

WAIROA

FLOOD MITIGATION
PROJECT



6 March 2025

Agenda

- Our kaupapa
- The journey so far
- North Clyde Option 1C
- Wairoa River mouth management
- Wairoa River mouth groyne
- Kopu Road and Ngamotu Road
- What happens next?

Our kaupapa

Since Cyclone Gabrielle in February 2023, the Tripartite partners – Wairoa District Council, Tātau Tātau o Te Wairoa Trust and Hawke's Bay Regional Council – have been working together with the community to find solutions to help protect Wairoa from future flood events.

This is about finding a way forward with the **best possible technically viable solution** that **minimises negative impacts on whānau, their land and homes** and **protects marae, urupā and cultural taonga** in the process.

The journey so far

- Cyclone Gabrielle – *February 2023*
- Community kōrero commence – *June 2023*
- Crown funding confirmed, including \$70m for Wairoa – *August 2023*
- Wairoa Flood Mitigation Stakeholder Group established – *October 2023*
- Long-list of flood mitigation options refined – *October 2023 to September 2024*
- Kopu Road weather event – *June 2024*
- Crown Manager appointed – *August 2024*
- Additional flood mitigation for Kopu Road, Ngamotu Road and Wairoa River mouth considered – *November 2024 onwards*
- Option 1C, with refinements, agreed for progression – *February 2025*

Holistic flood plain management for Wairoa

- North Clyde flood mitigation project – Option 1C, with refinements
- Wairoa River mouth operational management plan in place
- Structural solution for Wairoa River mouth under consideration – groyne
- Kopu Road and Ngamotu Road mitigation under consideration – stopbanks
- Upper catchment management of erosion and sediment loss
- Telemetry network resilience upgrade – 3 completed, 5 remaining



Progressing Option 1C

Cultural impact: impacts fewer parcels of whenua Māori, avoids sites of cultural significance as identified in the CIA

Hydraulic efficiency: most direct overland path, aligns with historical flood patterns, best hydraulic solution

Reduced upstream impact: fewer negative upstream impacts, significantly smaller footprint

Social considerations: including number of impacted homes and whenua

Right now, we are continuing to refine the profile and alignment of Option 1C to further minimise potential impacts to owners of whenua Māori, whānau, home and landowners.



Wairoa River mouth – operational management

- 18 October Draft Interim Management plan shared with Tripartite & Crown Manager
- 4 November Expert Conferencing held in Wairoa
- 21 November Final Interim Plan shared with Tripartite & Crown Manager
- 13 December Report received from Christensen Consulting on review of options discussed at the expert conferencing
- 16 December Meeting held with representatives from Tātau Tātau o Te Wairoa (TToTW) to discuss collaboration on development of Intermediate Management Plan
- 29 January Second meeting held with TToTW
- 26 February Third meeting and draft Intermediate Management Plan exchanged with TToTW
- 21 March Drafts to be finalised with TToTW, including operational guidance
- 28 March Final draft to be shared with experts from conferencing, Tripartite and Crown Manager for review
- 14 April Final intermediate Management Plan submitted to Tripartite and Crown Manager

Decisions from expert conferencing – 4 November

Medium term management options for mouth and bar to be developed in partnership with TToTW to replace initial interim plan.

- Include weekly joint inspections between HBRC and representative from TToTW
- Weekly inspection reports shared with Tripartite group
- Cameras installed to give 24/7 visibility of the river mouth
- Include management options for when mouth is closed during low flow
- Include Emergency procedure for when communications between Wairoa and Napier are disrupted – Wairoa CDEM Controller to be authorised to make decision regarding the opening of the mouth

Crown Manager to investigate longer-term / permanent options for mouth opening

Progress to March 2025

Initial Interim Plan for the Management of the Wairoa River mouth and bar (Nov 2024)

