Combined Tairāwhiti Regional Freshwater Planning Advisory Group and Waipaoa Catchment Planning Advisory Group – Hui 12

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Title of report: Land Overlay 3B – Transition Advisory Group (TAG)

Report no: 5

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Purpose of this report

This report provides an update on Land Overlay 3B (LO3B) and the Transition Advisory Group (TAG) formed to support transition of this land to permanent vegetation cover.

Outcomes sought

Members of this Advisory Group understand Land Overlay 3B and the role of the Transition Advisory Group (TAG) and the purpose of the transition guide.

Contents

1. Recap

At the first Combined Advisory Group hui on 15 November 2023 (Hui 4.5), staff prepared and presented a report on the proposed approach to the Forestry Plan Change.

An overview of the forestry programme was presented to the [28 February 2024 Sustainable Tairāwhiti Committee](#). At the time of that report, the Plan Change focused on the regulatory aspect of managing forestry activities, which included developing a mapping layer, now commonly known as Land Overlay 3B[1] , to inform the new provisions.

Manaaki Whenua Landcare Research (MWLR) has developed a landslide susceptibility and connectivity model, which identifies the probability of shallow landslides occurring and their connectivity to waterways. The model will help inform the development of LO3B – an area Council is proposing for transition to permanent vegetation cover.

2. Identification of Land Overlay 3B

Council has been focusing on identifying the worst eroding land across the region for transitioning to permanent vegetation cover. This connects directly to one of the Ministerial Inquiry into Land Use (MILU) report recommendations to identify land that carries 'extreme erosion susceptibility' (purple zone). The report argues for this land to be returned to permanent forest. If we can accurately identify these high-risk areas, gain support from our communities and work out pathways to transition, we have the potential to address a large part of our region's erosion problem. The remaining highly productive land will continue to provide valuable primary produce.

We are currently calling this spatial layer 'Land Overlay 3B', as an extension of our current land overlay framework (in the TRMP).

What we are working towards is the combination of three types of spatial information:

- Landslide susceptibility layer
- Morphometric connectivity model – an extension of the susceptibility layer
- Gully erosion layer

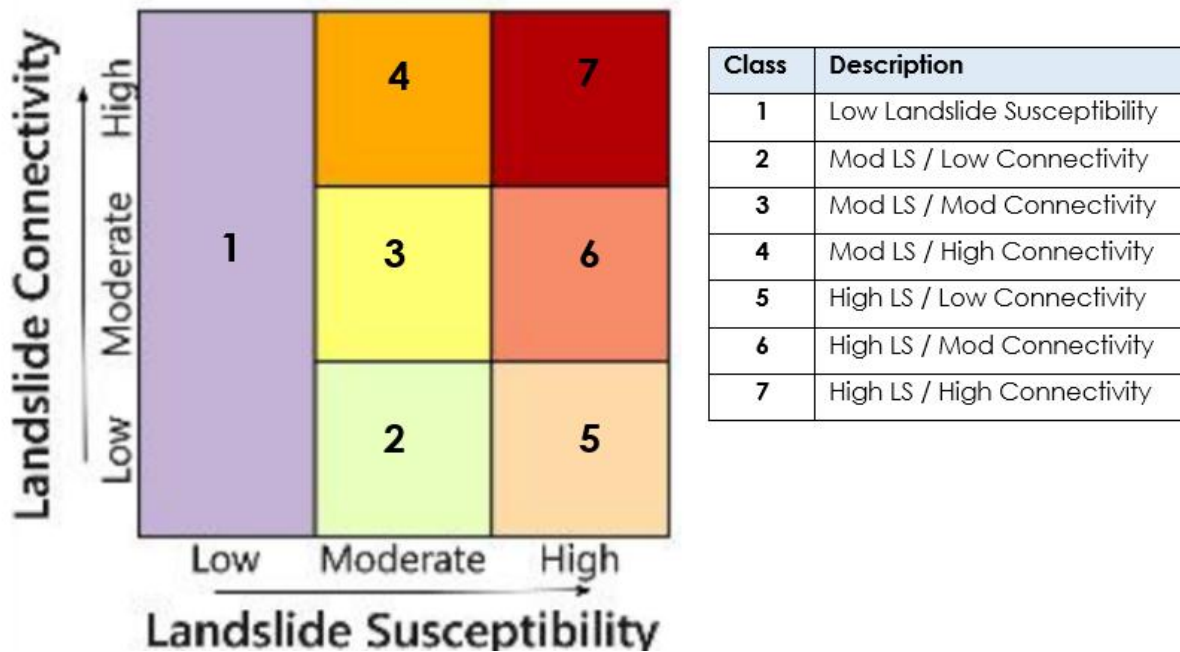This combined information will form the basis of LO3B mapping.

