their property. This information is to be used solely for the agreed purposes and requires explicit permission for any additional use. When procuring services, it is essential to include clauses in agreements that protect mana whenua IP. Pre-written clauses are available for this purpose.

Cultural safety practices

We will respect and integrate tikanga Māori (Māori customs and protocols) into all aspects of our project planning and implementation. We are committed to creating a welcoming and inclusive environment for mana whenua engagement, ensuring cultural safety.

Māori Partnerships team

Our Māori Partnerships team is available to provide continuous cultural guidance and support. HBRC's Cultural Advisor is available for cultural consultations and advice when needed, also supported by the IPMO Mana Whenua Engagement Lead.

Continuous learning

We will organise visits to marae to strengthen relationships and deepen our understanding of mana whenua perspectives. Continuous learning about Māori culture, values, and practices will be promoted among all team members. We will conduct regular internal karakia to promote spiritual wellbeing and connection within our team.

3.

Identify relevant hapū/ marae/PSGE/taiwhenua

Determine which hapū (sub-tribes) have mana whenua (customary authority) over the project area, as it is likely to have multiple hapū.

If no hapū authority exists for the area, the marae is the next best point of contact. Additionally, it is important to identify the appropriate Post-Settlement Governance Entity (PSGE) and taiwhenua.

HBRC Māori Partnerships Group Relationship Managers can help identify these groups and log engagements to maintain an organisation-wide understanding of relationships.

4.

Initiate early engagement

Reach out to the identified hapū representatives as early as possible in the planning stages. At a high level, provide introductions and explain the proposed project, its objectives, and the desire to meet formally to discuss working in partnership.

This should be with a phone call first, followed by email. Request a formal meeting to explore how the mana whenua entities would like to engage moving forward. In most instances, the hapū or marae will be the primary point of contact, while the PSGEs, Taiwhenua, and Ngāti Kahungunu Iwi (NKII) will vary in their level of engagement.

It is important to recognise that the capability and capacity of hapū and marae can present challenges, particularly when managing the demands of multiple projects. In such cases, PSGEs or taiwhenua may take a lead role to provide additional support and coordination. While these entities often act in a supportive capacity, there may also be instances where PSGEs or taiwhenua seek a closer, more active role in the engagement process.

Acknowledging and respecting the preferences of these entities is vital for ensuring meaningful engagement. Tailor your approach to accommodate their involvement, whether they wish to provide guidance and oversight or participate more directly alongside hapū and marae. By fostering flexibility and collaboration, the engagement process can better reflect the unique dynamics and aspirations of mana whenua groups.

5.

Formal meeting

Hold a kanohi (face-to-face) meeting with the hapū/marae, and invite PSGE, taiwhenua, and NKII representatives (ensure this is agreed upon with the hapū or marae first).

This meeting should preferably be at their marae or project site, but if neither is feasible a mutually agreed location (such as an HBRC meeting room). Before the hui, those attending should review the project context and historical background.

The purpose of the meeting should be whakawhanaungatanga (establishing relationships) and providing a project overview. During the meeting, provide detailed information about the project, including its scope, timeline, and potential impacts. Listen to historical accounts, concerns, perspectives, and suggestions from mana whenua with respect and openness. It is important to identify if there are any sites of significance within the project area, such as wāhi tapū or wāhi taonga. During this meeting discuss entering into a Memorandum of Understanding (MOU) and commissioning a Cultural Impact Assessment (CIA).

At the conclusion of the meeting, there should be a clear understanding of the next steps of engagement, sharing key information (project related), and how an MOU and CIA will progress. Follow up with an email sharing everyone's contact details (including the project team).

Following the kanohi hui with key representatives, a community or hapū meeting should be offered to share information about the project with the wider hapū community. This may be held at the marae, or another venue agreed with mana whenua.

6.

Enter into a memorandum of understanding

Enter a MOU with the appropriate mana whenua entity or entities. The MOU is important to provide details on how the partnership and relationship will function during the project(s) delivery. An MOU may be entered into by multiple mana whenua entities (e.g. hapū authority, marae, PSGE, or taiwhenua) for one or more projects. Use the MOU template developed for the IMPO, which outlines the details of the agreement between HBRC and mana whenua and should include:

- the relationship and roles between mana whenua and the IPMO
- the role of mana whenua in the distribution of information (to their audiences)
- key contact people
- service description: mana whenua engagement representation, cultural monitor(s)
- remuneration rates for roles and engagement.

Through this MOU, appoint a mana whenua representative to work alongside the project manager(s) and cultural monitor for field surveys, monitoring, and other related activities.

The mana whenua entity being engaged may wish to amend or change the MOU, or they may wish to use their own MOU. Be agile in this approach while maintaining key requirements, such as those required in consent or the OiC.

If a mana whenua entity does not wish to enter into an MOU, alternative arrangements can still be established. This may include service agreements that define and support roles essential to project delivery, resourcing for engagement and cultural monitoring, and details of how the partnership will function. These alternatives can be tailored to meet both the needs of mana whenua and HBRC's project requirements while ensuring the necessary support for mana whenua participation.

7.

Cultural impact pre-assessment tool

The cultural impact pre-assessment tool is a valuable resource to help identify cultural and environmental impacts while the full CIA is being completed. The CIA process, while critical for providing comprehensive guidance on cultural values and impacts, can take time to complete. This tool helps bridge the gap, offering initial insights to guide project planning and engagement, particularly when preliminary investigations or enabling works are running in parallel.

Use the cultural impact pre-assessment tool to:

- systematically assess mana whenua values, wāhi tapu, and environmental factors while completing the CIA
- get practical guidance during the early stages of engagement and for parallel activities
- address potential issues proactively until the CIA is finalised
- get input from project teams and in collaboration with mana whenua representatives.

Compensation for mana whenua contributions should be included in the MOU. Continue refining the tool with mana whenua representatives throughout the project lifecycle, addressing new insights and adapting to changes as they arise.

8.

Cultural Impact Assessment

Commission a CIA to identify and address potential impacts on cultural values, sites of significance, or areas of traditional importance. This process should run in parallel with the MOU, with the CIA engaged through a service agreement (not the MOU). The CIA should be conducted by the hapū/marae or a contractor engaged by mana whenua. For example, a PSGE or taiwhenua, likely to be the same entity(s) as the MOU. The CIA is important to inform the project's resource consent and to support and guide the working group's mana whenua representative. Send mana whenua the Template Scope of Works for CIA to complete and return, which will then serve as the service agreement. The mana whenua entity may wish to amend or change the scope of work, or to use their own. Be agile in this approach while maintaining key requirements, such as those required in consent or OiC.

Once the CIA is complete, it's important that recommendations are incorporated and there are opportunities inside the project for mana whenua engagement to ensure the project addresses the potential impacts.

- **Incorporate recommendations:** Review the feedback and recommendations provided by the CIA. Incorporate their input into the project design, mitigation measures, and management plans where appropriate and feasible. Confirm with mana whenua how the recommendations will be included in the project.
- **Provide opportunities inside the project:** See section 10.

Planning | Consenting | Closure

9.

Ongoing relationship management

Maintain regular engagement with mana whenua throughout all stages of the project. The entire project team is responsible for managing relationships with mana whenua.

While the Mana Whenua Engagement Lead and engagement teams maintain close relationships, the entire team must take a collective approach. To ensure ongoing and effective relationships, key areas of engagement are outlined below.

- **Stakeholder Advisory Group:** A Stakeholder Advisory Group (STAG) must be appointed to monitor and provide feedback on issues or matters relating to construction and include a representative appointed by mana whenua before construction starts. This is a requirement of the OiC and can include people in the roles below.
- **Mana whenua representation:** The MOU should enable and detail mana whenua involvement in a project group and/or close collaboration with the project managers. Initially, involvement should focus on shaping the project plan, followed by regular meetings to provide updates on the project and future works. This approach allows for active participation in decision-making and project direction, ensuring that cultural values are consistently integrated and upheld throughout the process.
- **Cultural monitor:** Ensure that cultural monitors are supported to attend fieldwork, such as ecological surveys, field surveys, archaeological surveys, and geotechnical work. Provide them with sufficient advance notice before the surveys begin and ensure they have the necessary information to work alongside the field staff. Also, invite mana whenua to share their stories and kōrero about the area by undertaking a site visit with the project team.

Associated documents

A. Mana whenua engagement framework

B. Memorandum of Understanding (MOU)

C. Template scope of works for Cultural Impact Assessment (CIA)

D. Cultural impact pre-assessment tool

10.

Capacity building and opportunities

Explore opportunities for mana whenua members to be involved in the project through employment, training, or capacity-building initiatives. This can help foster a sense of ownership and contribute to the project's success.

- **Establish procurement and contracting opportunities:** Explore ways to provide mahi for mana whenua-owned and/or locally owned businesses/contractors. This includes direct procurement during enabling works, a minimum of 15 percent weighting for progressive procurement in main contract works and requiring tier 1 and tier 2 contractors to actively pursue partnerships and employment opportunities with mana whenua and local contractors by applying key broader outcomes metrics in the contracts.
- **Offer capacity-building and training opportunities:** Provide training and capacity-building programmes for mana whenua to develop skills and knowledge relevant to the project. This could include environmental monitoring, monitoring works in areas of cultural significance (wahi tapū, wahi taonga), and CIAs.
- **Resource mana whenua representatives and experts:** Resource mana whenua representatives and experts as part of the project team. Each relevant Māori entity can and should appoint a representative supported by cultural monitors to provide information and advice to HBRC regarding construction works, cultural indicators, and cultural values. Their direct involvement ensures that mātauranga and mana whenua perspectives are integrated into the project delivery.
- **Facilitate cultural monitoring and site visits:** Encourage and support mana whenua representatives to participate in cultural monitoring and site visits during the construction and implementation phases. This allows for ongoing engagement, observation, and input from a cultural perspective.
- **Incorporate mātauranga and tikanga:** Collaborate with mana whenua to identify and incorporate traditional ecological knowledge and practices into the project design and implementation. This could include using traditional materials, methods, or techniques for enhancement, revegetation, storytelling or other aspects of the project.
- **Provide opportunities for cultural expression and interpretation:** Integrate opportunities for cultural expression and interpretation within the project scope. This could involve commissioning artwork, incorporating storytelling or interpreting signage.

11.

Cultural protocols

Work alongside the mana whenua representative and cultural monitor/s to identify and implement the correct cultural practices and protocols to ensure that tikanga and kawa are appropriately met through the implementation and delivery of the project. This may include pōwhiri (formal welcoming of the workers before starting on-site) and/or karakia on-site before the works commence. Follow the guidance of your mana whenua representative and cultural monitor regarding the appropriate cultural protocols.

12.

Cultural monitoring – construction

Continue to work alongside the cultural monitor(s) throughout the construction phase to ensure that cultural values, indicators and protocols are respected and that any inadvertent discoveries or impacts are addressed appropriately.

13.

Closure and celebration

When the flood resilience project is complete, hold a closing ceremony or celebration to acknowledge the collaboration and partnership with mana whenua. Recognise their contribution and the successful integration of cultural values into the project.

Lastly, document, and share engagement lessons learned throughout the term of this MOU. These lessons will include actionable insights aimed at improving future projects and engagement.