- Currently in place – pilot channel with coffer dam



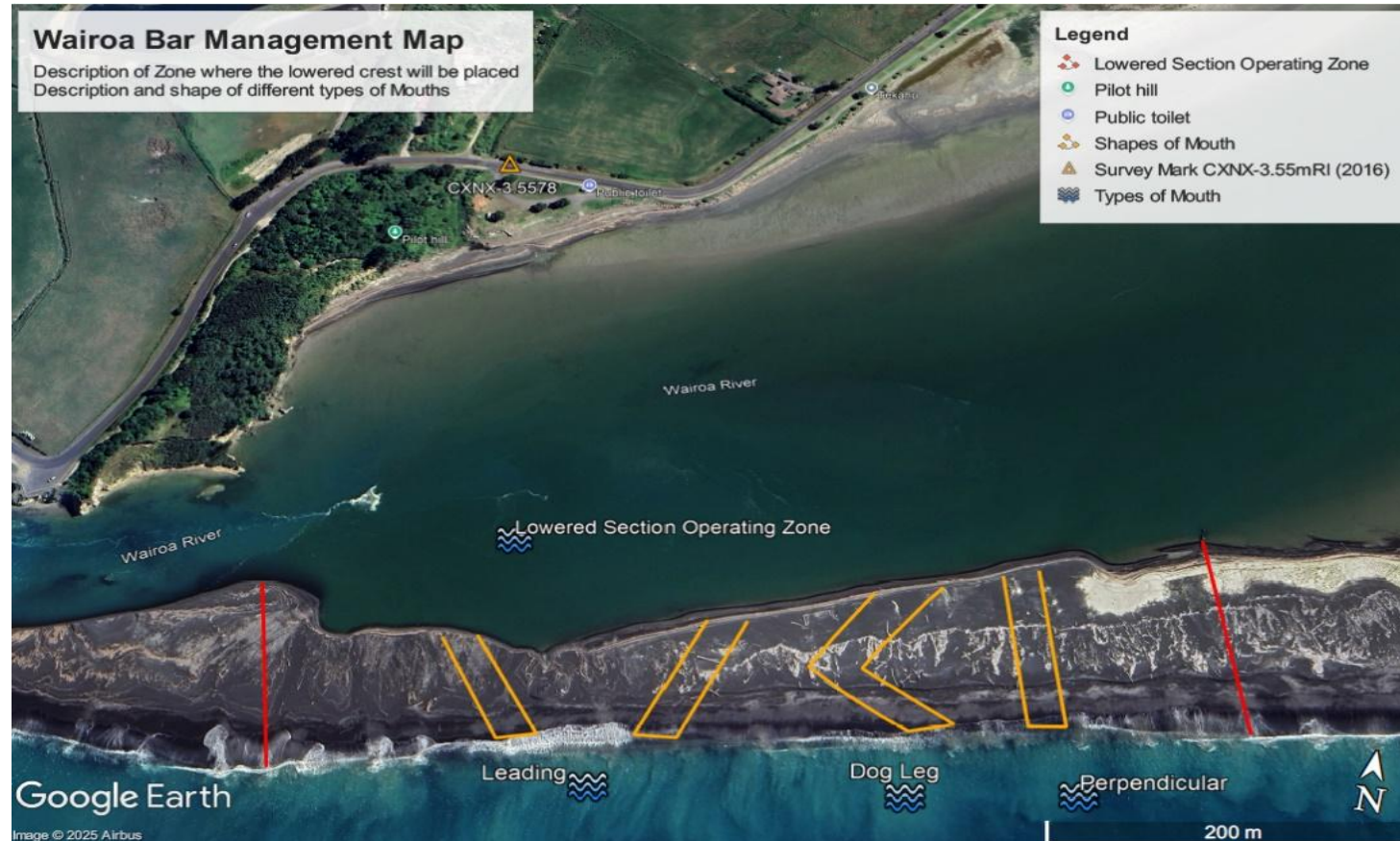
Progress to March 2025

Low flow event – second mouth opened successfully



Proposed Management Plan (March 2025)

Permanently lowering crest height across section of bar



Proposed zone of lowered crest located between two red lines

Additional flood mitigation options

- Development of potential flood mitigation option concepts and cost estimates have been completed, including stopbanks along Kopu and Ngamotu Roads and a Wairoa River mouth groyne option.
- At this stage, early indications are that most – if not all – of the Crown’s \$70 million will be allocated to North Clyde Option 1C.
- That leaves either/both as unfunded projects, and projects not yet approved by the Hawke’s Bay Regional Council.
- This is, however, about a more holistic approach to flood plain management for Wairoa and important conversations to continue.

