

NEW ZEALAND INSTITUTE OF FORESTRY –

EMERGING STRONGER: STRENGTHENING FORESTS, INFRASTRUCTURE
AND COMMUNITY POST-CYCLONE

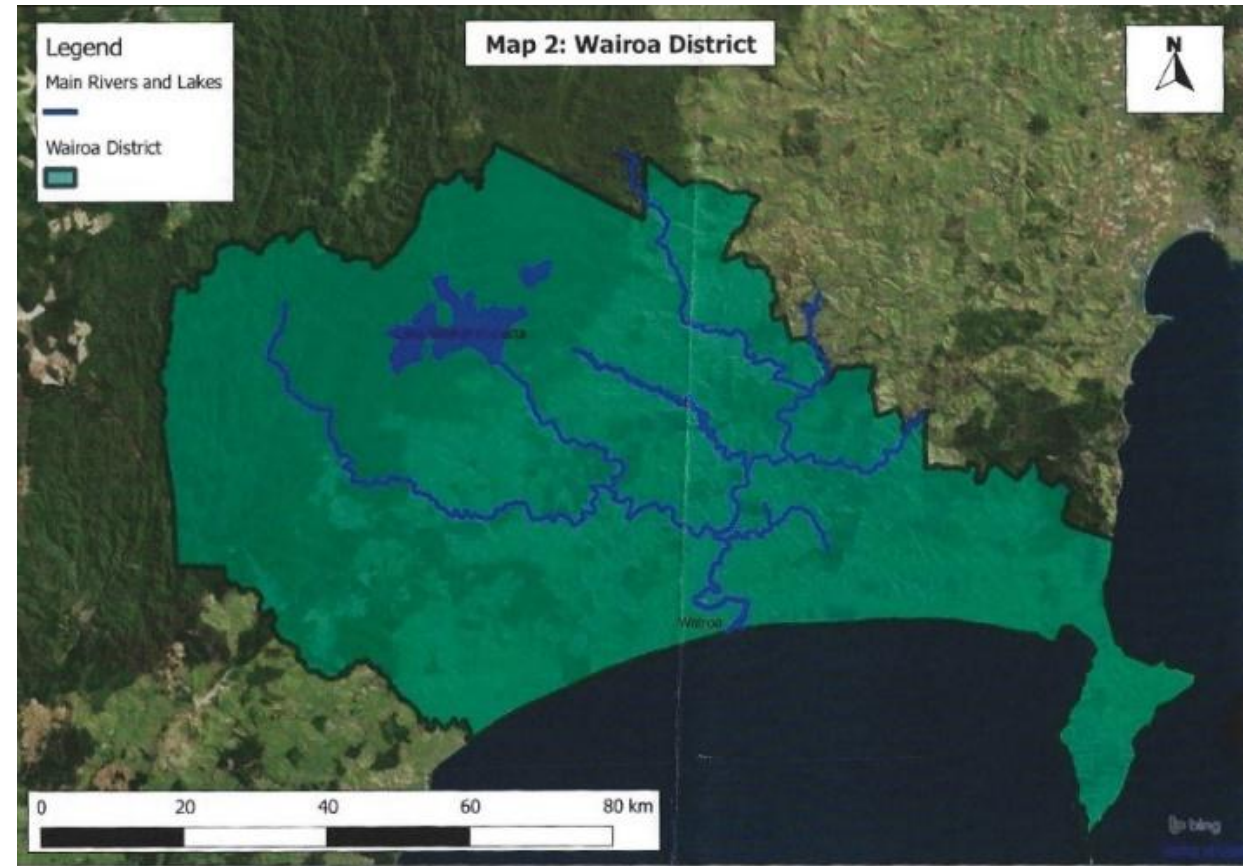
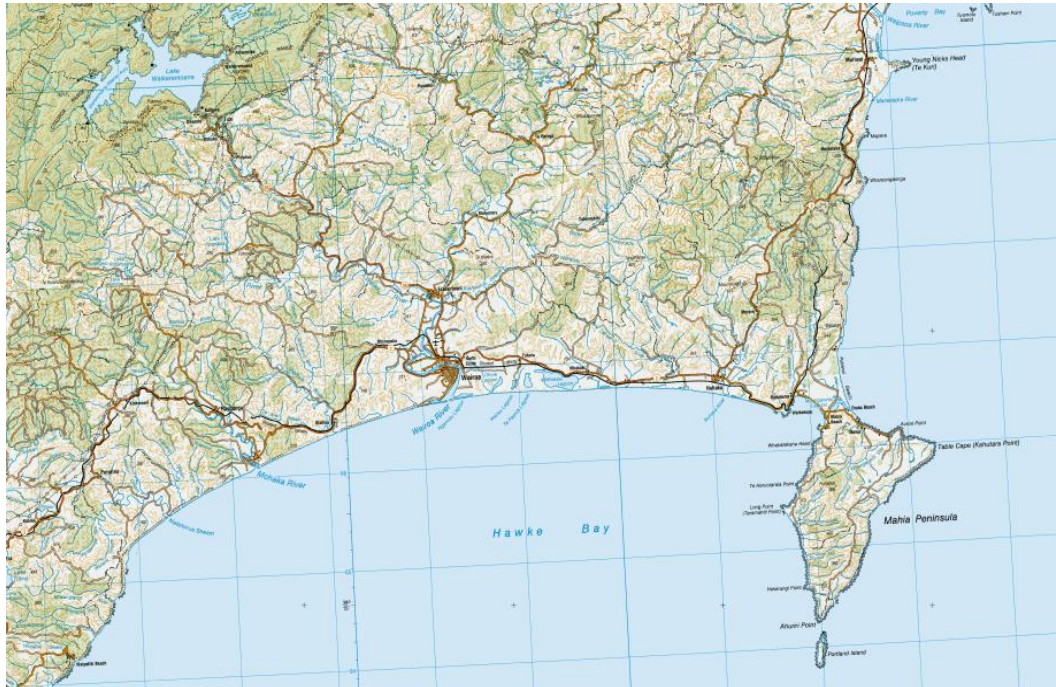








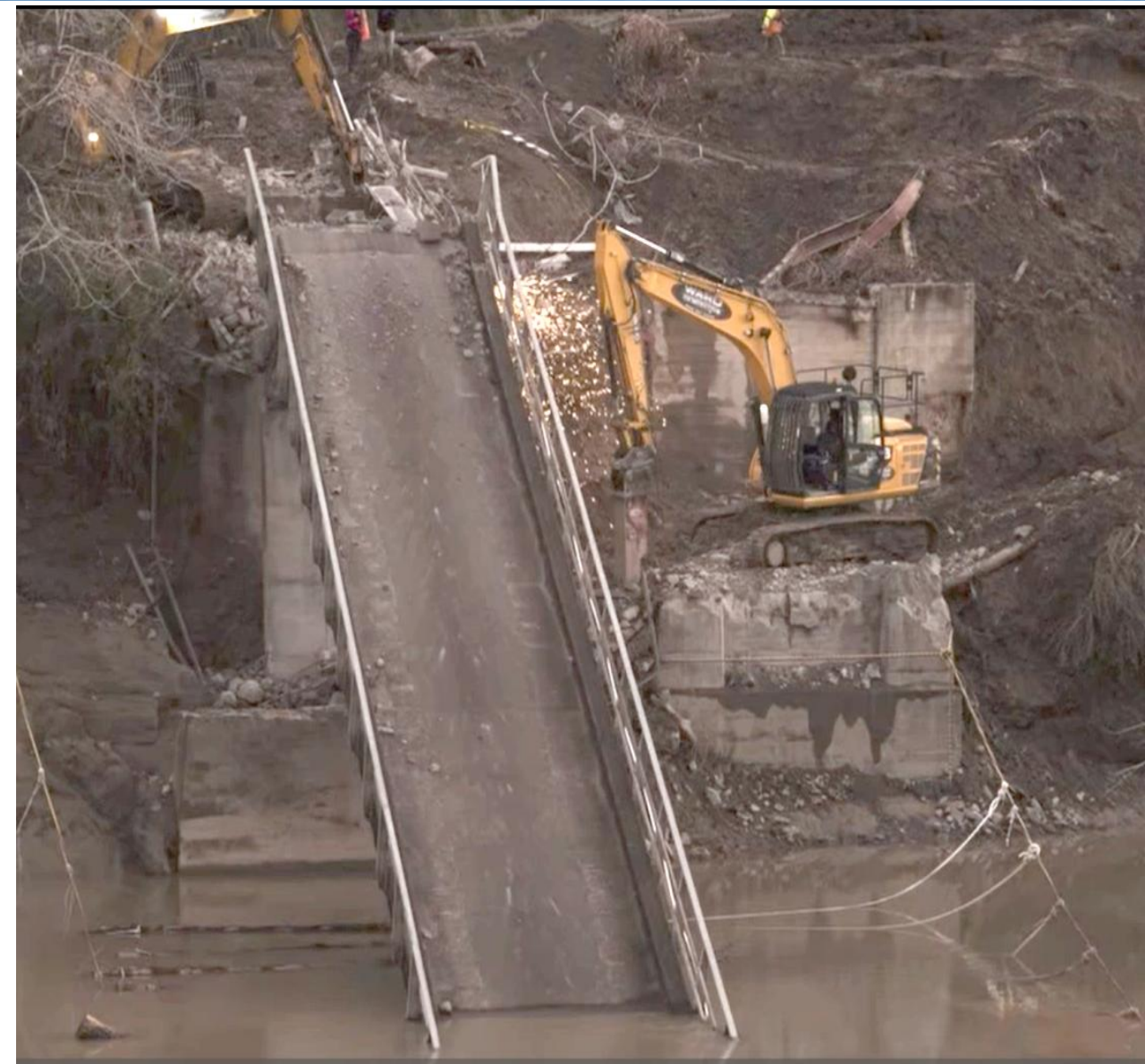
OUR PLACE











June 2024 Weather Event - Flood Extent

(using HBRC flood extent data)