It is important to approach this engagement process with respect, transparency, and a genuine commitment. Building a strong partnership and ongoing engagement with mana whenua will contribute to the project's success and help foster a spirit of mutual understanding and collaboration.

HAWKE'S BAY REGIONAL COUNCIL
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

IRP Infrastructure Resilience Programme
NGĀ MAHI TŪROA


AGP CONSULTING

AGP CONSULTING

Private Plan Change to Chapter 27.1 of the Hastings District Plan

Description of environmental effects

March 2025

Prepared for:
Hawkes Bay Regional Council
Prepared by:
AGP Consulting Ltd
Project number:
2403.01

Hawkes Bay Regional Council

Request for a Private Plan Change to the Hastings District Plan under clause 21, Schedule 1 of the Resource Management Act 1991

Description of environmental effects

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Version control:

Private Plan Change to Chapter 27.1 of the Hastings District Plan			
Project number	*Version*	*Date*	*Description*
2403.01	1	11.03.25	Final for lodgement

Applicability

This report has been prepared by AGP Consulting Limited at the specific instruction of our client Hawkes Bay Regional Council. It has been prepared for the exclusive use of our client for the purpose for which it is intended and in accordance with AGP Consulting Limited's (AGP) letter of engagement dated 11 April 2024 (AGP reference: 2403.01) and subsequent variations. It may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Table of contents

1 Introduction

Clause 22 of Schedule 1 of the Resource Management Act 1991 (RMA) requires that where environmental effects are anticipated from a plan change, the request shall describe those effects, taking into account clause 6 and 7 of Schedule 4 of the RMA.

This report provides the required description of potential environmental effects that may result from the plan change.

1.1 Scale and significance

Clause 22 of Schedule 1 of the RMA requires that the description of effects shall be in such detail as corresponds with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the plan change.

As outlined in section 2.3 of the Plan Change Overview Report, the earthworks typically include the removal and stockpiling of topsoil; excavation of suitable fill from borrow areas to be used in construction; the placement and compaction of fill, such as to build, raise and widen stopbanks; and reinstating the topsoil and stabilising disturbed areas through establishing grass cover.

In terms of the scale and significance of the adverse effects anticipated, it is noted that:

- The change will only permit earthworks undertaken by, or on behalf of, HBRC, thereby limiting the scale and extent of potential effects;
- The general performance standards and terms will continue to apply to ONFL and SAL and there will be no change to the scale and significance of effects on these landscapes;
- River control and drainage activities within wāhi taonga and heritage sites or the National Grid yard will not be further enabled and will still be subject to the existing District Plan provisions in Chapters 16.1(Wāhi Taonga), 18.1(Heritage item and notable trees) and 22.1 (Network utilities);
- The landscape and visual effects assessment prepared as part of this plan change has described the potential adverse effects as low;
- The ecological assessment prepared as part of this plan change has described the potential adverse effects on terrestrial ecology as no more than minor;
- The earthworks consents currently required for river control and drainage works are typically of low complexity, and due to the hazard management benefits are unlikely to be declined. As such, the plan change is unlikely to enable earthworks that that would otherwise not occur. For example, a resource consent (RMA20230257) was granted in 2023 to undertake earthworks to upgrade 2.8 km of the Ngatarawa stopbank near Roys Hill with simple consent conditions which predominantly related to erosion and sediment control, construction noise and an accidental discovery protocol.

Having considered the above matters, the scale and significance of the potential environmental effects from the proposed provisions is considered to be low. This reflects that the change is minor and will align the earthworks chapter with other District Plan chapters (e.g. Chapter 15.1, 19.1 and 20.1) in terms of how these chapters provide for river control and drainage activities.

2 Description of environmental effects

2.1 Flood hazard effects

Earthworks are typically required to upgrade and construct flood protection measures. Flood protection increases the resilience of the community to flood events, and more specifically, can be expected to reduce the likelihood of inundation and damage to land and property, disruption to communities and the injury or loss of life. These are significant positive effects.

The plan change will enable Hawkes Bay Regional Council (HBRC) to undertake earthworks for flood control and drainage without the time and cost constraints of obtaining earthworks consent. This will improve the efficiency of project delivery, which in turn, will facilitate the efficient management of the flood hazard and can be expected to result in the positive effects described above.

2.2 Soil erosion, land instability and sediment runoff effects

Earthworks have the potential to increase soil erosion and the subsequent sediment runoff during rainfall events. They can also destabilise the land surface resulting in landslips.

The earthworks associated with flood protection improvements can reasonably be expected to occur in areas with flat topography that may be subject to the flood hazard. The flat topography reduces the risk of stormwater runoff concentrating into overland flow paths and eroding active earthworks areas. Similarly, as the surrounding land is flat, landslips are unlikely to occur.

Notwithstanding this, to avoid and minimise the potential for erosion and instability HBRC require all contractors to prepare an Erosion and Sediment Control Plan (ESCP). The ESCP includes the practices and procedures to be implemented during earthworks to avoid and minimise erosion and sediment runoff, such as silt fences, progressive stabilisation of disturbed areas, and the use of water carts to control dust.

The HBRC Environmental Code of Practice for River Control and Waterway Works also requires HBRC to reinstate disturbed areas to minimise the release of sediment and the use of water carts to minimise dust nuisance to neighbouring properties.

Considering this, the potential adverse effects on soil erosion, land instability and sediment runoff from the proposed plan change are considered to be less than minor.

2.3 Effects on the life supporting capacity of soils

Earthworks for flood protection improvements typically require:

- The removal and stockpiling of topsoil at work sites;
- Excavation of suitable fill material from borrow areas to be used in construction. The borrow areas are typically within the river berm area;
- The placement and compaction of fill, such as to build, raise and widen stopbanks; and
- The reinstatement of topsoil and stabilisation of the disturbed areas through establishing grass cover.

As the topsoil is typically reinstated onsite, the potential adverse effects from the proposed plan change on the life supporting capacity of soils are considered to be less than minor.

Also, flood protection improvements will reduce the risk of land being inundated, and topsoil eroded or buried by silt, during flood events. As such, the earthworks will contribute to the protection of the life supporting capacity of soils.

2.4 Landscape and visual effects

A landscape and visual effects assessment has been prepared by Wayfinder in support of the proposed plan change. The full assessment is attached in **Appendix A** and summarised here.

The assessment notes that flood protection measures in Hawkes Bay are an intrinsic part of the landscape value. Most people who live in Hawkes Bay have grown up with such defences, understanding them to be a part of the way in which humans have adapted the landscape to provide for their wellbeing. Many of the waterways have a modified character due to existing flood protection, in-stream structures and planting of riparian areas with native and exotic species, with willow and poplar forming dense corridors on the larger rivers.

In terms of landscape effects, the assessment notes:

- The earthworks will be for river control and drainage purposes and will be of a similar scale to the existing flood control and drainage scheme, noting that while there may be significant upgrades in some locations, these will remain relatively insignificant when considered in the broader scale of the waterway systems and how they are perceived by people;
- The design of stopbanks is unlikely to change in terms of form and proportion, with the overall shape and arrangement relative to waterways to remain similar;
- Within this context of scale and form, post Cyclone Gabrielle, people are likely to be more forgiving of change given the long-term benefit, with the landscape effects widely understood and accepted;
- Physical effects will be rehabilitated through grassing and riparian planting, so that in time, the area of earthworks will be reintegrated into the wider waterway landscape;
- As such, the perceptual values of the waterways as a whole, managed system, will remain largely intact. The waterways will remain naturally flowing, but contained and managed as they have been for many decades.

Overall, the assessment concludes that the landscape effects resulting from the proposed plan change will be, in a general broad sense, low.

In terms of visual effects the assessment notes:

- For the most part the view of the waterway areas is a view of existing flood protection measures (e.g. stopbanks or willow/poplar plantings) rather than of the river channel;
- The generally flat nature of the Heretaunga Plains and other landscape features (e.g. shelterbelts and orchards) prevent long reach views, with most waterways only visible when a viewer is close to them or passing over them on a public road;
- There are few residences in very close proximity to the larger waterways and few properties directly orientate towards many of the urban waterways; and
- When viewed from public roads the earthworks are likely to draw the viewers attention, but there is likely to be a general understanding and acceptance of the proposed works. The earthworks are also unlikely to detract from the wider landscape, that is broad and ever changing.

Overall, the assessment concludes that the visual effects resulting from the proposed plan change will be, in a general sense, low.

A 'low' effect in Landscape Architecture terminology translates into a less than minor – minor effect in RMA terminology. As such, the potential landscape and visual effects are considered to be no more than minor.

2.5 Terrestrial ecology effects

A terrestrial ecology effects assessment has been prepared by Whirika in support of the proposed plan change. The full assessment is attached in **Appendix B** and summarised here.

The District Plan currently permits all vegetation modification associated with flood control activities under Chapters 19.1 and 20.1. As such, vegetation modification and the ecological effects associated with this are currently permitted and no change is proposed. Therefore, the focus of the terrestrial ecological assessment is the potential adverse ecological effects from the plan change, specifically, from the earthworks on land that will be a permitted activity for HBRC to undertake.

The assessment notes that most of the lowland forest and wetlands have been lost due to the historical development of agriculture, horticulture and viticulture. The riparian and floodplain areas have been substantially modified overtime to become dominated by exotic plant species and agricultural plant communities with low indigenous biodiversity and habitat value. Some isolated remnants of indigenous vegetation remain that have higher indigenous biodiversity value and habitat value. Weed species are also present that can smother and outcompete indigenous vegetation.

In terms of fauna, the braided riverbeds provide habitat for a number of indigenous bird species, including three dotterel species and the South Island pied oyster catcher. Long-tailed bats are also present within Hawkes Bay and while old-growth forests are their primary habitat, they will also use exotic forests, trees and modified environments as habitat. Much of the region is inhabited by pest animals which are affecting the biodiversity that remains in the riparian and floodplain areas.

In terms of terrestrial ecology effects, the assessment notes:

- The existing stopbanks and areas adjacent to stopbanks are typically mown grass areas that have limited ecological features and values. Therefore, potential ecological effects from earthworks associated with stopbank upgrades are likely to be limited;
- Indigenous fauna may have colonised existing stopbank areas since their original construction. During excavation there will be a total loss of available habitat area that the stopbanks may provide. However, any loss is temporary with the stopbank areas returned to grass at the completion of the works;
- Vehicle movements during construction may disturb indigenous fauna through elevated noise and dust. This may result in some bird species avoiding the immediate area and more sensitive species may avoid the general vicinity. This effect is unlikely to extend beyond 300-500 m. This could reduce feeding efficiency or nesting locations and represent a temporary and minor adverse effect on local populations;
- The excavation of borrow areas will result in the total loss of available habitat area as a result of physical disturbance. However, any loss is temporary with the borrow areas returned to grass at the completion of the works and indigenous fauna will likely recolonise the area overtime; and
- The construction of new flood protection improvements (e.g. new stopbanks) are more likely to occur in areas with less history of previous disturbance associated with flood protection. Therefore, there is potential for greater effects in terms of the loss of available habitat area. However, the floodplain environment has been modified by viticulture, horticulture and agriculture which can reasonably be expected to have low ecological values, therefore reducing the potential adverse effects.