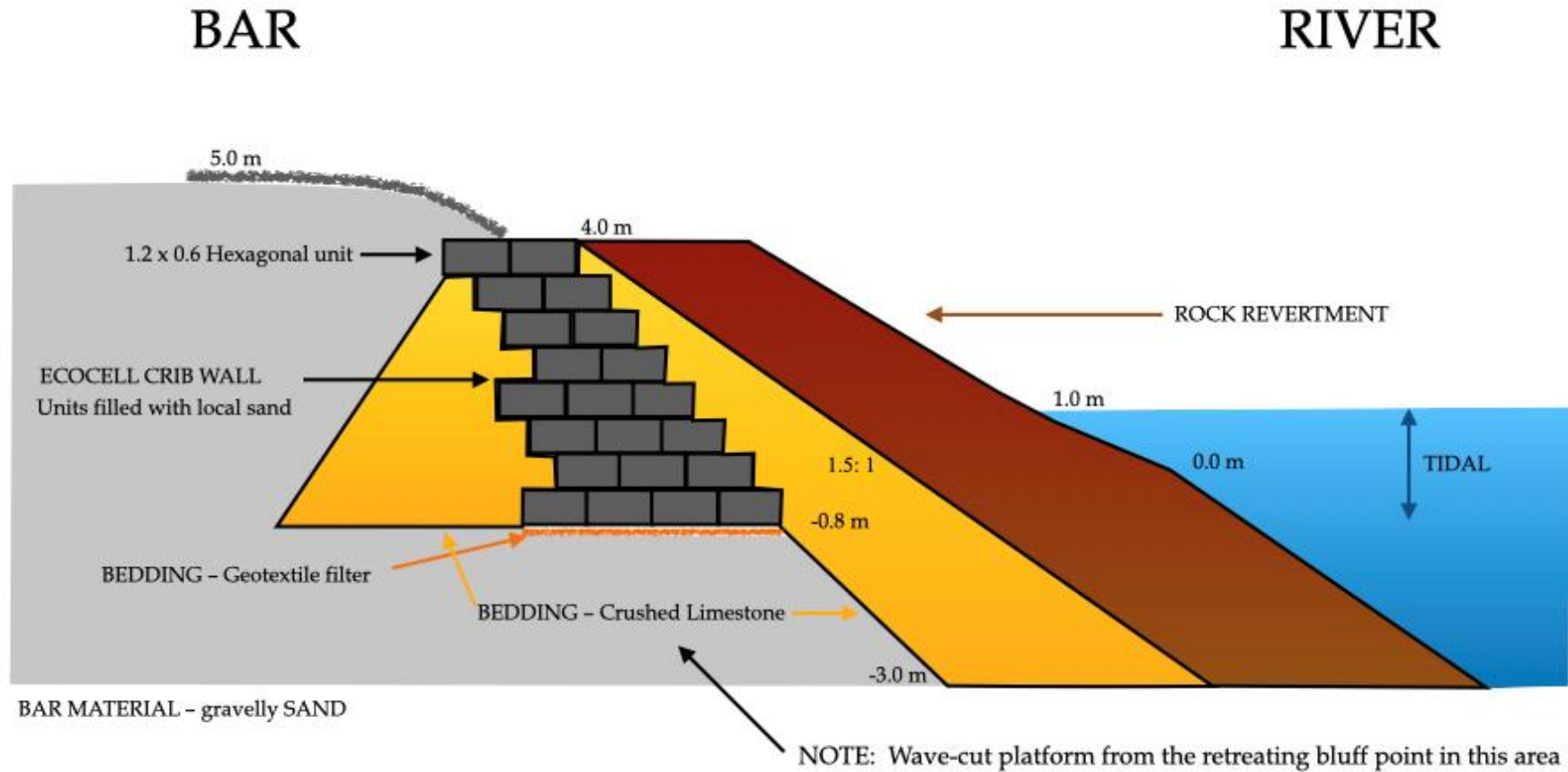
Wairoa River mouth – groyne option

- A training groyne concept has been developed, with the aim being to assist the river in forming and maintaining an opening to the sea
- Concept proposes the combination of an Ecocell hexagonal concrete crib wall, crushed limestone bedding as a bridging material, and a rock revetment
- Further work required, including:
 - An engineering site survey,
 - Further design refinements, and
 - More detailed construction cost estimates