0 500 1,000 1,500 2,000 m





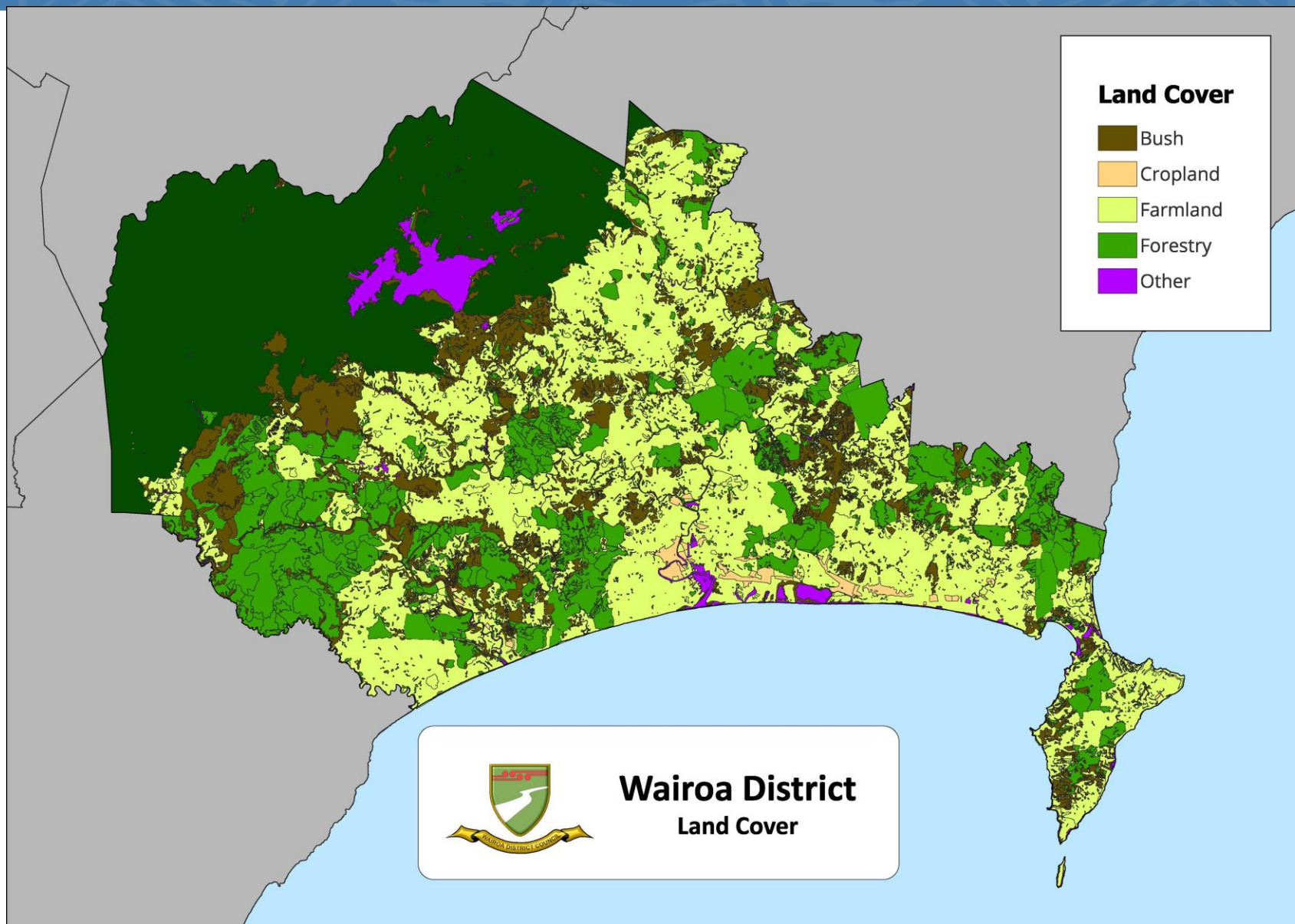
FLOOD MITIGATION





BUILDING BACK BETTER









OUR DOOR IS OPEN, LET'S WORK
TOGETHER





Cyclone Gabrielle – Cost to the communities and cost to the individuals

Topics and Discussion

- ▶ Cyclone Gabrielle recap
- ▶ What It Was Like for Communities
- ▶ The Financial Toll
- ▶ Lived Realities – Financial and Emotional Fallout
- ▶ Mental Health Impacts:
- ▶ Impacts on Agriculture
- ▶ Impact on Horticulture
- ▶ Wilding Trees
- ▶ Who Pays
- ▶ Communities need a seat at the table
- ▶ Summary
- ▶ A Challenge to the Sector
- ▶ Questions & Discussion

Cyclone Gabrielle recap

- One of the largest floods ever recorded in NZ with a return period of 1000 years
- 1,700 properties flood affected
- 326 properties classified as Category 3 (*Category 3 refers to the areas where it is no longer safe for people to live due to an intolerable risk to life in any future flooding event that cannot be mitigated*)
- Financial losses in excess of \$5.0 billion
- Horticulture loss \$1.4 billion in 2023 together with thousands of hectares covered in silt
- Commercial and Industrial premises affected – Awatoto industrial, Pan Pac, Packhouses etc
- 5.3km of stop bank breaches, 6 major road and rail bridges gone, major damage to state highways, district roading network, and infrastructure.