Overall, considering the typically low ecological values of the stopbanks and adjoining areas, the assessment notes that the adverse effects from the earthworks are likely to be less than minor for the majority of the areas where earthworks could be expected to occur. There is potential for vehicle movements and associated noise and dust disturbance to have a minor

temporary effect if areas of higher ecological importance are present in the immediate vicinity of the works (e.g. shag's nesting in nearby willows), which is possible, but unlikely.

Notwithstanding this, we note that the HBRC ecological management and enhancement plans (EMEP) for the Tutaekuri, Ngaruroro and Tukituki Rivers provide guidelines for river control and drainage works. This includes for edge retreat and channel diversions which may require earthworks on land. If these activities occur during the nesting season the guidelines recommend that an ecologist inspect the site for nesting *'At Risk'* or *'Threatened'* riverbed bird species, and if found, setbacks are established.

2.6 Effects on wāhi taonga, heritage sites, cultural landscapes and archaeological sites

The existing District Plan rules relating to registered wāhi taonga (Chapter 16.1) and heritage items and notable trees (Chapter 18.1) will not be changed. If flood control and drainage activities, including earthworks, are proposed within these areas in future, the earthworks will need to comply with the existing permitted activity rules or obtain resource consent. As such, the proposed plan change will not result in any further adverse effects beyond those currently permitted by the District Plan.

Earthworks on cultural landscapes that are ONFL or SAL will continue to be managed by the existing District Plan earthworks performance standards and terms. As such, the proposed plan change will not result in any further adverse effects beyond those currently permitted by the District Plan. In terms of archaeological sites, the earthworks chapter of the District Plan (section 27.1.4 - Methods) notes that it is unlawful for any person to modify or destroy an archaeological site without first obtaining an archaeological authority from Heritage New Zealand under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). The District Plan does not contain rules that specifically restrict earthworks on or near the mapped archaeological sites and defers to the HNZPTA process. This method and the District Plan maps which identify known archaeological sites will be retained.

Should earthworks modify or destroy an archaeological site, the necessary archaeological authority will need to be obtained by HBRC from Heritage New Zealand Pouhere Taonga. Similarly, if accidental discoveries were to occur during earthworks, standard practice is for an Accidental Discovery Protocol (ADP) to be followed with the earthworks ceasing until the necessary archaeological authority is obtained under the HNZPTA. An example ADP is attached in **Appendix C** for context. The archaeological authority process occurs outside of the District Plan and will continue to apply following the plan change.

2.7 Access and recreation effects

The river berm and stopbanks are frequently used to access the district's rivers and for recreation. There is a well-established network of walking/cycling trails along many of the existing stopbanks.

Access to active earthworks areas will be restricted during construction to protect the health and safety of the public and staff. This may include restricted access to river access points, berm areas and stopbanks where earthworks are occurring.

The earthworks will be temporary and can reasonably be expected to be undertaken in stages (e.g. a 1-2 km length of stopbank). As such, any loss of access and recreational opportunities will also be temporary and limited to a discrete location within the district. Multiple alternative access points and stopbanks will remain available for recreation at any one point in time.

Considering this, the potential adverse effects from the proposed plan change on access and recreation are considered to be less than minor.

2.8 Noise effects

The existing District Plan contains permitted activity rules and standards for noise within Chapter 25.1. No change is proposed to these provisions and construction noise associated with earthworks will need to comply with the existing permitted activity rules or obtain a resource consent. As such, the proposed plan change will not result in any further adverse noise effects beyond those currently permitted by the District Plan.

3 Conclusion

Clause 22 of Schedule 1 of the Resource Management Act 1991 (RMA) requires that where environmental effects are anticipated from a plan change, the request shall describe those effects. This report has described the potential environmental effects from the proposed plan change and makes the following conclusions:

- The plan change will facilitate increased community resilience to the flood hazard (positive effect);
- The potential adverse effects on soil erosion, land instability and sediment runoff are considered to be less than minor and mitigated by the HBRC requirement for a sediment control plan to be in place for all earthworks activities undertaken by or on behalf of the regional authority;
- The potential adverse effects on the life supporting capacity of soils are considered to be less than minor given that topsoil will be reinstated and stop-banks re-grassed;
- The potential landscape and visual effects are considered to be no more than minor as the perceptual values of the waterways as a whole, managed system, will remain largely intact and as views of the earthworks are likely to be limited;
- The potential terrestrial ecology effects are considered to be no more than minor considering the typically low ecological values of the stopbanks and adjoining areas and the temporary nature of earthworks;
- The proposed plan change will not result in any further adverse effects on wāhi taonga, heritage sites and notable trees and cultural landscapes beyond those currently permitted by the District Plan;
- The potential adverse effects on access and recreation are considered to be less than minor as any effects will be temporary and limited to discrete locations; and
- The proposed plan change will not result in any further adverse effects noise effects beyond those currently permitted by the District Plan.

Appendix A Landscape and visual effects assessment

Landscape & Visual Effects Assessment

Heretaunga Plains Flood Control & Drainage Scheme
Flood Protection Upgrades
Hawke's Bay Regional Council

March 2025

WAYFINDER
Landscape Planning & Strategy

Contents

Document Control

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Introduction

Hawke's Bay Regional Council ("HBRC") has a responsibility through the Soil Conservation and Rivers Act 1941, the Drainage Act 1908 and the Hawke's Bay Regional Resource Plan to maintain flood control mechanisms within Hawke's Bay. Following Cyclone Gabrielle, HBRC has undertaken a review of the region's existing flood control and drainage scheme and has identified that significant improvements are likely to be required. These improvements will often require large scale earthworks.

The Hastings District Council ("HDC") District Plan generally allows for flood control and drainage activities as a permitted activity, or exempts these from most District Plan rules. However, the earthworks chapter of the District Plan includes performance standards for volumes and cut/fill heights that limit how much work can be undertaken by HBRC as a permitted activity. To help enable the flood protection improvements to be undertaken, HBRC are seeking to exempt flood control and drainage works from needing to comply with these performance standards. This is being progressed through a Plan Change application which seeks to alter wording associated with section 27.1.5 of the District Plan.

This report has been prepared to support the Plan Change application. It provides an assessment of the potential landscape and visual effects that could arise by relaxing the current limitations and allowing HBRC to undertake any required flood control and drainage works within Hastings District as a permitted activity.

Overall, this assessment generally concludes that such landscape and visual effects will be ***low***. Due to the nature of what is being proposed, there are exceptions to this conclusion which are discussed throughout the report.

Methodology

This assessment has largely been undertaken as a desktop exercise, informed by the authors extensive knowledge of Hawke's Bay waterways following many years of consulting work for the HBRC. In the past 10 years, this has included:

- Visiting over 80% of the existing flood control systems within the Hastings District, this being a majority of the left and right banks of the Tutaekuri, Ngarururo and Tukituki Rivers and the Karamū Stream, alongside a large number of tributaries within the catchments of these waterways;

- Authoring the "Public Use of Rivers" consultation document that considered how the HBRC owned land adjacent to waterways can accommodate and manage the effects of public recreational use;
- Preparing various concept development plans for HBRC owned land within or directly adjacent to waterways for the management of public recreation;
- Assisting HBRC and private landowners with the identification of rehabilitation options for Esk River following Cyclone Gabrielle; and
- Preparing various planting rehabilitation plans for numerous riparian areas alongside waterways throughout the Hastings District.

However, during the preparation of the assessment, various waterways were visited on a largely unplanned basis to assist with ground-truthing the concepts and assumptions that underpin the methodology used to prepare this report.

Approach

The biggest challenge in undertaking this assessment is that the scope of works is essentially undefined. HBRC are seeking the opportunity to undertake the earthworks component of flood control and drainage works in numerous locations with no permitted limit on the extent, height, volume or location of the earthworks works. It is noted that all other components of flood control and drainage works are either already a permitted activity in the District Plan, or are managed via Regional Plans. Without defined parameters of the earthworks, undertaking a traditional landscape, natural character and visual effects assessment is challenging – there is no known physical project from which to ascertain potential impact.

However, there are some practical limitations that can be assumed.

Firstly, the Land Drainage Act 1908 describes processes by which HBRC is able to undertake works on private land, which is further underpinned by the Public Works Act 1981. Both pieces of legislation require that HBRC consult with private landowners and come to an agreement of both the works to be undertaken on their land, and the appropriate compensation to be paid. As such, any flood control and drainage works on private land will be managed by HBRC with this and other legislation addressing access arrangements and mitigation as required

As such, generally the potential effects on private landowners from flood control and drainage works on their own land can essentially be disregarded, recognising that there may be some residual effects on neighbouring private or public land.

Secondly, all flood control and drainage work undertaken by HBRC is subject to a design process that typically includes community and iwi consultation, alongside the formation of a business case that assesses the cost of such works against the benefits they will provide. In essence, HBRC are only ever likely to undertake works that are required to achieve the appropriate level of flood control, not anything greater.

Although this second point doesn't create a tangible limit to the volume or cut/fill height of potential upgrade works, it is important in the context of landscape values and what the works are seeking to achieve.

Thirdly, each of the main rivers within the Heretaunga Plains Flood Control and Drainage Scheme have their own Ecological Management and Enhancement Plans ("EMEP"). These have a two-fold purpose, firstly to manage the

waterways in the context of managing associated ecological values, and secondly to set out a strategy for enhancement of ecological values and creation of new ecological sites. Again, these documents don't create physical limits to work that can be undertaken but reinforce the requirement for work to be appropriately planned and considered.

And finally, the Plan Change is being requested to assist with the progression of upgrades to flood control mechanisms following Cyclone Gabrielle. It is noted that the Hastings District Plan has a planned life of 10 years (becoming partially operative on 12 March 2020 and fully operative on 27 June 2024), and as such the sought provisions only have a natural life until the end of this current plan. If there is reason for Hastings District Council or the community to cease the flexibility granted to HBRC through this Plan Change, then this can be reversed during the next District Plan cycle.

All of these considerations provide a degree of practical common sense to what is being sought by HBRC. The works have to be necessary, appropriately designed and considered through a consultative business case approach, and undertaken by HBRC (or its contractors) for specific flood control and drainage outcomes.

Therefore, this assessment has been undertaken by first considering the existing landscape values of the waterways within the District, at a generally high level, before then considering in a general sense and in the context of the practical limitations outlined, how earthworks relating to flood control and drainage work might affect these values. Following this, the report identifies several risk areas where potential effects might be greater at a localised scale than what has been generally considered at a broader scale.

Scale of Effects

The New Zealand Institute of Landscape Architects has published technical guidelines for landscape assessment[1] which has informed the preparation of this document. This includes the use of a 7-point assessment rating scale which has been adopted for this report, as follows:

This Assessment	Very-Low	Low	Low-Mod	Moderate	Mod-High	High	Very-High
RMA	Less than Minor	Minor		More than Minor			
						Significant	

The scale deliberately avoids the use of more traditional RMA terminology, such as minor or less than minor, and (as the NZILA guidelines set out) caution is needed in directly translating the 7-point scale of each identified

[1] Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022.

effects into an RMA terminology. Rather, the degree of individual effects are to be assessed first, and then – following that – an overall professional judgement can be made on the overall significance of effects in the context of relevant RMA or policy tests. Nevertheless, a broad scale translation of effects is provided for reference.