Wairoa River mouth – groyne option

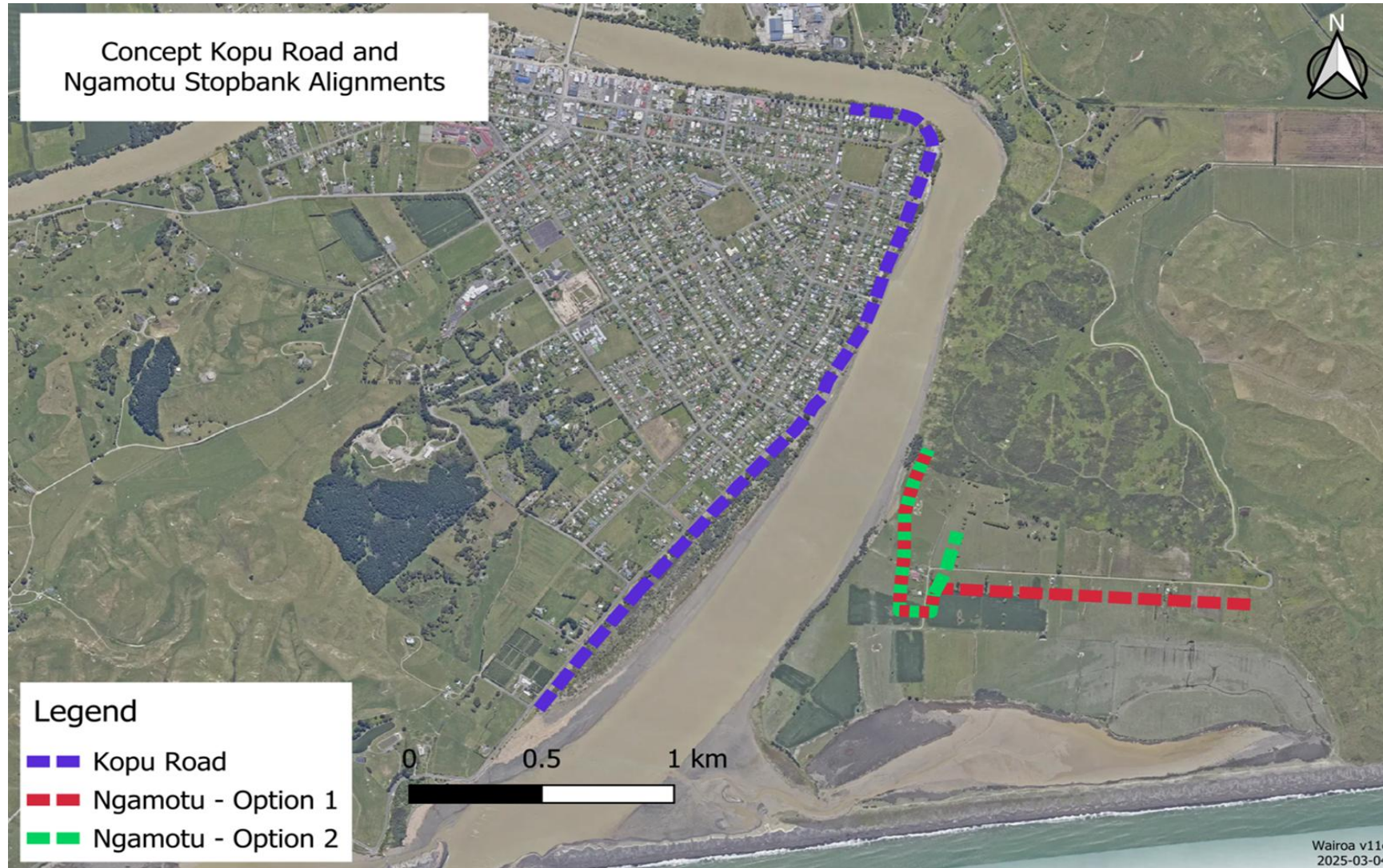


Wairoa River mouth – groyne option



CONCEPT CROSS-SECTION

Kopu Road and Ngamotu Road options



Kopu Road and Ngamotu Road figures

Kopu Road

- Spooners Point to Pilot Hill area – road and river reserve
- ~3.4km long stopbank, tying back into high ground, height ranging from 0.7m – 3.1m
- 1:3 slope, 4m crest
- WDC stormwater outlets and major infrastructure

Ngamotu Road

- ~1 – 2km long stopbank, height ranging from 1m – 3m
- May involve the elevation of some houses
- Protection of urupā and Marae

What happens next?

- An independent peer review of the Wairoa river mouth groyne option (March-April)
- Further, more detailed design refinements and costings will need to be completed
- With Crown funding largely allocated, funding options will need to be considered further
- Additionally, prioritisation between the groyne and stopbank options may need to be considered



Questions?

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