Best overview slide of what happened on Tutaekuri and Ngaruroro Rivers

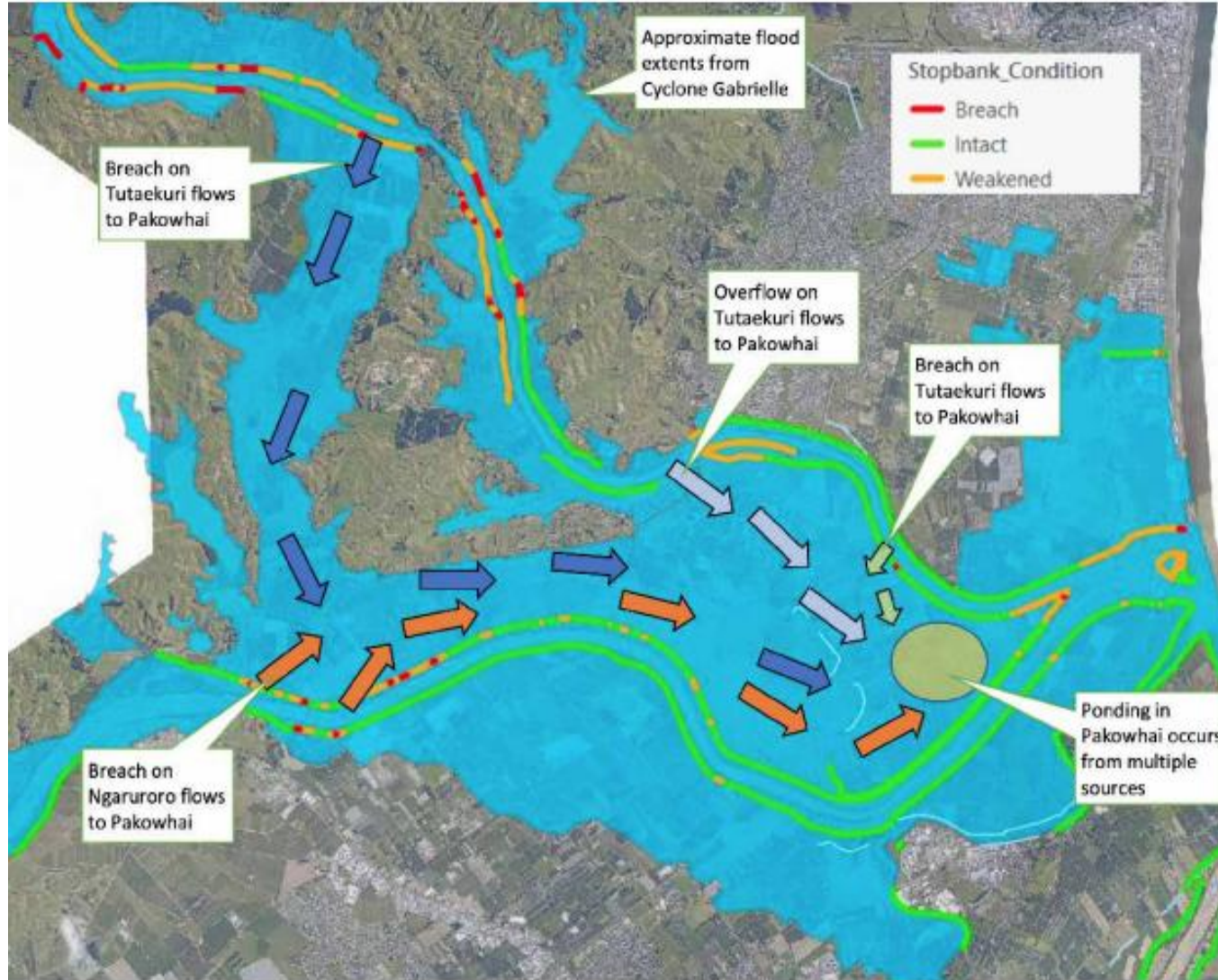
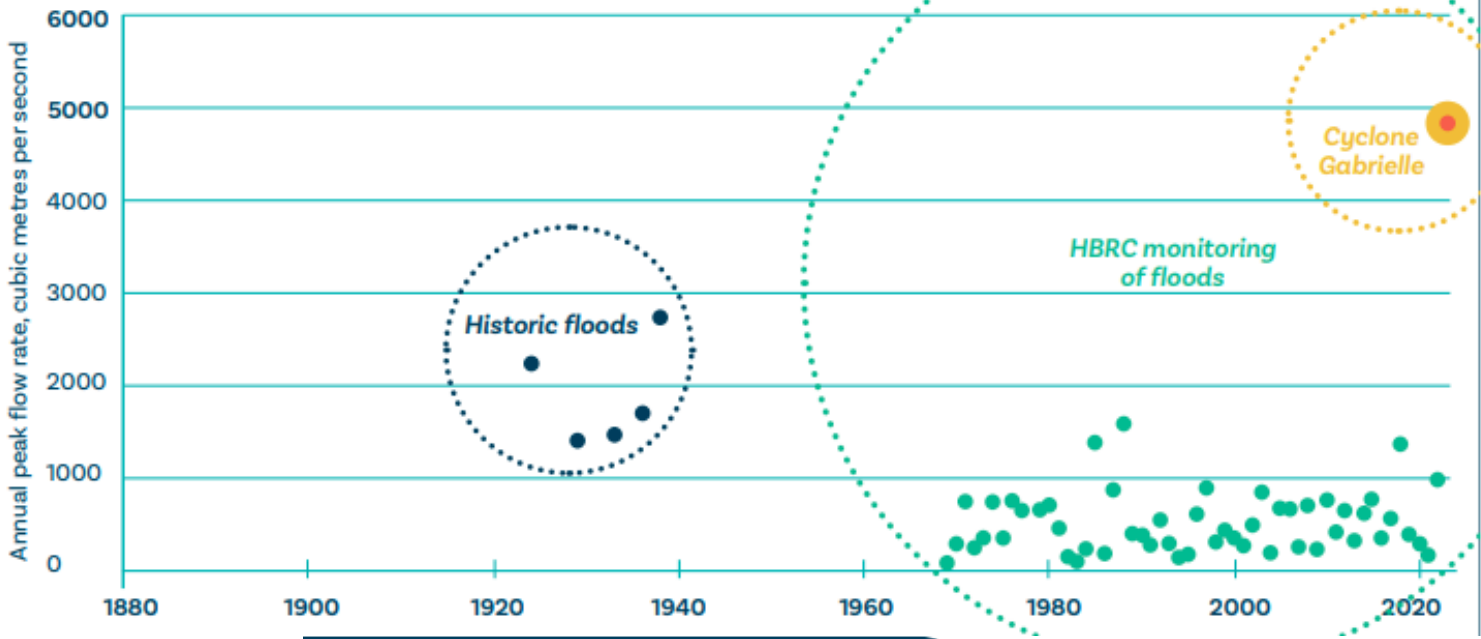


Figure D8 Breaches/Overflows Inundation Heretaunga Plains

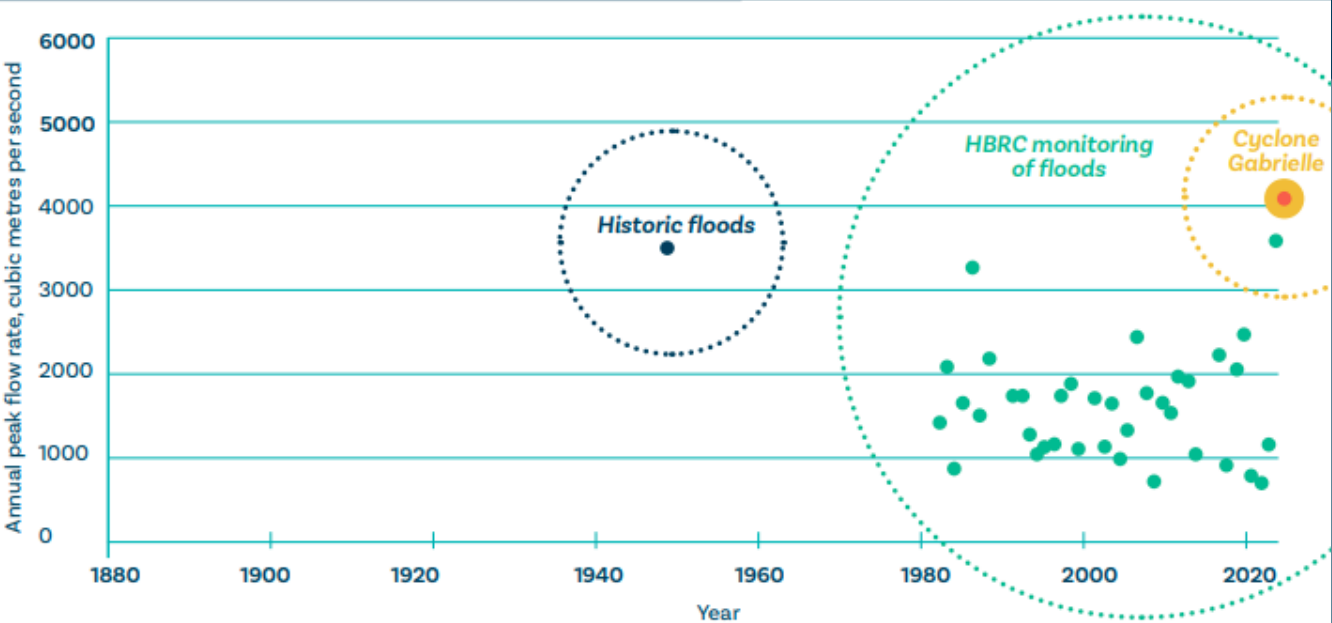
During cyclone Gabrielle, the Tūtaekurī river at Puketapu had 4,800 cubic metres a second of water flowing at its peak, which is nearly two Olympic size swimming pools of water per second.

At 13 of the 20 measurement sites, it was deemed the largest flood on record.

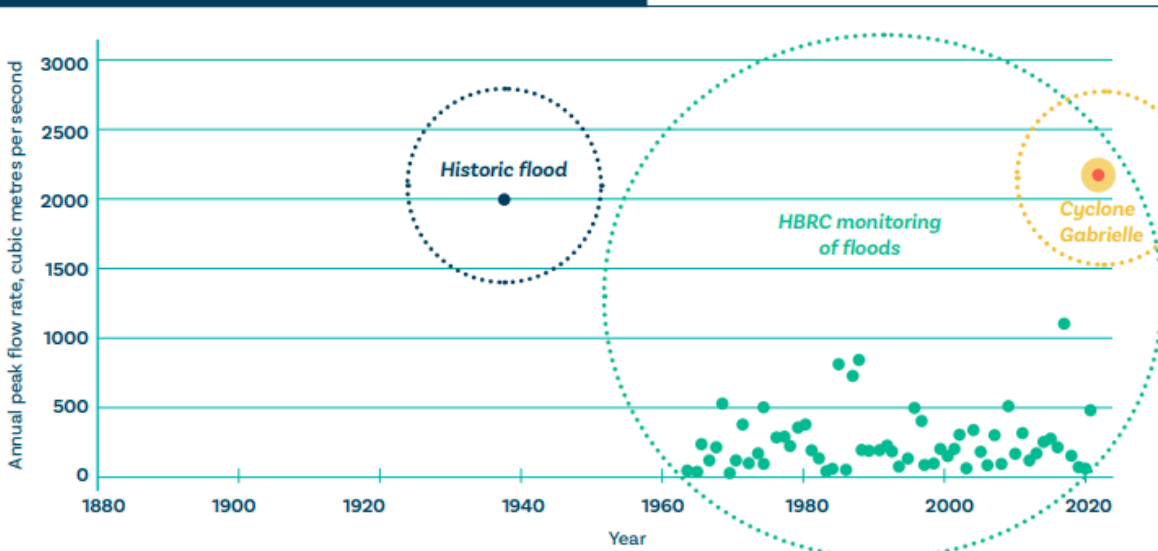
Tūtaekurī River at Puketapu
Peak flow rate per year