Landslide susceptibility and morphometric connectivity

A lot of research was done in the aftermath of cyclone Gabrielle. Part of this work involved the mapping of land across the region vulnerable to landslide susceptibility. This was done by Dr Hugh Smith at Manaaki Whenua / Landcare Research. The data was made available to Council last year.

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[1] Land representing the region's worst of the worst eroding land, where the only suitable land use for such land is permanent vegetation cover.

In December 2023, Council engaged Manaaki Whenua to develop a 'morphometric connectivity model' that aligns with the landslide susceptibility layer. The model identifies the spatial probability of those landslides reaching waterways and used a LiDAR-derived Digital Elevation Model.

These spatial probabilities were aggregated into seven classes corresponding to likelihood of landslide susceptibility and likelihood of connectivity:

Class	Description
1	Low Landslide Susceptibility
2	Mod LS / Low Connectivity
3	Mod LS / Mod Connectivity
4	Mod LS / High Connectivity
5	High LS / Low Connectivity
6	High LS / Mod Connectivity
7	High LS / High Connectivity

The final output (combining susceptibility and connectivity) was completed in mid-March this year.

Given the model covers a range of probabilities across the region, we've been considering how to set the threshold for defining the LO3B layer. After discussion and exploring the data on GIS, we are looking to combine classes 4 and 7 as the basis for engagement.

Both carry high risk of sediment connecting to waterways and we believe this is a good way to demonstrate the critical relationship between land use and the receiving environment.

Unsurprisingly, these two classes both tend to be found along waterways where the risk of erosion entering the receiving environment is highest.
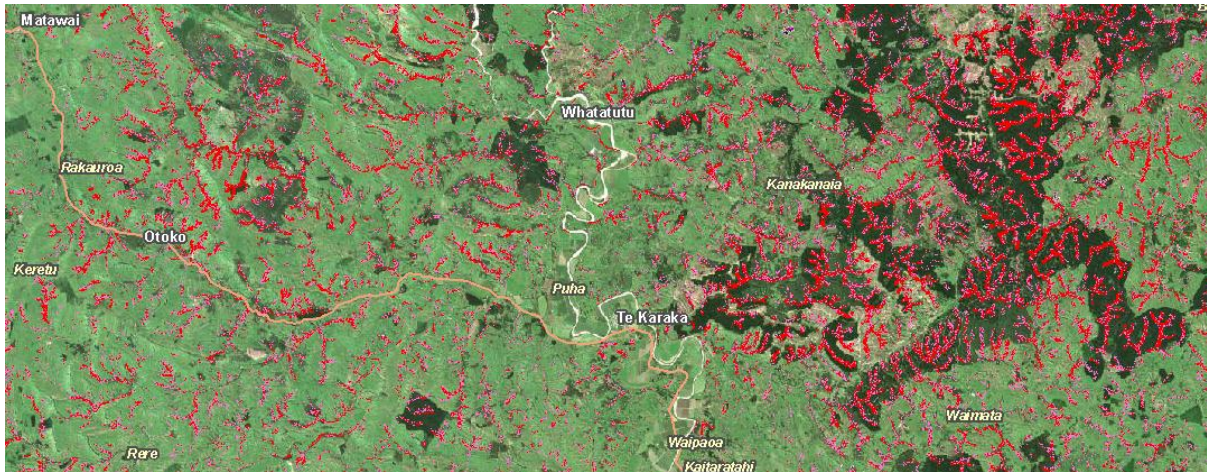
Figure 1: example of proposed LO3B layer (classes 4 and 7).

Gully erosion layer

Gully erosion is another significant erosion type in this region. Recent research by Dr Mike Marden has indicated that the current area of hill country affected by gully erosion is only 5% less than what it was 60 years ago. That is a small reduction despite the various remediation efforts since the 1960s.

We will look to include actively eroding gullies within the LO3B layer, in addition to the shallow landslide and connectivity layer.