In regard to landscape effects, a very-high rating represents a situation where a proposal would result in direct, extensive change to the nature of landform or land-cover, and would result in changing the character of a place. A very-low rating represents a situation where a proposal would have only a small impact on landform or land-cover (such as temporary works), and relates to works that are in character with the existing landscape, or the same as a type of activity that already exists. The key aspect of assessing landscape effects is the relationship between the works and the values and character of the existing landscape.

In terms of visual effects, a very-high rating represents a situation where a proposal would become the key, dominating element in the primary view from a particular viewpoint, likely in the foreground, making the appreciation of other aspects of the view difficult to achieve. A very-low rating represents a situation where a proposal might be partially visible from a particular viewpoint, but it would be subservient to other aspects of the view and likely partially (or largely) obscured by foreground elements.

Proposal

As identified, HBRC are seeking a Plan Change to *Chapter 27.1 – Earthworks Mineral, Aggregate and Hydrocarbon Extraction* of the Hastings District Plan. The proposed changes are underlined as follows:

to amend the wording in Rule 27.1.5. The key change is to add an additional permitted activity as follows:

EMAO5	Flood protection of rivers is able to be carried out efficiently and is sustainably managed including the reduction of sedimentation into waterbodies, watercourses and riparian areas
Objective EMO1 Relates to Outcome EMAO1, EMAO2, EMAO3 ~~and~~, EMAO4 and EMAO5	To enable earthworks within the Hastings District while ensuring that the life-supporting capacity of soils and ecosystems are safeguarded and adverse effects on landscapes and human health and safety are avoided, remedied or mitigated.
Policy EMP15 Relates to Objective EMO1	Enable earthworks activities associated with river control and drainage works to be carried out by, or on behalf of, the regional authority.
Explanation	River control and drainage works provide significant benefits to the community and it is important that earthworks associated with river control and drainage activities can be undertaken efficiently.

27.1.5 RULES

The following table sets out the status of activities involving earthworks, and mineral, aggregate and hydrocarbon extraction:

When assessed under Rule table 27.1.5, earthworks will be considered a Permitted Activity and not have to comply with the Performance Standards and Terms in Section 27.1.6, provided they are:

(a) Earthworks assessed with any Subdivision Consent and Designations.
(b) Earthworks in association with a Building Consent, where the area of earthworks includes no more than 150% of the area of the associated building footprint. Note that Rules and Standards are applied once the 150% threshold is exceeded.
(c) Earthworks in association with Forestry Activities, Network Utility Operations; and the replacement and/or removal of a fuel storage system as defined by the Resource Management Regulations 2011 (National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health)
(d) Earthworks in association with the creation of public walkways and cycleways, except when located within any ONFL area, where standards relating to ONFL's in 27.1.5 and 27.1.6 shall still apply.
(e) Earthworks for river control and drainage purposes undertaken by or on behalf of a regional authority under rule EM4, except when located within any ONFL or SAL where the performance standards in 27.1.6 shall still apply.

For reference, EM4 is:

"The removal of river berm silt, gravel or other river control or drainage works carried out by a local authority, exercising its powers, functions and duties under the Soil Conservation and Rivers Controls Act 1941, or the Land Drainage Act 1908 and ancillary activities involved with the relocation of the extracted material."

Essentially, this means that earthworks outside of ONFL and SAL for the construction, deconstruction or relocation of flood control and drainage infrastructure will become permitted within the Hastings District. This might include:

- Stopbanks that are generally, but not always, parallel to the waterway;
- Retention basins for flow detention;
- Formation of flood flow diversions;
- Waterway channel realignment or creation of diversions; and/or
- Gravel or material extraction for the purposes of constructing any of the above.

It is important to note that the diversion of water is managed by the HBRC Regional Resource Management Plan, and any works to create a permanent diversion (such as undertaken by the Hawke's Bay Catchment Board in the mid 1900's) would either need to comply with the permitted activity rules of the Regional Plan or require a resource consent (and likely require significant iwi and community consultation).

Landscape Context

Activity Area

The extent of the waterways that HBRC administer is larger than the Hastings District, however this assessment is relevant only to earthworks related to flood control and drainage works on land that are restricted by the District Plan, and practically only the waterways within this area that are subject to flood control (excluding the river bed which is managed by the Regional Plan).

In a general sense, this includes the following rivers where they tend to cross flatter areas or flood plains (including the Heretaunga Plains) and become braided:

- Waikari River from approximately SH2 to the coast (only the left bank is within Hastings District);
- Te Ngaru and Pakuratahi Streams in the lower flood plains around Tangoio;
- Esk River from approximately Wallace Road to the coast;
- The Main Outfall Channel and Ahuriri Estuary east and north of Napier;
- Tutaekuri River from approximately Dartmoor to the coast, including the estuary at Waitangi;
- Ngaruroro River from approximately Maraekakaho to the coast, including the estuary at Waitangi;
- Minor tributaries and old channels of Tutaekuri and Ngaruroro Rivers, including Raupare Stream and Tutaekuri Waimate;
- The whole catchment of the Karamū Stream and Clive River, including tributaries such as Ruahapia Stream, Awahou Stream, Louisa Stream, Mangarau Stream, Karatuwhenua Stream, Awanui Stream, Irongrate Stream and others ;
- Tukituki River from Red Bridge to the coast, including the estuary at Haumoana; and
- Maraetotara River on the flatter plain south of Te Awanga.

All earthworks within these areas that are associated with flood control and drainage work will be enabled by the Plan Change. In addition, there may be other areas such as Pekapeka Wetlands and Poukawa Swamp which will also have drainage works enabled (although may not need any works undertaken). It is also important to recognise that the National Environment Standards for Freshwater also regulate the earthworks near, and within wetlands, and a resource consent would likely be required from HBRC for earthworks in close proximity to wetlands.

In total, the HBRC manages approximately 155km of stopbanks, 577km of river, stream and drainage channels, nearly 200 flood control and drainage related structures, and nearly 760ha of associated land.

Landscape Values

Nearly all of the waterways outlined above have existing flood control mechanisms in place. Typically, these take the form of linear river stopbanks that flank either side of the waterway at a calculated distance apart that provides for adequate river flood volumes to be contained.

Flood protection from many of the Hastings waterways began in the late 1800's. Significant improvements have been incremental following major events such as the Napier Earthquake in 1931 and various flood events (such as Cyclone Bola in 1988). In addition, significant upgrade works were undertaken in the mid 20th century, which included permanent diversions of the Ngaruroro, Tutaekuri and Karamu River channels, and the installation of over 150km of stopbanks.

The design and maintenance of these stopbanks and river berms is subject to significant engineering scrutiny in order for them to be robust against significant natural forces. Usually, the stopbanksare designed with steep angles rising each side, with a flat top approximately 5-8m wide. The stopbanks are grassed and mowed (or occasionally grazed by stock), and kept clear of any vegetation that might threaten the structural integrity of the stopbanks. In more recent times (since 2000), many of the tops of the stopbanks have been installed with limestone tracks that provide for walking and cycling. Aside from this surface change, the overall design and appearance of the stopbanks and river berms has been relatively unchanged for many decades.

As a result of this long activity, flood protection measures in Hawke's Bay are an intrinsic part of its landscape value. Most people who live in Hawke's Bay have grown up with such defences, understanding them to be a part of the way in which humans have adapted the landscape to provide for their wellbeing. They are a physical representation of how the rivers in Hawke's Bay dramatically change to weather patterns, and provide for popular forms of recreation that allow people to explore the wider Heretaunga landscape.

In addition, there has been a long history of material extraction within the waterways, particularly the larger rivers. While this traditionally has focussed on gravel, there are other instances of silt extraction across the Ngaruroro in particular. The extraction process involves large earthwork machinery, and often stockpiling within the river systems or directly adjacent.

Even in smaller waterway systems, flood control mechanisms are very evident. This includes weirs, dams and culverts across many of the smaller urban waterways, or the provision of generous riparian areas that allow for water overspill during floods. In addition, HBRC have been actively planting many of the riparian areas, particularly within the Karamū catchment, with a variety of native and exotic species. On the larger rivers, willow and poplar form dense corridors that are widely recognised from across the Plains.

All these features and activities combine to provide for a somewhat modified character for all the waterways in Hastings. At their core, the waterways are natural forms that respond to natural events, however they are modified in the sense that they are controlled, confined, grazed, extracted, mowed and used for recreation. It is the combination of all of these that Hawke's Bay people have become to know and understand as the rivers and waterways of the District.

There are, of course, exceptions. Locations such as the Karitewhenua Stream in Havelock North have been subject to intensive community interest, with extensive native planting and amenity enhancements. Other waterways across parts of Twyford, for example, have less interventions and tend to be narrower "V" shaped channels that are directed around orchards and farms.

Nearly all the waterways sit within the broader context of the Heretaunga Plains, mostly in rural environments (although some pass through urban locations, including some Havelock North urban streams and Tutaekuri River which passes close to Taradale). The nature of the Plains is that it is generally flat, although long-reaching views or vistas are somewhat rare due to intervening shelterbelts, orchards, buildings and amenity planting. Where visible, the waterways tend to be identified by the tall bands of poplar or willow, or other riparian vegetation.

It is known that all the rivers have significant cultural value to mana whenua, and are important markers in the wider cultural landscape. Numerous marae across Hastings are aligned towards or located adjacent to certain waterways, such as Ruahapia and Waiohiki (amongst others). It is understood that HBRC has, and continues to work directly with iwi and individual hapu in the ongoing management of waterways (more broadly and actively than just this Plan Change process) – but this assessment has been prepared independent of any engagements or cultural assessments.

Overall, the context in which the Plan Change is to be considered is focussed around the waterways within Hastings, and predominantly in the areas where they are flatter and prone to flooding. In these locations, the larger rivers in particular are somewhat iconic features, but are a representation of natural processes within a context significant human modification and management.

Landscape Effects

As identified, the waterways have known cultural landscape value to mana whenua. This assessment has not explored how the Plan Change will affect such values, and defers to the engagement processes that are being undertaken separately by HBRC. This is a recognised gap in this assessment within the context of Te Tangi a te Manu best practice landscape assessment methodology.

Putting this to one side, as identified it is also somewhat challenging to specifically and tangibly assess landscape effects as the Plan Change will potentially allow HBRC to undertake unlimited earthworks at an unlimited scale outside of identified ONFL and SAL6. However, as outlined above, there are practicalities that provide a reasonable basis for assuming effects, particularly within the landscape values and characteristics that have been identified.

Most notably is that the works that will be permitted to be undertaken by the proposed Plan Change must be specifically related to river control and drainage purposes. As a result, they will be earthworks that are of a similar scale to the existing flood control and drainage purposes described above. Although in specific locations the permitted activity status may result in relatively significant upgrades, these will remain relatively insignificant when considered in the broader scale of the waterway systems and how they are generally perceived by people.

Additionally, as alluded to above, the design of the works is unlikely to change from what currently exists – the form and proportion is well tested and understood. On this basis, stopbanks may be raised, but the overall shape and arrangement relative to the waterway and edge vegetation is likely to be very similar. It's also noted that large-scale, permanent waterway relocation (i.e. river diversion) is not manged by the District Plan – so the Plan Change doesn't allow a repeat of the mid 20th Century where significant realignments to some of the rivers was undertaken.