Wairoa River at Marumaru
Peak flow rate per year



Esk River at Waipunga Bridge
Peak flow rate per year





Dartmoor Valley before

Puketapu

Motop



Puketapu

Dartmoor Valley - After

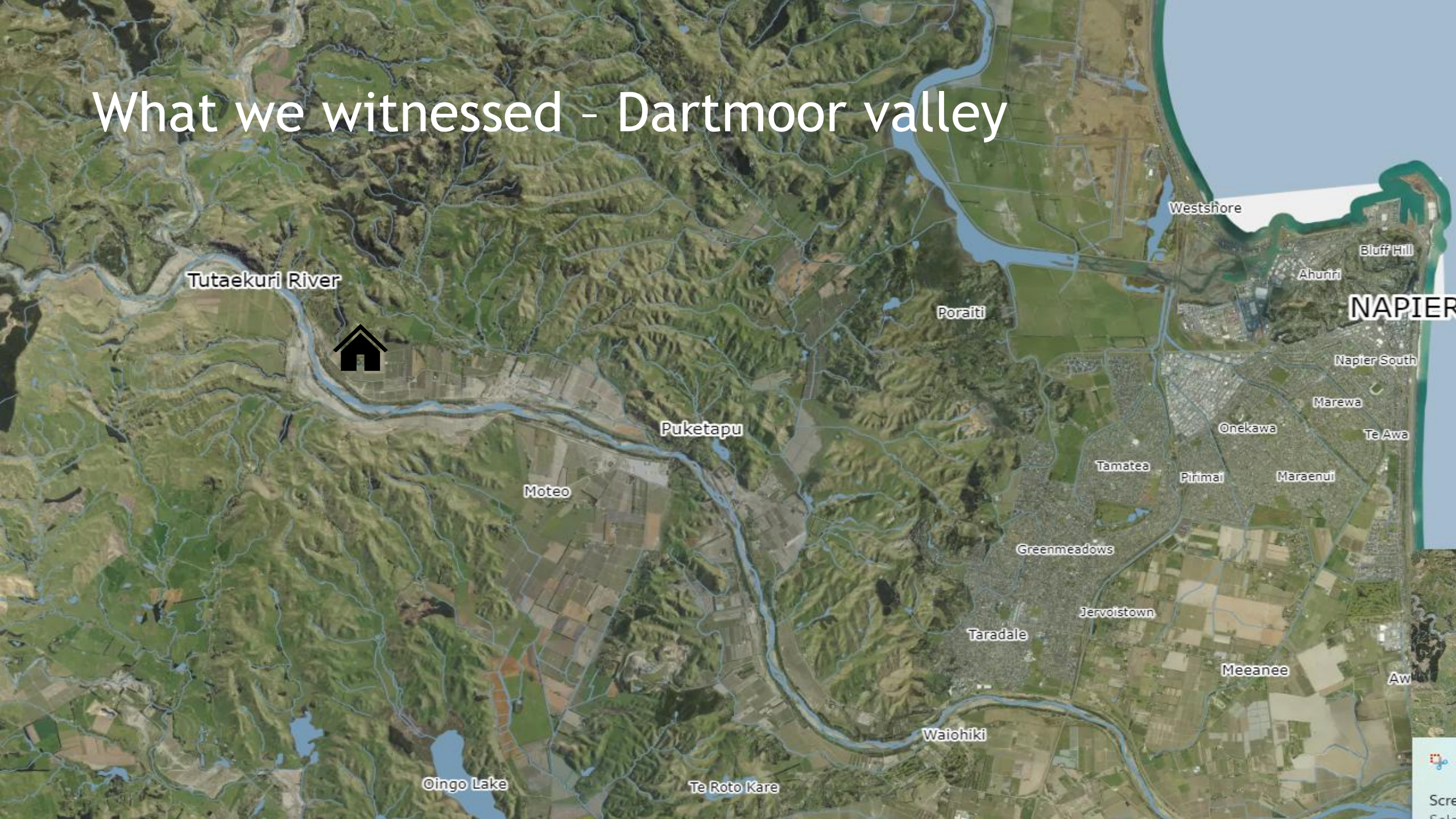


Closer Before



Closer After

What we witnessed - Dartmoor valley







What It Was Like for Communities

- ▶ Personalised impact: families stranded, farmland unrecognisable
 - ▶ Losses to Stock, Crops, Infrastructure, Staff, Land, Income, Neighbours, Community
- ▶ First response came from neighbours, then Communities, then emergency services
- ▶ Neighbours not directly impacted by flooding could act immediately to save lives. Quick thinking and quick action.
- ▶ Farming communities well resourced for no access, power, communications. Lifestyle communities not so much.

The Financial Toll

- ▶ 990+ farms hit — \$336–\$385M in sheep/beef damage
- ▶ Horticulture losses >\$1.4B
- ▶ Emotional burden: trauma, isolation, exhaustion
- ▶ Many land owners were under insured for full loss
- ▶ Land owners own clean-up costs are not accounted for
- ▶ Intergenerational debt now for many businesses

Lived Realities – Financial and Emotional Fallout

- Frustration with lack of warning
- Community support was vital to survival
- Bureaucracy often hindered emergency action
- Surprise at low death toll and gratitude to responders
- Deep disappointment in looting, which still occurs
- Significant economic loss: livelihoods destroyed or severely impaired
- Retirement plans upended for many
- Psychological trauma is widespread
- Anger, especially toward insurance and bureaucracy
- Difficulty navigating funding and support systems

Mental Health Impacts:

- Trauma from near-death experiences and communication blackouts
- Mishandled bereavement notifications by authorities
- Survivor's guilt, pet loss, livelihood loss
- Long-term housing uncertainty
- Exhausting and overwhelming cleanup
- Repeated retraumatisation through insurance, buy-out, and council processes
- Ongoing uncertainty (e.g., stop banks being imposed post-rebuild on Category 1 properties)

Impacts on Agriculture

- Estimate that 990 farms on the East Coast, Tararua, Hawke's Bay and the Wairarapa were affected and suffered damage.
- Isolation issues
- Livestock Welfare
- Infrastructure Damage (Fences, tracks, access across property, dams, culverts, bridges and water reticulation).
- Land management and financial stability
- Estimate impact on sheep and beef farms across the East Coast and Hawkes Bay is a range of \$336 - \$385 million.



Impact on Horticulture

- 47% of crops have been affected and broken down into three categories
- Category 1 – orchards that have been destroyed and need complete redevelopment
- Category 2 – completely submerged and have deep silt through them which has significant tree depth
- These two categories are about 25% of all planted area in HB or around 2100 hectares. (not saveable)
- Category 3 – workable, have been water logged but a lot of trees are salvageable. Around 1800 hectares.
- All up affected is about 3900 hectares with the other 4400 hectares not affected.
- Cost \$250,000 to replace 1 hectare orchard.





Wilding Trees - Dartmoor Road

Scale of timber in flood zone

Wilding Trees - What Happens When We Don't Prepare



Wilding Trees

- ▶ On our 6 hectare orchard we had 100 tonnes of trees dumped on there - 77% pine of which 70% had root balls — rest willows, poplar, kanuka, and other natives.
- ▶ Trees blocked bridges, caused dams, and then wave surges as they blew
- ▶ No flood protection infrastructure can cope with that
- ▶ I estimate 33% of wilding pines gone – 66% waiting for next event.

Who Pays?

- ▶ Government funded buyouts; local ratepayers still stretched
- ▶ Cost shifting: forestry impacts paid for by others
- ▶ Forestry Companies paying for clean-up – whether responsible or not.
- The cost of recovery for the Hastings District Council alone is \$1.1 billion dollars, including \$800m to repair the transport network.
- There is a long way to go yet, with seven to ten years to fully repair and restore the area's transport network.

Communities Need a Seat at the Table

- ▶ They've lived the risk and paid the price
- ▶ Must be included in mitigation discussions from day one
- ▶ Forestry must act as a responsible neighbour

Summary

- ▶ These are not just financial figures or environmental statistics. This is a human crisis. As foresters and policymakers, our work must reflect this reality. Community involvement isn't optional; it's foundational.

A Challenge to the Sector

- ▶ Are your forests protecting or threatening people downstream?
- ▶ Are you building trust, or shifting burdens?
- ▶ Good forestry includes people, place, and partnership

Questions & Discussion

- ▶ What would co-designed resilience plans look like?
- ▶ How can forestry lead in true sustainability?
- ▶ Open Q&A