Currently Dr Marden is working with MPI to develop an updated gully erosion GIS database for the region.

3. Transition Advisory Group (TAG)

In August 2024, Council formed a Transition Advisory Group (TAG) to consider options and tools for on-the-ground implementation to transition LO3B land out of existing land use and into permanent vegetation cover.

The purpose of the Transition Advisory Group (TAG) is for members with local expertise and knowledge to inform and assist Council in identifying options for transition land identified as LO3B from existing land uses to a permanent vegetative cover.

The TAG consists of members from a range of diverse background:

- Tangata whenua
- Forestry interests
- Pastoral farming interests
- Indigenous vegetation expertise
- Community interests
- Council staff

The TAG meets monthly, with the first meeting held in August 2024. The TAG is scheduled to wrap up in April 2025.

Key output – Transition guide

Members are tasked to contribute their expertise and knowledge to develop a transition

guide. This document will outline site-specific steps for transition and includes scenarios and case studies across Tairāwhiti and other parts of Aotearoa that align with our region's geology and/or landscape.

The aim of the transition guide is to provide landowners, farmers and foresters the best, site-specific guidance they need to help reduce soil erosion and improve water quality, which in turn will enhance land, aquatic and marine biodiversity.

The draft transition guide is expected to be distributed more widely for comments and feedback once a draft document is completed. A draft table of contents is provided in **Appendix 1** of this paper.

4. Next Steps

Gaining community-wide support for change
Beyond the TAG, Council will socialise LO3B and the Transition guidance document with the wider community. The strength of transition will be in widespread support for the idea in principle and commitment from landowners to implement on-the-ground actions. Staff will look to broaden the conversation in 2025 through catchment planning as well as the review of the Tairāwhiti Resource Management Plan.

Resourcing regional transformation
A critical part of this work is to explore funding avenues and mechanisms to enable effective and comprehensive transition across the region. There are several avenues to explore including the ETS, biodiversity credits, and the potential for cross-sector funding initiatives such as the MAHI pilot at Te Kautuku[2].

Work in this space is currently underway.

Catchment planning
LO3B is vitally connected to catchment planning. Catchments provide a more meaningful and achievable scale to deliver change. Tangata whenua, landowners and communities are closely connected within catchments and can coordinate to deliver change.

Importantly, work at this scale will be closely connected to the environmental outcomes and Long-Term Visions that our communities will set for each of the seven catchment areas of Tairāwhiti. LO3B will help to achieve the aspirations set within catchment plans by reducing sediment and slash migration, improving riparian habitat and in-stream conditions, and moderating stormwater runoff.

Council staff are exploring the potential of freshwater farm and forestry plans as a way of working with landowners to identify practical measures to implement LO3B. Part of this work involves exploring the application of a digital dashboard that can provide catchment-scale information to support transition. This kind of work is underway in the Te Arai and Waimatā catchments.

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[2] https://toha.network/tekautuku

Appendix 1

Draft Table of Contents of Transition Guide

1. **Introduction**
   1.1. Scope
   1.2. Purpose
   1.3. Guide layout
2. **Chapter 1: Objectives and transition outcomes**
   2.1. The issue we are addressing
   2.2. The key things to achieve
   2.3. The intended outcome
   2.4. How TAG initiative sit in the matrix of other regulatory and non-regulatory sustainable land use programmes
3. **Chapter 2: Potential land use scenarios for transition**
   3.1. The most likely starting points – a limited typology of existing scenarios
   3.2. In each scenario includes information on how much land is contained, the future intentions or motivations of the landowners
   3.3. Images
4. **Chapter 3: Land use transition planning**
   4.1. Where available, reference industry or sector plans
   4.2. The issues and challenges associated with transitioning
5. **Chapter 4: Transition budget, resourcing and timeframes**
   5.1. Estimation of the funding, management, people resource and time needed to start and complete transition
6. **Chapter 5: Barriers to land use transition**
   6.1. Identifying and resolving challenges to undertake land use transition
7. **Chapter 6: Transition implementation**
   7.1. Putting the plan into action
8. **Chapter 7: Funding opportunities and incentives**
   8.1. The funding options or incentives currently available
   8.2. How the funding options or incentives may be operationalised or administered
9. **Appendix 1: Transition case studies**
10. **Acknowledgements**