Within this context of scale and form remains the purpose of the earthworks – to provide flood control and drainage. In the post Cyclone Gabrielle landscape, many people (particularly those living near the waterways) have a much-heightened sense of the need for such protection. Considering this in terms of landscape values, they are more likely to be forgiving of change given the works are to provide long term benefit.

As such, in a general sense the landscape effects of the relief sought through the Plan Change are likely to be widely understood and accepted. In this regard, it is considered that the perceptual values of the waterways as a whole, managed system will remain largely intact. The waterways will remain naturally flowing, but contained and managed as they have been for many decades.

There will be physical impacts – that is the nature of earthworks. However, it is within HBRC's own interests to ensure that any physical effects are mitigated through rehabilitation, in order to ensure the long-term integrity of the works undertaken and to reduce potential maintenance. Like many of the existing stopbanks, river berms and riparian edges, this will include grassing and planting (with a mix of native and exotic species), so that in time the area of earthworks is reintegrated into wider the waterway landscape.

With this mitigation will be reinstatement of recreational opportunities, such that the waterways will remain publicly accessible once the works are completed.

There may be enhanced landscape effects resulting from the proposed Plan Change in coastal locations where the landscape is more sensitive to change. In locations such as Waitangi (the estuary of the Tutaekuri, Ngaruroro and Karamū/Clive Rivers) and Haumoana (Tukituki River estuary), there is a heightened public awareness around the amenity of such locations, alongside increased cultural and recreational values. Having said this, HBRC is heavily invested in retaining such values in these locations through its other statutory functions, and will be under intense scrutiny for any upgrade works being considered.

Additionally, a number of the coastal portions of the waterways across Hastings were significantly modified by Cyclone Gabrielle. Land use change in such locations is happening by necessity, through restoration of previous land cover, or by the conversion of such areas to other land uses (such as the removal of residential areas or the change in cropping or farming regimes). Any works undertaken by HBRC in such locations will be within this context.

Therefore, overall, it is considered that the landscape effects resulting from the proposed Plan Change will be, in a general broad sense, ***low***. This is largely driven by the fundamental purpose of undertaking the earthworks – to maintain and improve flood control and drainage. This function has long been established within the Hastings landscape, and is generally well understood and accepted. There will, of course, be shorter term effects during and immediately following construction, but these will be appropriately mitigated due to the inherent need to do so.

There may be some specific locations where specific proposals result in higher levels of landscape effects. Such effects are most likely to occur along waterways that currently have no or limited flood protection measures. These tend to be smaller tributaries, many of which have been modified by surrounding land use (waterways such as the Raupare Stream which has been channelled and straightened, or urban waterways which have been subject to built-form encroachment). The extent of flood protection works on such streams is likely to be more limited (indeed, may well include volumes below the existing permitted limits), and as such have reduced potential effects.

And, as identified, there may also be cultural landscape effects experienced by mana whenua which have not been considered by this report.

Visual Effects

Visual effects are, in essence, landscape effects that are experienced visually. Typically, this is considered in terms of how a specific view might become altered by a proposal, and whether it results in the proposal area becoming more or less dominant within the wider view.

Across Hastings, there are many locations where the waterways are visible – but only a few where the water channels themselves can be seen. For the most part, the view of the "waterways" is of the existing flood protection measures, both physical (stopbanks) or biotic (riparian vegetation, usually poplar and willow). Furthermore, the generally flat nature of the Hastings (particularly on the Heretaunga Plains) is that other landscape features (such as shelterbelts, orchards and buildings) prevent longer-reach views, and as such most waterways are only visible when a viewer is relatively close to them, or passing over them on a public road.

As such, there are vast stretches of the waterways in Hastings that are not immediately visible to the public. For example, there are long reaches of the Ngaruroro River that run at the back of orchards through Twyford. Even where roads run alongside the road, such as adjacent to the Karamū Stream on Te Ara Kahikatea, the nature of the flood protection doesn't immediately suggest this is a waterway corridor.

In addition, based on the historical work undertaken by the author, there are surprisingly few private residences in very close proximity to the larger waterways, and also few properties that directly orientate towards many of the urban waterways. In rural areas, houses are generally tucked into established gardens or surrounded by wind shelter belts, and don't have a focus towards the waterway as traditionally there is little significance in the view (the side of a stopbank). In urban areas, the waterways have historically been considered "drains" and have held little amenity – it is only more recently that people are beginning to value the corridor.

Therefore, for the most part, the only likely views of potential earthworks are when they may need to be undertaken in close proximity to public roads. In such locations, it is likely that the proposed earthworks will draw the viewers' attention – such as what was experienced by the recent upgrading of the Tutaekuri River stopbank area off Guppy Road, visible from SH2. But in such instances, as outlined in the previous landscape effects section, there is likely to be a general understanding and acceptance about the purpose of the works.

Additionally, while such works might draw the attention of a viewer, they are unlikely to be a detraction from the wider landscape – a landscape that is broad and ever changing (particularly post Cyclone Gabrielle). The waterways themselves will remain visible from locations they are currently visible, retaining their existing character.

There also remains a practical limitation to the scale of such works, particularly in regard to the height of the stopbank – as it cannot exceed the height of the road without the road itself requiring elevating. Obviously, such works would be at the higher end of the scale and would involve a very rigorous design process and community and iwi engagement. Regardless, flood protection improvements are unlikely to detract from the wider landscape and are likely to be generally accepted and understood by the viewer. .

Therefore, in a general sense, it is considered that the visual effects resulting from the Plan Change will be *low*.

However, there may be specific locations where such effects are heightened. Most likely this will be from specific private residences that do have clear, outward views to an area that will be subject to upgrade works. It is anticipated that in such situations, the dwelling would be located relatively close to the waterway, and as such will directly benefit from works undertaken. Additionally, as outlined, it's unlikely that such dwellings have an existing view of the waterway itself – unless they are adjacent to one of the smaller tributaries or an urban stream – and therefore their current outlook will be of a stopbank and potentially bank protection vegetation. During construction visual effects may elevate, but post completion and rehabilitation, the general form will remain, with any removed trees replanted and growing back in time. And, as outlined, if the works are being undertaken on private land, then they will need to be agreed to by the landowner.

In urban areas, it is understood that the proposed works to be undertaken are more complex and may involve physical structures in streams that will often require resource consent from HBRC (such as the Mangarau Stream in Havelock North). Where this is not the case, the extent of area available is relatively narrow, by default limiting the earthworks that might be undertaken. It is also assumed that properties directly adjacent to such earthworks will be direct beneficiaries of the flood control upgrades. Therefore, although visual effects have the potential to be higher (particularly during construction), they are equally more likely to be accommodated by those affected.

Conclusions

This report has been prepared to consider the potential landscape and visual effects that might result from removing flood control and drainage earthworks limitations from the Hastings District Plan, except within the ONFL and SAL areas mapped in the District Plan.

As has been outlined through the report, preparing an assessment on the basis of a potentially unlimited activity where there are no defined sites or scales is challenging. As a result, the general approach has been to consider the nature of the activity and how it fits with the surrounding landscape values.

A key aspect of this is that flood control and drainage works have been a part of the Hawke's Bay landscape for many decades. It is work that is undertaken to improve opportunities for people to live on and harvest the land, and is generally understood and accepted. Most of the waterways are not considered solely as the water channels, but as the whole system between, and including the stopbank, river berms and edge protection vegetation. The landscape values derived from the waterway are based on this whole system, and it is often the flood protection that is seen across the landscape rather than water channels themselves.

As such, within this context, it is considered that the works that will be enabled by the Plan Change will generally align with the form, scale and function of existing flood control mechanisms. In this vein, the existing values of the waterways will be generally maintained – they will remain naturally flowing, but contained and managed as they have been for many decades. As such, it is considered that in a general sense, landscape effects of the proposed Plan Change will be ***low***.

Visual effects will also be relatively contained, partly due to there being surprisingly few residential properties directly adjacent to waterways (with the exception of urban areas), and that views of the water channels themselves is usually hindered by the existing stopbanks. As such, in a general sense, visual effects of the Proposal Plan Change are also considered to be ***low***.

It is acknowledged that in reaching these conclusions there are a number of assumptions and generalisations. This is inherently necessary given the unlimited nature of what is being proposed. There will, undoubtedly, be some specific locations where a specific upgrade project exceeds the effects outlined. This will most likely occur during construction periods, but could also occur around the coast, along waterways that have currently limited flood protection mechanisms, or in urban locations.

However, in such locations, there are practicalities that provide a degree of mitigation, such as the purpose of the works being enabled by the Plan Change, and the degree of scrutiny that HBRC will remain under. Further, rehabilitation of undertaken works is inherent – required in order for HBRC to effectively maintain the works completed, and because of other statutory obligations.

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Appendix B Terrestrial ecology effects assessment

Ecological effects assessment: Proposed Plan Change to the Hastings District Plan

Hawke's Bay Regional Council

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Contents

1 Introduction

The Hawkes Bay Regional Council (HBRC) manages and maintains the Heretaunga Plains Flood Control and Drainage Scheme. This includes a network of stopbanks to provide flood protection. The majority of the stopbanks are located along the lower reaches of the four main rivers on the Heretaunga Plains, being the Tūtaekurī, Ngaruroro, Tukituki, and Karamu Stream/Clive River. However, there are also stopbanks adjacent to smaller streams throughout the Hastings District, including near the townships of Pakipaki, Whirinaki, and Te Awanga. The estimated length of stopbanks within the Hastings District is 147.157 km.

Several approaches are/have been employed to manage rivers and flooding in the Hawke's Bay. These include riverbank stabilisation using planting of the 'live' river edge with willow (or similar species), construction of stopbanks on the river berm to restrict flood waters to a defined channel, extraction of gravel and gravel beach raking (to mobilise weed-bound gravels). The Tūtaekurī and Ngaruroro Rivers were diverted into a common mouth in the 1960s for the purpose of regulating flood water.

Following Cyclone Gabrielle, the Heretaunga Plains Flood Control and Drainage Scheme has been reviewed. HBRC expect a number of flood protection improvements to be required and anticipates a large future programme of works. These upgrades will require large volumes of earthworks and a resource consent is likely to be required from Hastings District Council under the existing Hastings District Plan (HDP) for the improvements.

To address the anomaly of flood protection works being subject to earthworks volumes, HBRC is seeking a plan change to *Chapter 27 - Earthworks, Mineral, Aggregate and Hydrocarbon Extraction* of the HDP to exempt earthworks undertaken by the HBRC for river control and drainage purposes from needing to comply with the general performance standards and terms for earthworks.

The Heretaunga Plains Flood Control and Drainage Scheme is situated within an area with known and potential ecological values or biodiversity features. This report provides a description of the existing terrestrial ecological values and the potential terrestrial ecological effects of adopting the proposed Plan Change (PC).

2 Document Scope

The proposed plan change relates to a change to the earthworks rules within the HDP. This is to enable HBRC to undertake earthworks for flood control and drainage purposes as a permitted activity. This document is a high-level examination of the potential effects on terrestrial ecology and biodiversity that could arise from the proposed plan change. It does not evaluate the likelihood of the effect.