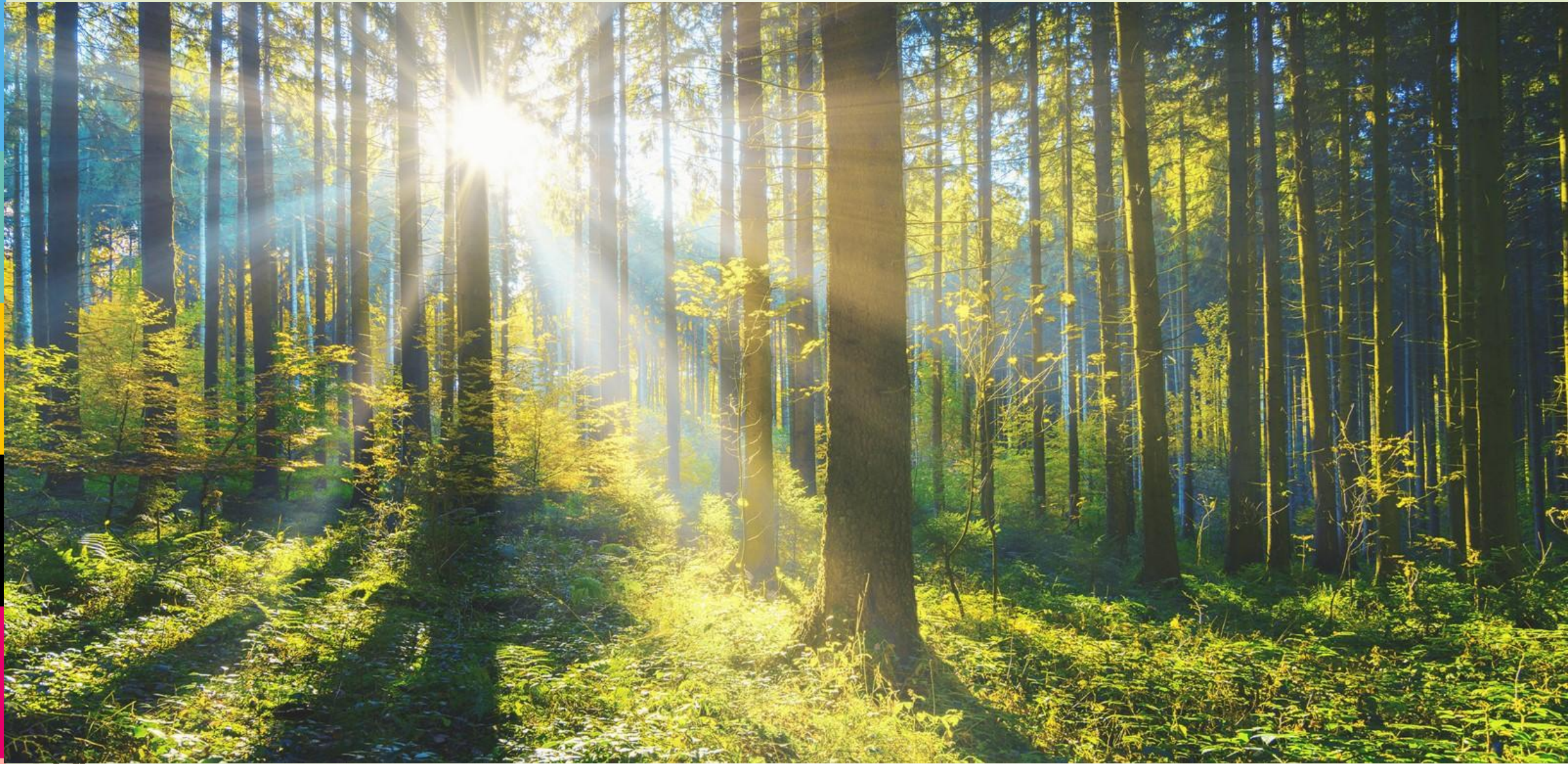
morice

PROPERTY ■ FORESTRY ■ VALUERS ■ ADVISORS

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Thanks to Kirstin Speers who has interviewed many Cyclone Gabrielle impacted people as part of a book she is writing.



Ingka Investments NZ Forestland

INGKA[™]
INVESTMENTS

Kelvin Meredith

Forestland Country Manager
Ingka Investments NZ



Agenda

- / An introduction to Ingka Investments
- / Our forestland portfolio
- / Responsible Forest Management
- / Case study – Huiarua Afforestation
- / Questions



Investing with impact

An introduction to Ingka Investments

Ingka Group



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graph TD; IG[Ingka Group] --- IR[IKEA Retail]; IG --- II[Ingka Investments]; IG --- IC[Ingka Centres]; IR --- IRD[Bringing the IKEA brand to 31 markets]; II --- IID[Purposeful investments for long-term growth]; IC --- ICD[Meeting places together with IKEA];
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The diagram shows the Ingka Group at the top, branching into three main divisions: IKEA Retail, Ingka Investments, and Ingka Centres. Each division has a brief description of its role.

IKEA Retail

Bringing the IKEA brand to 31 markets

Ingka Investments

Purposeful investments for long-term growth

Ingka Centres

Meeting places together with IKEA

Ingka Investments business direction

We invest to make a positive impact on Ingka Group's financial strength, on IKEA Retail and Ingka Centres' growth and development, and to achieve the IKEA Sustainability goals.



**Financial Markets
Investments**

**Business Acquisitions
and Venture**

Circular Investments

**Renewable Energy
Investments**

Real Estate Investments

**Forestland
Investments**



Investing for the long term

Our forestland portfolio

Mandate

Ingka Investments invests in forestland for the long term to ensure this vital resource is managed responsibly, so that they remain forests forever. Our forestland portfolio is not directly linked to the IKEA value chain. This is to ensure competitive returns and encourage a bigger market for sustainable timber from responsibly managed forests.



Wood is an essential part of the IKEA identity

- “Our forests are mankind's greatest assets”
- - Ingvar Kamprad, 1996

➤ Forestland portfolio (FY24)



320,000+ hectares
in **7** countries, all
FSC certified (or in
the process)



13.5 million seedlings
planted, **10,000**
hectares regenerated
and afforested



1,5 million cubic
meters harvested

2025

United States of America
74.3k hectares

Finland
8.6k hectares

Estonia
31.5k hectares

Lithuania
27.1k hectares

Romania
50.6k hectares

Latvia
101.4k hectares

New Zealand
28.2k Hectares

Overview of NZ Portfolio





Preserving our forests forever **Responsible Forest Management**

More trees

More forest

**Protecting
biodiversity**

**Better forest
manager and
better neighbor**

We carefully plan to ensure that the right species are planted in the right places, maximising both ecological and economic benefits while creating new habitats for wildlife.

Community engagement



We hope to create a shared sense of responsibility and stewardship, enhancing the social and economic well-being of these communities, and leading to better forest management practices.





Conservation and biodiversity



Setting aside
forest areas

16,500 ha for
CTN study



Using data for
environmental
protection

Water and
biodiversity
monitoring



Prioritising
habitat
conservation

15-20%
setasides



Going beyond
FSC



Afforestation

OR IS IT

reforestation

Huiarua and Matanui
Station
6,200ha



Fears over Huiarua's future

Newshub.



S

Save Huiarua Station

824 likes • 850 followers

SCOOP Politics

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Business

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World

5000 Hectare Huiarua Station Sale Invites Patagonia Fires To East Coast

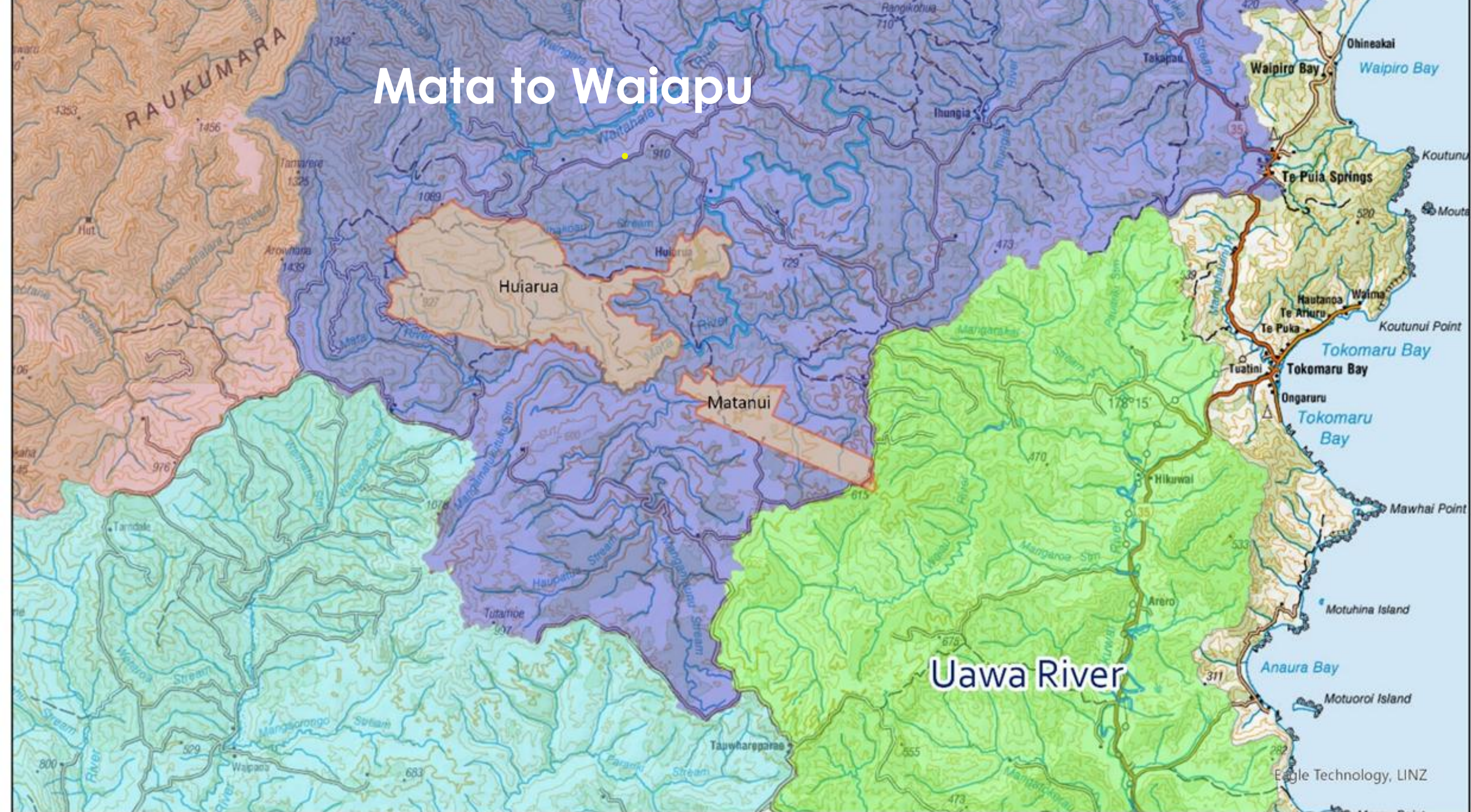
Friday, 14 January 2022, 12:13 pm

Press Release: [Social Credit](#)

Social Credit is calling on the government to step in and stop the sale of Huiarua Station on New Zealand's East Coast.

If the sale to foreign buyers gets overseas investment office approval, the 5000 hectare farm will be turned into pine trees, inviting the kind of future devastation that raged through Patagonia less than 12 months ago when fire burnt through more than 22,000 hectares in just a few days.

Mata to Waiapu



RESTORING THE WAIAPU CATCHMENT

“Healthy land, healthy rivers,
healthy people.”



Waiapu koka
huhua
– Waiapu,
mother
of many

ENVIRONMENTAL EFFECTS OF EROSION



TREATMENT IMPACT

GULLY EROSION FOCUS

Gullies are incised, linear to amphitheatre-like erosion features formed by running water. While erosion is a natural process, human activities have increased by 10-40 times the rate erosion is occurring. Excessive erosion causes problems such as sedimentation of waterways, decreases in agricultural productivity due to land degradation and ecological collapse due to loss of the nutrient rich upper soil layers.



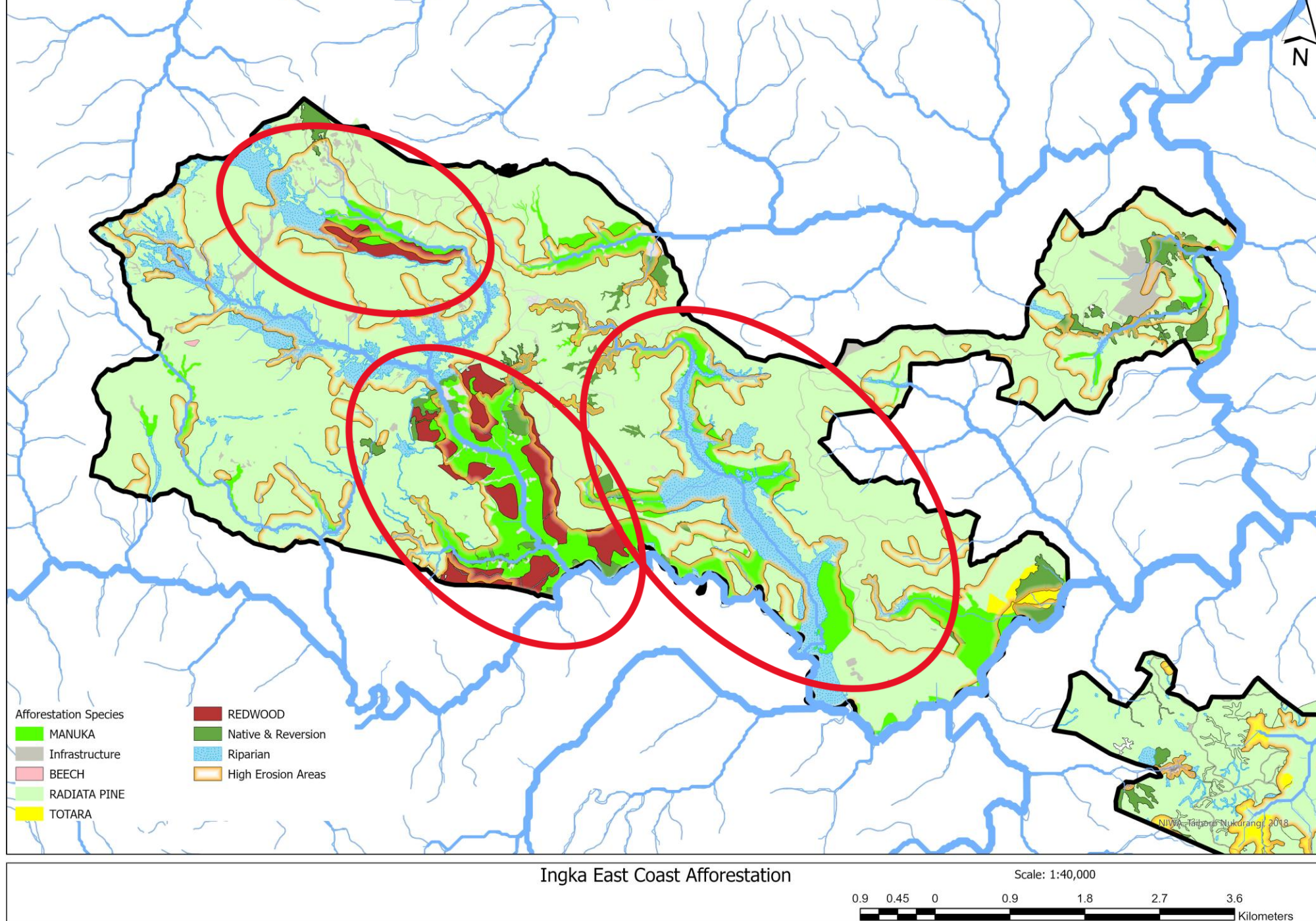
UNTREATED GULLY EROSION

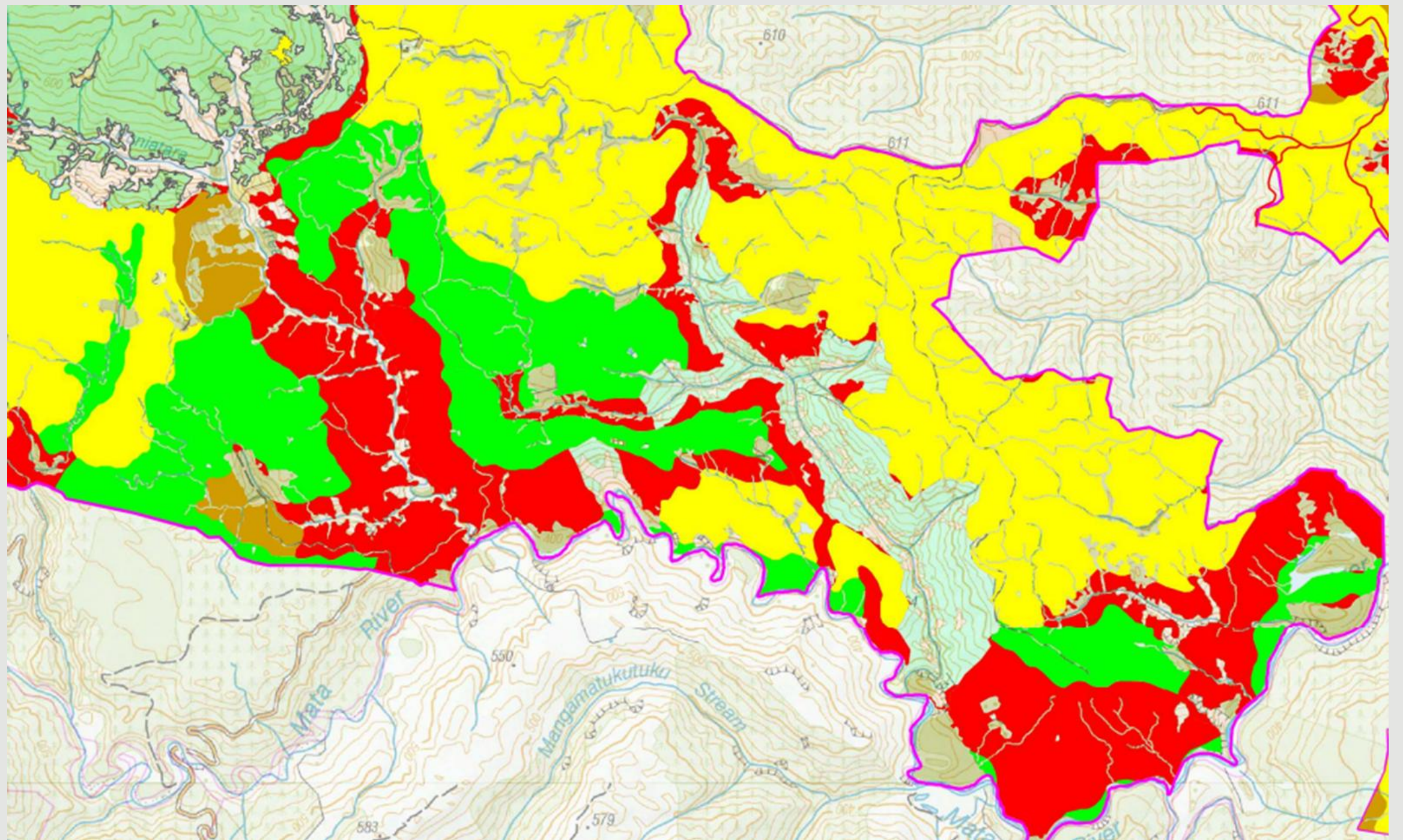


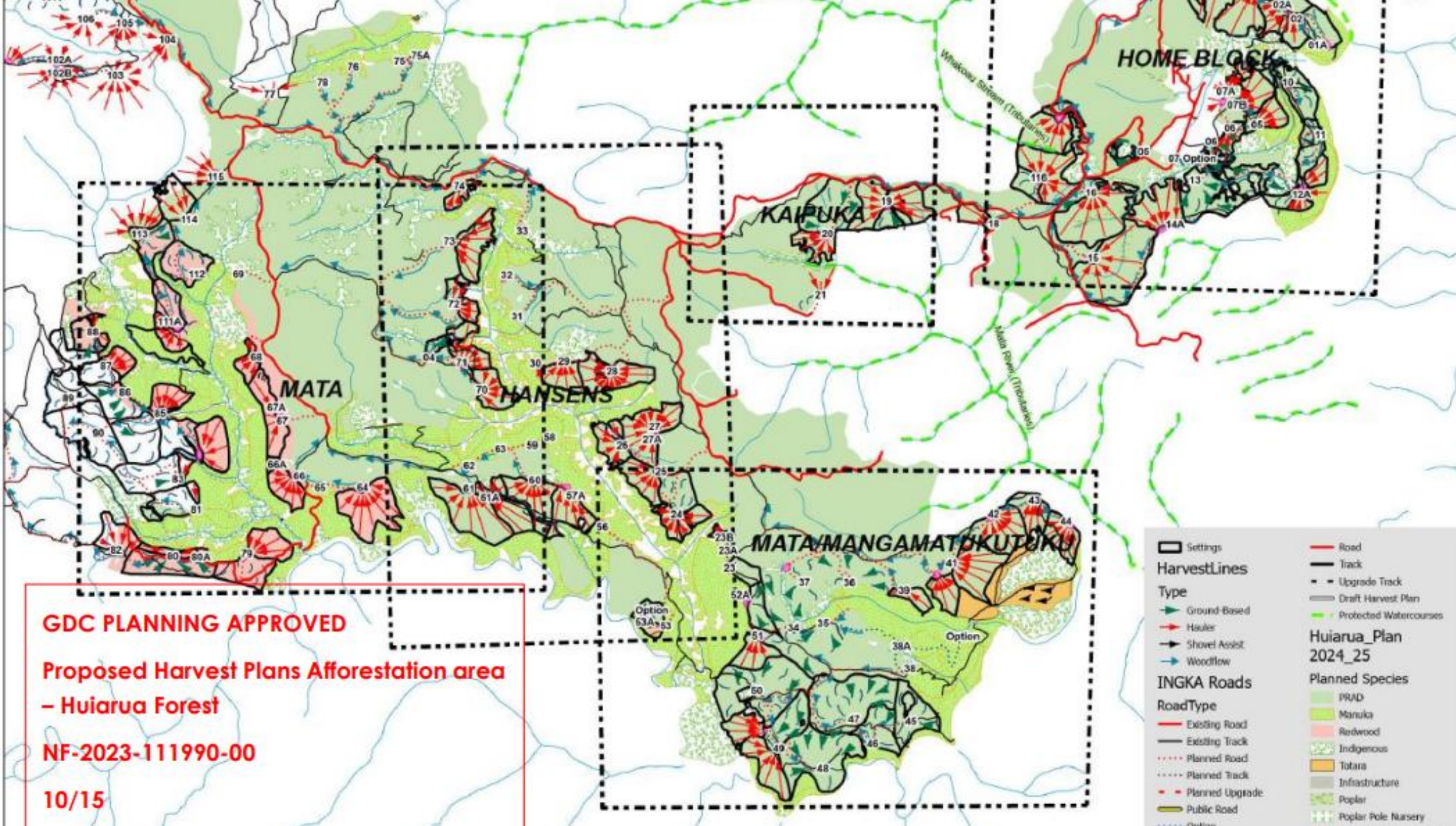
TREATED GULLY EROSION













Historical East Coast afforestation



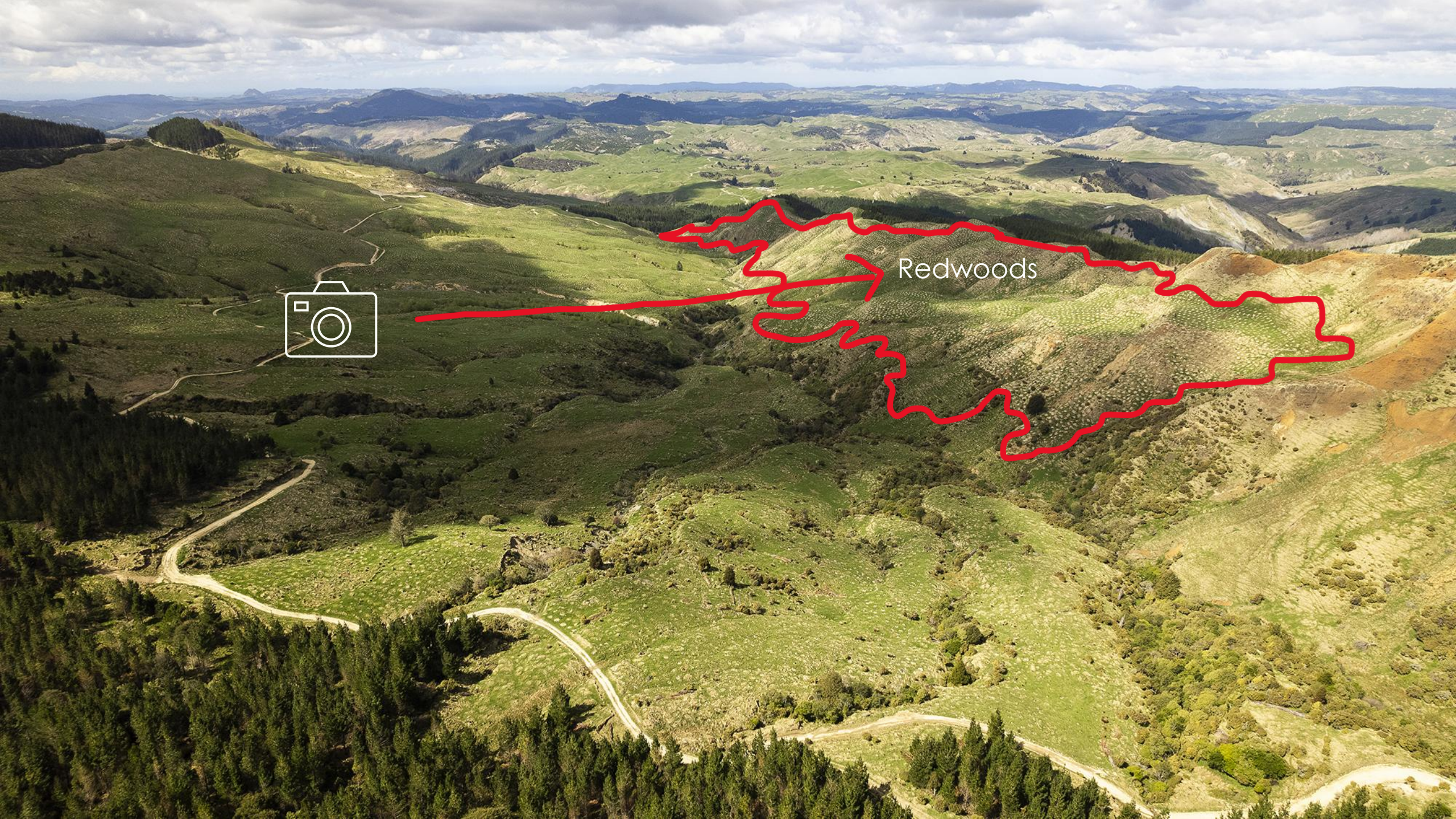
New planning afforestation

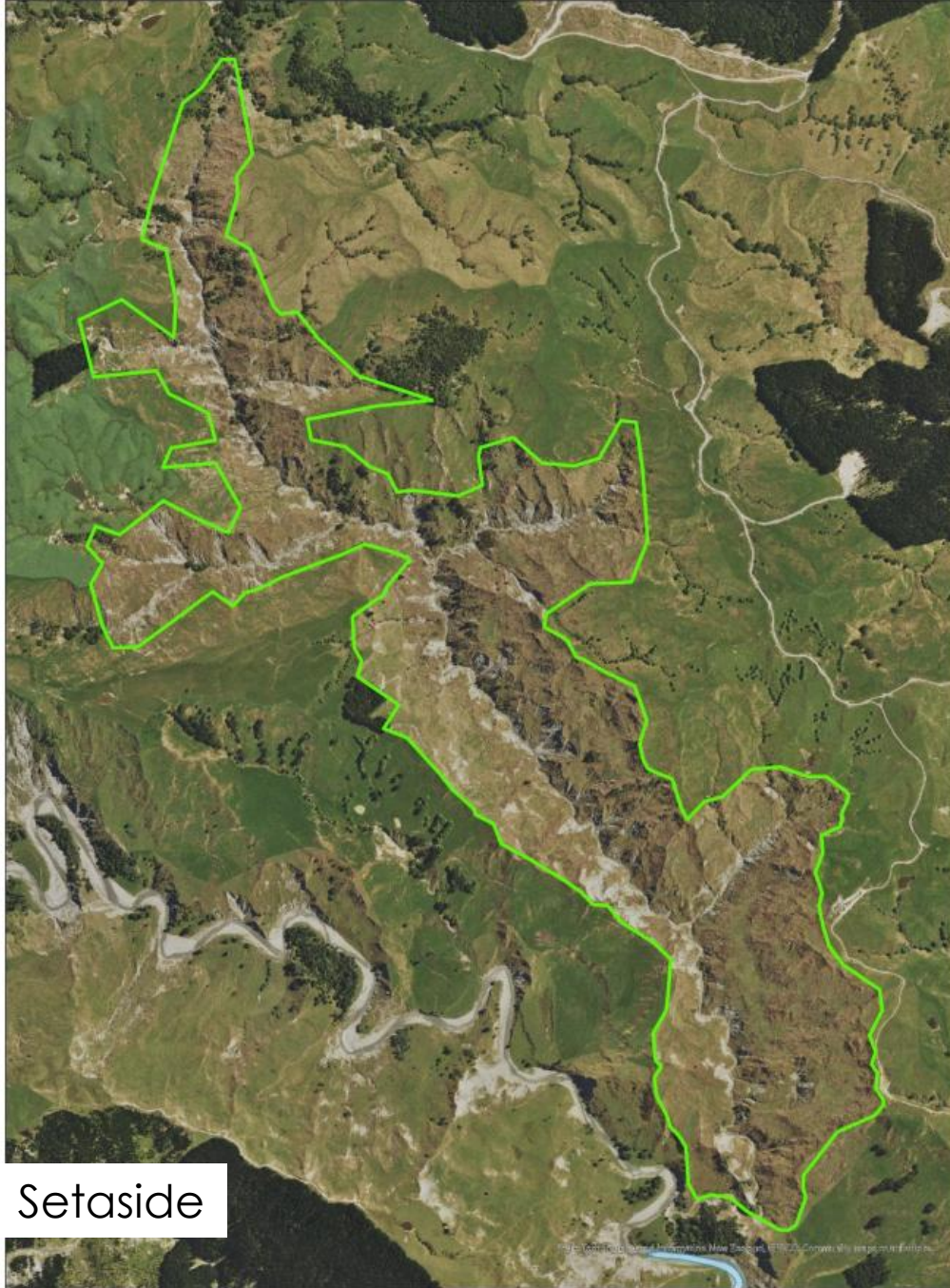






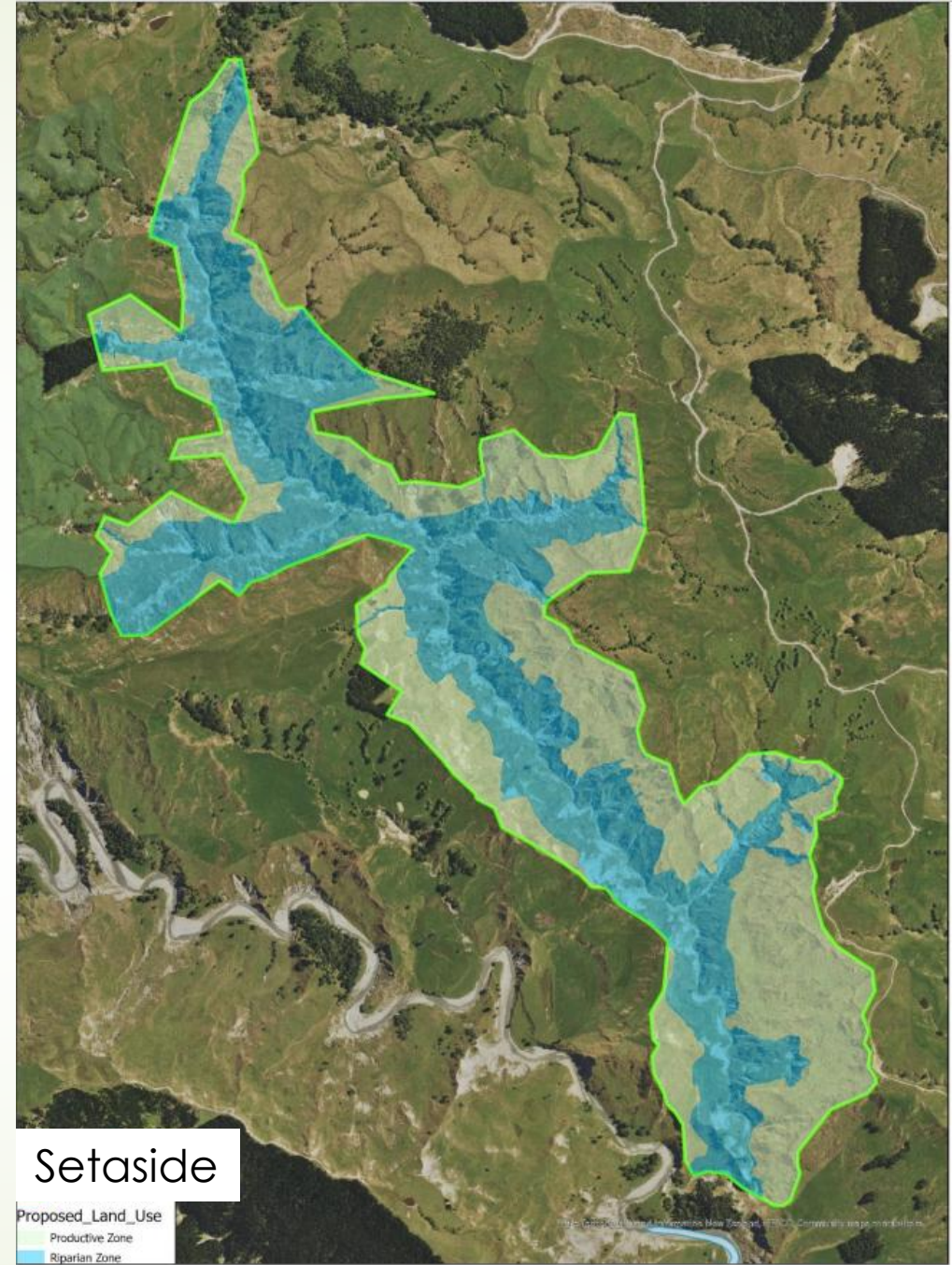
Redwoods





Setaside

Huiarua - Hansen's Gully Restoration



Setaside

Huiarua - Hansen's Gully Restoration