The HDP exempts all riparian vegetation modification that is associated with flood control from having to comply with the rules in *Chapters 19 – Riparian Land Management and Public Access*. Similarly, all indigenous vegetation modification for flood control purposes is a permitted activity under *Chapter 20 –*

Indigenous Vegetation and Habitats of Indigenous Fauna. As such, vegetation modification and the ecological effects associated with this, such as the effects on fauna using that vegetation as habitat, are currently permitted and no resource consent is required for these activities. As vegetation modification associated with flood control activities, is a permitted activity, this report does not consider potential adverse effect on terrestrial ecology and biodiversity from vegetation modification. The focus of this report is the potential adverse ecological effects from the plan change, specifically, from the earthworks on land that will be a permitted activity for HBRC to undertake.

It is acknowledged that flood protection improvements, particularly new stopbank construction, can have additional ecological effects. The ecological effects may arise due to the take, damming or diversion of water associated with flood protection improvements (e.g. flood flow paths are diverted due to the construction of a new stopbank), from the physical disturbance of the bed of a river or due to the earthworks within or near natural inland wetlands. However, the take, damming and diversion of water, activities in the beds of rivers, and earthworks within or near natural inland wetlands, and discharges that may affect water quality are a regional council function and managed by HBRC under the Regional Resource Management Plan and National Environmental Standards for Freshwater (NESF). These documents will not be changed as part of the plan change process and flood protection improvements will need to comply with the existing permitted activity rules/regulations of these documents or obtain resource consent from HBRC (as the regulator). Therefore, this report does not assess the potential ecological effects from the activities that are managed by HBRC.

This evaluation has been based on information provided by HBRC on likely extent and nature of activities. This report has been prepared based on the existing information available, the authors experience in the district and has not included a site visit to all areas. We note that it is not always possible to identify areas of natural biodiversity at a site in the absence of a site inspection.

3 Typical flood protection activities

To upgrade or build new flood protection infrastructure the following activities are typically required on land:

- The removal of trees and vegetation (if present);
- Earthworks to remove and stockpile topsoil at work sites;
- Excavation of suitable fill material from borrow areas to be used in construction. The borrow areas are typically within the river berm areas;
- Placement and compaction of fill, such as to build, raise and widen stopbanks; and
- Reinstatement of topsoil and stabilise the disturbed areas through establishing grass cover.

HBRC require contractors undertaking the earthworks to prepare an Erosion and Sediment Control Plan (ESCP) to manage sediment discharges from the sites. This may include controls such as use of silt

barrier fences, water carts to control dust, storage and refuelling procedures to avoid chemical and fuel spills and may also contain measures to reduce the importation of weeds[1].

Table 1 below provides a description of potential flood protection improvements for context. The table is a guide only and the details of the flood protection improvements will be determined through a site-specific detailed design and community and iwi consultation.

Table 1. Indicative scale of activities associated with flood control earthworks.

Earthworks activity	Earthworks description
Existing stopbank upgrades	The existing stopbanks generally provide protection for a 1 in 100 year event. A recently upgraded stopbank had a total crest height of 4 m and batter slopes of 7 m wide, giving a total width of 19 m. Increases in height and width can reasonably be expected to result in a total stopbank height of less than 10 m, and a width at the base of less than 40 m. The length of the entire stopbank network may be subject to upgrades, noting that upgrades will be staged in sections that are typically 1 to 5 km long.
Construction of new stopbanks	The locations of new stopbanks are currently unknown as no decisions have been made by HBRC on future projects. It is reasonable to assume that these will be located in proximity to rivers within the Hastings District. The height and width can reasonably be expected to be less than 10 m high and 40 m wide. The setback from rivers is determined on a project-by-project basis.
Borrow areas	These are typically located within the river berm areas between the stopbank and the river. They will most likely be in close proximity to the stopbanks to reduce haulage distances. Additional borrow material may be sourced from neighbouring privately owned property if suitable material is available and the landowner agrees. At the completion of the works the borrow area forms a depression within the berm area.
Other possible upgrades	The plan change will enable earthworks associated with other flood control activities. However, what these may be (e.g. spillways,

[1] Nasella tussock is a HBRC eradicate weed present in some catchments

	detention dams) is currently unknown as no decisions have been made by HBRC on future projects

4 Current Hastings District Plan provisions

The HDP defines earthworks as:

"the disturbance of land by moving, placing or replacing earth, or by excavation or cutting; filling or backfilling and the removal or importation of earth (including topsoil) to or from any site, but does not include, excavation associated with.

- tiling or cultivating of soil
- harvesting and maintaining of crops
- post holes
- drilling bores
- offal pits
- burial of dead stock and plant waste
- installation of services such as water pipes and troughs

The volume of earthworks is the sum of both cut and fill operations".

Earthworks for river control and drainage activities are provided for as a permitted activity under rule EM4 in Chapter 27. However, the general performance standards and terms in section 27.1.6A for all earthworks apply (e.g. zoned based earthworks volume limits, cut/fill heights).

Flood control works are unlikely to occur within the area mapped as a Nature Preservation Zone which relates to Cape Kidnappers and Ocean Beach as these areas are outside the existing flood control scheme area.

5 The proposed plan change

HBRC is seeking a plan change (PC) to *Chapter 27 -Earthworks, Mineral, Aggregate and Hydrocarbon Extraction* to the HDP to permit earthworks undertaken by HBRC for river control and drainage purposes. A minor change is proposed to exempt earthworks that are undertaken by the HBRC for river control and drainage purposes from needing to comply with the general performance standards and terms for earthworks.

The following changes are proposed to *Chapter 27.1 - Earthworks, Mineral, Aggregate and Hydrocarbon Extraction* of the HDC District Plan. Additions are shown in <u>underline</u>:

whirika

EMAO5	Flood protection of rivers is able to be carried out efficiently and is sustainably managed including the reduction of sedimentation into waterbodies, watercourses and riparian areas
Objective EMO1 Relates to Outcome EMAO1, EMAO2, EMAO3 and, EMAO4 and EMAO5	To enable earthworks within the Hastings District while ensuring that the life-supporting capacity of soils and ecosystems are safeguarded and adverse effects on landscapes and human health and safety are avoided, remedied or mitigated.
Policy EMP15 Relates to Objective EMO1	Enable earthworks activities associated with river control and drainage works to be carried out by, or on behalf of, the regional authority.
Explanation	River control and drainage works provide significant benefits to the community and it is important that earthworks associated with river control and drainage activities can be undertaken efficiently.

27.1.5 RULES

The following table sets out the status of activities involving earthworks, and mineral, aggregate and hydrocarbon extraction:

When assessed under Rule table 27.1.5, earthworks will be considered a Permitted Activity and not have to comply with the Performance Standards and Terms in Section 27.1.6, provided they are:

(a) Earthworks assessed with any Subdivision Consent and Designations.

(b) Earthworks in association with a Building Consent, where the area of earthworks includes no more than 150% of the area of the associated building footprint. Note that Rules and Standards are applied once the 150% threshold is exceeded.

(c) Earthworks in association with Forestry Activities, Network Utility Operations; and the replacement and/or removal of a fuel storage system as defined by the Resource Management Regulations 2011 (National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health)

(d) Earthworks in association with the creation of public walkways and cycleways, except when located within any ONFL area, where standards relating to ONFL's in 27.1.5 and 27.1.6 shall still apply.

(e) Earthworks for river control and drainage purposes undertaken by or on behalf of a regional authority under rule EM4, except when located within any ONFL or SAL where the performance standards in 27.1.6 shall still apply.

This plan change will permit all earthworks associated with flood control and drainage activities, except those within Outstanding Natural Features and Landscapes and Significant Amenity Landscapes where the existing District Plan performance standards will continue to apply.

6 Ecological context

6.1 Hawke's Bay ecological setting

The Hawke's Bay region is situated on the east coast of the North Island and spans several Ecological Regions[2]. The Heretaunga Plains is situated in the Hawke's Bay Ecological Region and Heretaunga Ecological District. In general, the region is climatically dry and based on the geologically unstable, tectonically active greywacke-based axial ranges, with papa-based hill country in north and south, dryland limestone, and deep alluvial gravels in river valleys and on the extensive lowland plains.

The main rivers of the Heretaunga Plains catchment are the Tūtaekurī and Ngaruroro rivers, both of which originate in the Kaweka Range, and the Tukituki which originates in the eastern Ruahine Range.

Prior to human arrival the area was mostly forested. Fires (both deliberate and accidental) during Māori occupation significantly reduced the extent of forest which was replaced by low dry short-tussock grasslands. Further burning during the development of pastoral farming by Pakeha removed most of the remainder of forest in lowland Hawke's Bay and replaced it with extensive grass-based sheep and beef farms and later dairy farms in some areas. The highly fertile alluvial plains of the Heretaunga Plains have long been favoured for orcharding and wine growing. The steeper hill country has extensive exotic pine plantation (mostly radiata pine). There has been a massive loss (96% of the original extent) of wetlands from lowland areas, mostly historical (HBRC, n.d.).

Currently, most remaining forests are located in the axial ranges and these are frequently secondary forests resulting from fires, storms and prior volcanic activity from Central North Island Volcanic Zone. Primary forests are, thus, now rare in the region. On hill country areas there is increasing (depending on land use activity and intensity) sclerophyllous shrubland (mānuka and kānuka shrubland) and secondary broadleaf forest. Many of the remaining natural areas are moderately to severely degraded by the combined actions of pest plants and pest animals, particularly deer, goats, pigs, rats, possums, mustelids and cats.

[2] Hawke's Bay, Eastern Hawke's Bay, Wairoa, Urewera, Kaimanawa, Moawhango, and Ruahine Ecological Regions.

The loss of the original forest cover has more than likely resulted in reduced water quantity [3] and quality in the region's rivers although decline in quantity and quality have also been exacerbated by anthropogenic activities on land. The loss of forest cover is impacting on the region's aquatic fauna and flora through increased algal and periphyton cover of riverbed stones, low dissolved oxygen and high water temperature stress changing the composition of the river's aquatic fauna and flora. Increased sedimentation from hill country erosion is smothering river gravels, changing the local food web and creating trophic cascades adversely affecting fish and bird faunas.

6.2 River ecological values

The three main rivers of the Hawke's Bay are unusual in both a national and international context as they have extensive areas of braided river in their lower reaches. Braided rivers have a curvilinear network of terraces and river channels of varying age, some very young and bare and others much older and covered in low vegetation. Globally, braided rivers are rare, and New Zealand is an international braided river hotspot. Braided rivers are also rare in the national context, being classified as Naturally Uncommon and have the status of 'Endangered' due to historic and ongoing loss and degradation (Holdaway et al., 2012). The braided rivers of the Hawke's Bay are the only extensive representation of this river type in the North Island.

Rivers in the Hawke's Bay and particularly the braided river sections, provide nesting, feeding and roosting habitats for a number of fauna (including ca. 88 species of indigenous bird and 19 species of native freshwater fish), some of which are adapted to river and braided river environments, and some are highly mobile or migratory. The headwater reaches are also home to small patches of specialised indigenous riverbed plant communities, however, these are now functionally extinct in the lowland Hawke's Bay. Some of the flora and fauna species are threatened with extinction nationally.

The region's river mouths are ecologically important areas, although many of these river mouths have been modified and/or reduced in area, which has impacted the presence and abundance of indigenous species (e.g., there is little use by marine mammals such as seals today).

The braided rivers of the Hawke's Bay have been dramatically transformed by river management practices constraining rivers and adjoining land use change. There are now few areas that display the typical braided river character.