An aerial photograph of a river valley. A winding river flows through the center of the image, surrounded by lush green hills and vegetation. The terrain appears rugged with some rocky patches visible along the riverbanks.

How's the restoration going

- Challenging with grazing and poor fencing
- 3rd year of blanking with manuka
 - grass grass and more grass
- Start to infill with other species
 - Totara, beech
- Pest Control is critical
 - Full time on ground
 - occasional aerial

We are leaning into some headwinds !!

© Ingka Holding B.V. 2025

More generally, recent research shows the treatment of high country erosion by plantation forestry in Tairāwhiti is largely a failed experiment and does not lessen erosion from high rainfall events.

The areas of pasture on Huiarua Station were not greatly affected by erosion in cyclone Gabrielle

Regardless, therefore, of any supposed trade-off between benefits and adverse effects of afforestation, the effects of fallen trees and slash (slash largely from the eventual harvest) mobilized in floodwaters will be a new effect from the land which is currently in pasture.

"Indicator 6.7.20 does not allow for afforestation in very high-risk erosion areas with species that require clear felling."

The request to add this forest to the FSC Scope has been rejected, this decision has been done by SGS NZ with the support of SGS Global.

This decision was based on stakeholder consultation and the risk assessment, at this stage the FSC STD section 6.7.20 is not in compliance. In NZ clear-felling species refers directly to Radiata Pine, if we include these areas under your scope LFS will have a Major CAR and will need to be closed in 3 months. To close this you are not able to plant Pine in any high risk area, we can't allow to add an area that has such a controversy with FSC due the impact in the Gisborne community due to poor management.

The present area of Huiarua Station which is in pasture is subject to erosion and sediment loss to streams and the Mata River. The pasture area, however, does not contribute fallen trees or slash to these waterbodies. Trees and slash would greatly increase the erosive potential of floodwaters and associated damage to riparian areas,

There is no evidence that other, present effects of erosion and sediment loss will be much reduced. The types of major erosion found on Huiarua Station may not be improved by afforestation

Your web sites state that "While all our forests are FSC certified (or in the process of certification),"

Our concern is that this statement may not be correct and the public are receiving incorrect information.

This disgusting practice is tantamount to eco- terrorism and we have to live with the carnage



Leading the way The future



- Back to basics – an approach closer to nature productive active margins of set-asides
- Planting legacy species 60-100 – 300 years podocarps, hardwoods
- On-the-ground management – developing a deeper understanding and connection
- Partner with those who share our vision – reward them well
- A shared responsibility – collaboration is key