6.3 Riparian ecological values

The main rivers within the Hastings District typically have a wide grassed berm area between the stopbank and the active river channel. Edge protection, in the form of willow plantings, is also often present along the edge of the active channel and river berm areas. The indigenous ecological values

[3] Deforestation in temperate climate zone generally result in decline of water quantity through loss of rainfall interception, increase in surface runoff, loss of soil moisture (via soil loss or loss of humic layers), and eventually loss of baseflow in streams and rivers (Allen et al., 2013; Ruiz-Garcia et al., 2022). Diverse forest provides more and better ecosystem services (including water provisioning) than those of exotic or planted forests (Carlyle-Moses & Gash, 2011; Jones et al., 2022; Larcher, 2001)

within the riparian area (riverbank and berm) generally reduce in the lowland environment compared to the upper reaches of the rivers, except in the vicinity of the river mouths.

The riparian areas of the rivers within the lowland HDC area are now dominated by exotic plant communities. These have either been deliberately induced (flood protection plantings, farmland, orchards) or as a result of invasion of a large number of weedy tree, herb or grass species. The main plant community in the riparian areas are river edge treeland/forest dominated by crack willow with areas of other tree species, such as necklace poplar trees. These cover large areas and extend considerable distances inland from the riverbed in places. The riparian area also contains a number of problematic herbaceous weeds such as old man's beard and periwinkle that smother the ground to a depth of ca. 1 m in places.

Areas of wetland are present within riparian areas (some of which may be ecologically important), dominated in places by the indigenous sedges *Carex geminata* and *Carex virgata*. However, these are frequently degraded by a high loading of weed species, especially water celery *Helosciadium nodiflorum*.

The dry grassed areas consist of a number of exotic grass and herb species that are maintained as pasture in some places. Important remnants of indigenous vegetation and habitats for indigenous fauna (mainly dry alluvial forest containing kānuka *Kunzea ericoides* and kōwhai *Sophora* spp., with occasional occurrence of tītokī *Alectryon excelsus*) are present in some locations. At most sites a few scattered common indigenous plant species (such as fireweeds *Senecio* species, or *Haloragis erecta*, or cudweed *Pseudognaphalium lanatum*) are likely to be present. Some areas of native plantings have been undertaken in the riparian area by HBRC.

In terms of fauna, exotic trees such as willows can provide roosting and nesting habitat for several species of shags, some of which are rare. Reptiles now rarely occur in lowland areas, but small-scaled skink and other species occur in the headwaters or upper reaches. The remaining fragments of indigenous vegetation often supports relatively higher numbers of indigenous invertebrates, such as beetles, native wasps, and millipedes, compared to exotic vegetation (Forbes, 2011; Forbes & Whitesell, 2015) as well as indigenous birds.

Overall, the riparian area has been substantially modified over time to become dominated by exotic plant species with low indigenous biodiversity and habitat value, with some isolated remnants of indigenous vegetation that are of substantially higher indigenous biodiversity value including as habitat for indigenous fauna.

Illustrative photographs of typical vegetation communities within the berm of lowland Hawke's Bay rivers are provided in Figure 1 and Figure 2.

Figure 1. Typical vegetation community in berm area of lowland Hawke's Bay rivers with tall rank exotic grasses and herbs and patches of tall exotic trees, particularly fringing the river bed (left in photo).

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Figure 2. Exotic-dominated riparian vegetation along watercourse in berm area of river in Hawke's Bay.

6.4 Flood plain ecological values

Flood plains (wider braid plain plus older elevated terraces and alluvial deposits) in the Hawke's Bay have now mostly been modified by agricultural or urban land uses. However, in some locations within the lowland HDC boundary (but mostly outside of the Heretaunga plains and areas where flood protection can reasonably be expected to occur) are remnants of alluvial forest (some containing mature forest).

Forest fragments and wetlands on floodplains are now often orphaned from the fluvial processes which contributed to their development. This, together with weed invasion, fragmentation and pests is likely to be resulting in a cascade of negative ecological changes within the floodplains and may be a reason mature forest trees fail to thrive at some sites.

The alluvial forest and wetlands on floodplains provide habitat for indigenous birds, and may provide habitat for indigenous invertebrates, reptiles and (together with large exotic shelterbelt trees and old

buildings) bats (Forbes, 2011; Forbes & Whitesell, 2015). Most of the alluvial forest remnants as well as freshwater wetlands are Acutely or Chronically threatened ecosystem types.

Overall, the floodplain area has been substantially modified over time (to a higher degree than the riparian area) to become dominated by exotic plant species and agricultural plant communities with low indigenous biodiversity and habitat value, but with some isolated remnants of indigenous vegetation that are of substantially higher indigenous biodiversity value including as habitat for indigenous fauna.

6.5 Species of national, regional, or local conservation importance

There are a large number of species of conservation importance that are known to occur within the Hawke's Bay non-marine area (344 species in a number of taxonomic groups and including 61 threatened species[4]). These are outlined below.

6.5.1 Avifauna

The Tūtaekurī, Ngaruroro, and Tukituki rivers and their respective tributaries support significant proportion of populations of indigenous birds which use braided rivers for breeding.

Prior to the Cyclone Gabrielle in February 2023, the riverbeds of these rivers collectively supported a significant proportion of the global population of three indigenous dotterel species including 13% of global population of banded dotterel (At Risk – Declining)[5], 14% of global population of New Zealand dotterel, and ~50% of the national population of black-fronted dotterel (At Risk – Naturally Uncommon). Previous surveys have placed the Tukituki, Ngaruroro and Tūtaekurī riverbeds as second, third and eleventh largest single-river populations of banded dotterel (McArthur et al., n.d.).

These riverbeds are also one of very few breeding habitats in North Island for South Island pied oystercatcher (At Risk – Declining), with numbers increasing by ~50% in the Hawke's Bay between 2019 and 2021 (McArthur et al., n.d.). River mouths create heterogenous habitats which are also hotspots for river and coastal birds as well as Arctic-breeding migratory species (McArthur et al., 2021). Some of the species such as New Zealand dotterel experienced a substantial increase in population size and breeding range along the region's coastline from 2011 until before Cyclone Gabrielle.

The post-cyclone river bird census in the Hawke's Bay revealed the devastating impact of Cyclone Gabrielle on birds that are present on riverbeds and coasts in the region. Cyclone Gabrielle resulted in the largest decline in populations of most of the indigenous species since the bird surveys began in the 1960s, including 15% and 30% declines of banded dotterel from the three main rivers and the coastline, 30% decline of black-fronted dotterel from the three main rivers, and 36% decline of New Zealand dotterel from the coastline (HBRC, 2024; McArthur et al., 2024). Specific causes of declines are yet to become clear, but are most likely from the combination of direct loss or mortality of nests, juvenile and adult birds, and habitat degradation (such as increased sediment deposits on gravel beds) (McArthur et

[4] Whirika Consulting Ltd data
[5] Threat status as per Robertson et al (2021)

al., 2024). Areas smothered with fine sediments are fertile ground for invasive weeds, which would further lead to future habitat degradation within the riverbed.

Climate-induced catastrophes such as cyclones are not the only threats that have caused the dotterel species and pied oystercatchers to decline within the Hastings District. Fundamental and long-lasting impacts have been caused by loss of breeding habitats (most of these birds require 'clean' gravel with minimum vegetation cover) and predation by introduced mammals. Declines in water quality, especially the release of fine sediment has resulted in losing optimum breeding and feeding habitats. Water level drawdown via water takes and associated summer low flow events has also created areas which are more accessible to predators, thus resulting in high breeding failure. There is no large-scale predator control currently in place along these rivers.

The avifauna outside of the riverbed and the fringing willows is mostly exotic species, but some common indigenous species such as shining cuckoo, grey warbler, waxeye, and fantail use the areas of treeland and forest.

6.5.2 Bats

The long-tailed bat is currently classified as "Threatened – Nationally Critical" (O'Donnell et al., 2023), being one of the species with the highest risk of extinction. Long-tailed bat populations are declining at the rate of 5 – 9% per annum across New Zealand, equating to > 95% decline over three generations (36 years). Their primary habitat is old-growth forests, which has been reduced to 30% of its original extent both in Hawke's Bay and nationally and continues to decline regionally and nationally due to heightened vulnerability to climatic events (including high winds), browsing, and airborne disease such as Myrtle rust affecting large Myrtaceae trees (e.g. Northern rātā).

While old-growth forests are the primary habitats for the species, long-tailed bats also uses exotic forests and trees as well as modified environments for roosting and foraging (Borkin & Parson, 2010). River corridors are particularly important foraging ground as insects are their main food source. Long-tailed bats have been recorded within the Hastings District in modified landscapes such as rural townships and even in urban and peri-urban areas where large, often exotic, trees are providing roosting and/or foraging sites (Go Eco, 2024; Griffiths, 2022). The species have also been detected near areas with rivers (including braided rivers) and wetlands flanked by tall vegetation (e.g. kanuka scrub, willow forest), indicating that rivers provide foraging ground for the species.

6.6 Exotic species

Much of the region is inhabited by pest animals, particularly stoats and ferrets (and possibly weasels), rodents, hedgehogs, cats, hares, rabbits and possums which are affecting the biodiversity that remains in the area. These species can be expected to be present within riparian areas and the adjoining floodplains within the HDC area. Likewise, infestations of weed species are also affecting the area's biodiversity. Some weeds are of concern because they can smother or outcompete indigenous vegetation.

While of low indigenous ecological value, the rivers and their margins are frequently inhabited by game birds (pheasants, ducks, quail) and sports fish (trout).

7 Potential ecological effects

The section below provides a description of the potential effects on terrestrial ecology from the proposed plan change to the earthworks chapter of the District Plan. As outlined in Section 2, vegetation modification for flood control is already a permitted activity under the existing District Plan and these provisions will not be changed. Therefore, the ecological effects from the clearance of vegetation have not been considered. Similarly, ecological effects associated with activities managed by HBRC (as regulator), such as, the diversion of water and earthworks within wetlands have not been considered.

7.1 Potential effects on terrestrial ecological features from earthworks

7.1.1 Stopbank maintenance or upgrade

The terrestrial ecology effects that could arise from earthworks for the maintenance or upgrade (increases in width and/or height) of an existing stopbank are:

- Vehicle movements during construction which may disturb indigenous fauna through elevated noise and dust and the transport of unwanted pest plant species.
- Loss of available habitat of fauna as a result of an increase in footprint area of flood protection structures or an increase in crest height.

The presence of indigenous biodiversity beyond a few scattered common indigenous plant species (such as fireweeds *Senecio* species, or *Haloragis erecta*, or cudweed *Pseudognaphalium lanatum*) is unlikely due to the long history of ecological change in the district. Wetlands (both naturally occurring or induced) may be present within any of the sites. Isolated indigenous trees and patches with higher indigenous biodiversity may also exist within the footprint works area. Although, any native biodiversity that is present is most likely to be common indigenous species. However, there is always the possibility that rare flora or fauna species, mobile species, or protected wildlife[6], are present.

The works area[7] is likely to have been previously impacted, with vegetation removal and establishment of mown grass, during construction of the original stopbank. These stopbank areas have limited ecological features and value. Therefore, potential ecological effects arising from new earthworks are likely to be limited.

There is potential for effects on indigenous fauna that have colonised the site since stopbank construction (e.g. birds, lizards). There will be a total loss of any indigenous fauna habitat values within

[7] The works area is the area occupied either by the structure and the area affected by heavy equipment movement involved in construction or excavation.

the footprint during the earthworks. However, at the completion of the maintenance and upgrade works the area will be returned to grass and indigenous fauna will likely recolonise the area overtime. As such, the adverse effects will be temporary.

The effects of noise, dust, and vehicle movements from maintenance and upgrade works may make some bird species avoid the immediate area and more sensitive species may avoid the general vicinity. This effect is unlikely to extend beyond 300 – 500 m from the site and will occur for the duration of works. This could result in some reduction in feeding efficiency or nesting locations for some species. These effects could have minor and temporary adverse effects on the local population of a species.

No effect is anticipated from the increases in stopbank crest height during stopbank upgrades. The increase in crest height is unlikely to impede movement or communication of any indigenous fauna such as birds, bats, and lizards that could be present in these areas.

Overall, considering the typically low ecological values of the stopbanks and areas immediately adjoining the stopbanks generally, these effects are unlikely to occur and the potential adverse effects from the earthworks are considered less than minor for the majority of the areas where works could be expected to occur.

7.1.2 Excavation of fill borrow sites and the transport of fill

The ecological features possibly present at borrow sites are the same as that described for stopbank maintenance and upgrade in Section 7.1.1. The potential adverse effects from the earthworks are:

- Vehicle movements during construction which may disturb indigenous fauna through elevated noise and dust and the transport of unwanted pest plant species;
- Loss of available habitat area as a result of physical disturbance, noting that the disturbance is temporary; and
- The transport of weed and pasture species.

The effects of noise, dust and vehicle movements on indigenous birds are the same as those discussed in Section 7.1.1.

Excavation of fill borrow sites and transport of fill are likely to result in damage to habitats of fauna (if present). The effect of these activities is complete loss of the habitat in sites being excavated, and moderate to severe damage to habitats in vehicle movement areas for the duration of the works. However, at the completion of the works the area will be returned to grass and indigenous fauna will likely recolonise the area overtime. As such, the adverse effects will be temporary.

There is also a risk that excavation of borrow material transports weed species to new sites. Of particular concern are Chilean needle grass, African feather grass, Nasella tussock, yellow bristle grass, Australian sedge, nodding thistle, variegated thistle, cotton thistle, saffron thistle, goats rue, Noogoora bur, Bathurst bur, spiny emex, and old man's beard.

Remediation of borrow sites typically includes reinstating stockpiled topsoil and oversowing with pasture grasses. Oversowing of pasture species in close proximity to indigenous vegetation or a wetland would increase the risk of invasion of the pasture species into indigenous ecosystems, resulting in a higher weed burden for the latter.

The final landform is likely to be a depression due to the extraction of the fill material. This has the potential to create an induced wetland (a positive ecological effect due to habitat creation), but this is considered unlikely as borrow areas in these locations (adjacent to rivers) are likely to have a free-draining subsurface.

Overall, considering the typically low ecological values of the stopbanks and areas immediately adjoining the stopbanks generally, these effects are unlikely to occur and the potential adverse effects from the earthworks are considered less than minor for the majority of the areas where works could be expected to occur.

7.1.3 Creation of new stopbanks

The ecological features possibly present at new stop bank sites is the same as that described for stopbank maintenance and upgrade in Section 7.1.1.

The creation of a stopbank at a new location has the same effects identified for stopbank maintenance and upgrade and excavation of borrow sites as discussed in Sections 7.1.1 and 7.1.2. However, new stopbanks are more likely to be occurring in areas with less history of previous disturbance (e.g. the previous creation of a grassed and mown stopbank) and therefore could have a greater effect, in terms of the loss of available suitable habitat area, than similar works associated with an existing stopbank. Noting that the floodplain where a new stopbank may be located is typically a modified environment comprised of viticulture, horticulture and agriculture which can reasonably be expected to have low ecological values, therefore, reducing the potential adverse effects generally.

Overall, considering the typically low ecological values of most locations where stopbanks are likely to be created and areas immediately adjoining the stopbanks generally, these effects are unlikely to occur and the potential adverse effects from the earthworks are considered less than minor for the majority of the areas where works could be expected to occur.

7.1.4 Other earthworks

The plan change will permit all earthworks for flood control and drainage activities. This could include earthworks for a different purpose than those discussed above, such as to form spillways or detention dams. These ‘other’ and unknown earthworks can reasonably be expected to be of a similar nature and scale and location as the earthworks discussed above. Therefore, while the purpose of the earthworks may be different, the potential adverse effects on terrestrial ecology can be expected to be the same.

8 Conclusion and recommendations

Overall, the potential adverse effects of the PC on the ecological features and values of the sites where earthworks may occur is likely to be less than minor. It is noted that there is potential for vehicle movements and associated noise and dust disturbance having a minor temporary effect if areas of higher ecological importance are present in the immediate vicinity of the works (e.g. shag's nesting in nearby willows), which is possible, but unlikely.

No amendment to the proposed wording of the PC in Section 5 is considered necessary.

9 Appendices

9.1 Terms used

Stopbanks (also known as levees or embankments) are man-made structures built along rivers to prevent flooding by restricting river flow to a defined channel.

Fluvial: resulting from river water.

Freestone: a river bed consisting of boulders that move during flood events.

Riverbed: the bed of the river channel occupied by the flowing river and associated fresh gravel terraces out to the river bank.

River channel: the area occupied by the flowing river.

Braided river: a river network consisting of a sequence of gravel islands and intervening frequent inter-connected river channels.

Flood plain: The area occupied by the river during floods, including historically occupied areas that have been built-up during previous flood events. Termed a 'braidplain' where they occur in a braided river environment.

Natural Inland Wetland: as defined in the NPS-FM.

River terrace: raised and flat area adjacent to a river and created by past deposition of gravels by the river.

Riparian: inhabiting the margins of a river (the now commonly-applied meaning).

Alluvial/riverine: relating to a river. Alluvial often refers to the area outside of the bed currently occupied by the river.

Macrophyte: aquatic plants or plant-like algae.

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Appendix C Accidental discovery protocol

Outlined below is a typical ADP that is followed when accidental discoveries occur during earthworks.

If koiwi, wāhi taonga, wāhi tapuor other archaeological material is discovered in any area during the earthworks:

- All works shall cease immediately within 50 m of the discovery and an exclusion zone around the area of discovery shall be established;
- The following authorities shall be contacted as soon as possible but within 24 hours:
  - Hastings District Council;
  - Heritage New Zealand;
  - The relevant iwi authority;
  - If human remains are found, the New Zealand Police shall also be contacted.
- HBRC shall allow the above parties to inspect the site, and in consultation with them, identify what needs to occur before work can resume;
- No works shall resume within 50 m of the discovery until written confirmation is received from the parties identified above that works can recommence.

Note: Evidence of archaeological material may include burnt stones, charcoal, rubbish heaps, shell, bone, old building foundations, artefacts and human burials.


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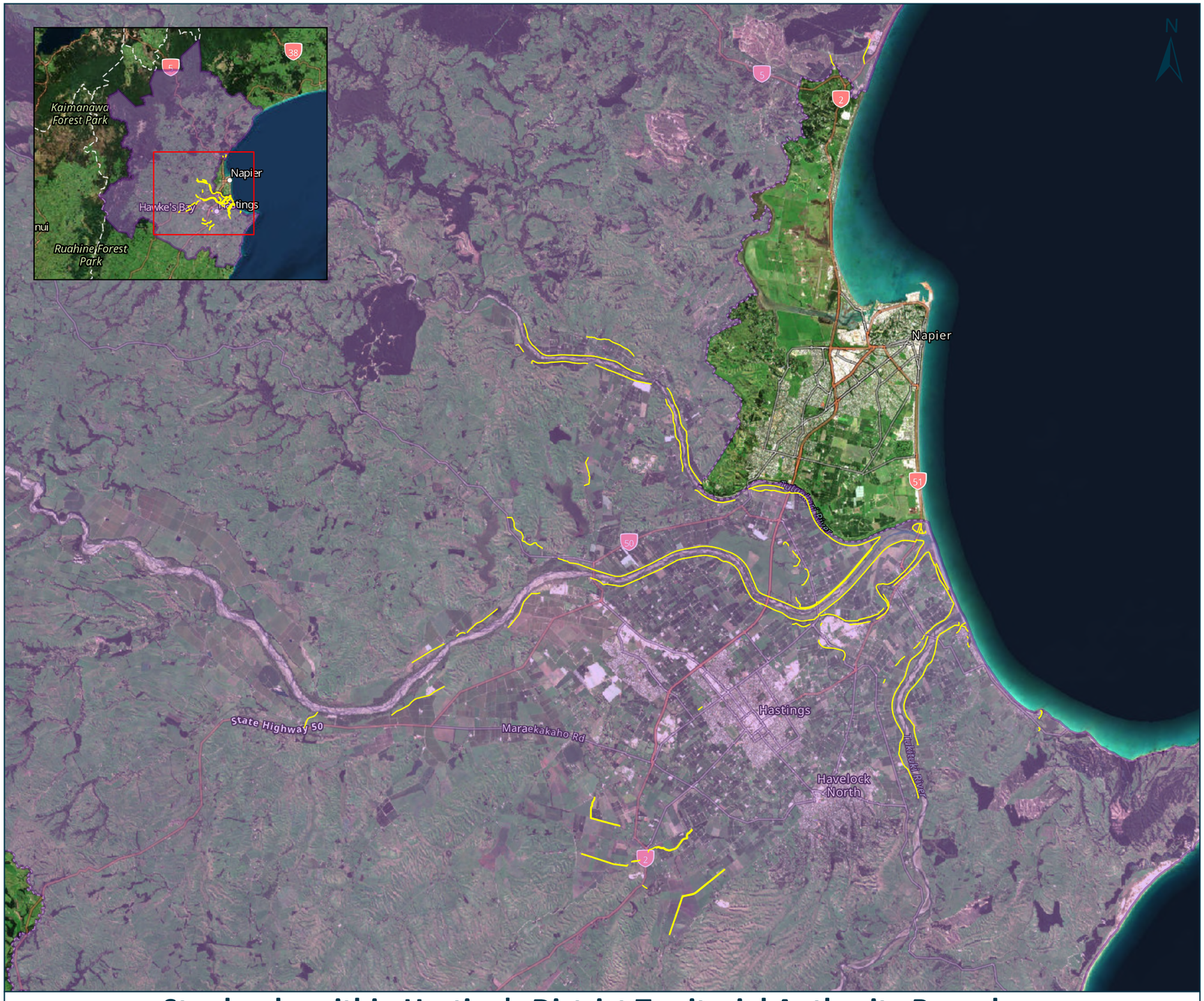
Appendix C Existing stopbank map



Stopbanks within Hasting's District Territorial Authority Boundary

LEGEND

- Stopbanks
- HDC Boundary 2023

Total estimated length of stopbanks within Hasting's: District Boundary: 147,157m

0 1.5 3 4.5
kilometres

Date: 3/05/2024
Scale: 1:154,000 @ A3

Reference Systems:
NZTM | NZVD2016

HAWKES BAY REGIONAL COUNCIL
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI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