



28 May 2020

The Chief Executive Waikato Regional Council Private Bag 3038 Waikato Mail Centre Hamilton 3240

By email: healthyenvironments@waikatoregion.govt.nz

Dear Vaughan

Plan Change 2: Taupō Overseer

Thank you for the opportunity to present our concerns via the submission process. Please find below the Lake Taupō and Lake Rotoaira Forest Trusts' submission on Plan Change 2. I do not wish to speak at the hearing in support of my submission.

Contact Details:

Geoff Thorp Forest Manager Lake Taupō and Lake Rotoaira Forest Trusts PO Box 102 Turangi 3330

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Background

- Lake Taupo Forest Trust and Lake Rotoaira Forest Trust ("the Trusts") were formed in 1969 and 1973 respectively and own and manage 50,000 hectares of plantation forestry and undeveloped land in the Lake Taupo catchment, equating to approximately 20% of all rural land in the catchment. The Trusts' lands comprise 139 land titles, nearly all Maori owned and in multiple ownership, with over 12,000 owners in each Trusts' lands. Almost all members of Tuwharetoa iwi are either owners or descendants of owners of land blocks in one or both Trusts.
- 2. The Trusts are also 60% shareholders in Hautū Rangipō Whenua Ltd which owns 9,000 ha of general freehold land in near Turangi, most purchased from the Corrections Department in 2015. This land is mainly in plantation forests and native bush, but also includes 1,600 ha of farmland.
- 3. Approximately 33,000 hectares of the Trusts' land is in plantation forestry, 20% of which is owned in joint venture with the Crown. The Trusts represent the owners of over half of the plantation forestry in the Lake Taupo catchment.
- 4. Ngati Tuwharetoa have an historic relationship to Lake Taupo and its catchment and are kaitiaki of the area subject to the Variation as well as being the owners of the bed of Lake Taupo. Over time they have acted in a way that has promoted the ecological health of the lake and its catchment. By way of example:

- Ngati Tuwharetoa interests are collectively the largest private landowner in the catchment with total landholdings in the order of 118,000 hectares plus ownership of the bed of Lake Taupo which is a further 61,000 hectares;
- Most (78%) of Ngati Tuwharetoa's lands in the catchment remain in native forest, regenerating forestry or production forestry, to the direct benefit of the lake;
- The Trusts' decided in the 1960s to put their land into forests rejecting strong proposals to develop it into farming specifically because of environmental concerns.
- Ngati Tuwharetoa are committed to conservation initiatives throughout the catchment and by way of example over the past 50 years have retired thousands of hectares of land pursuant to the Lakeshore Reserves Scheme;
- Members of Ngati Tuwharetoa are becoming increasingly committed to developing the iwi's land in an environmentally sensitive but commercially viable manner so as to allow the iwi to benefit economically, socially and culturally from its land.

Involvement with Variation 5

- 5. The Trusts were closely involved in the process of creating Variation 5, working with the Tuwharetoa Māori Trust Board and other Tuwharetoa Trusts to try and develop a coordinated response to the proposed legislation. The key aspect of the Trusts' submissions at the time, like other Tuwharetoa entities, was strong support for the objective of protecting the lake, and the decision to reduce manageable nitrogen emissions by 20%.
- 6. The Trusts did have concern that with 78% of Tuwharetoa lands being in plantation forest or undeveloped, the grandparenting formula adopted by the Regional Council would immediately cement in place that forestry was now the highest and best use of these lands. There is a range of reasons as to why Tuwharetoa has so much land in these uses. While there was no immediate desire for significant land-use change, Tuwharetoa are perpetual owners of their lands and the impacts of such regulation is therefore also perpetual. Selling the land due to dissatisfaction with its economic prospects is not an option for Tuwharetoa. There was therefore a strong feeling that the impacts of Variation 5 on Tuwharetoa landowners as a whole was inequitable, and that Tuwharetoa lands were forced to take a disproportionate share of the load of environmental protection in the catchment.
- 7. One matter the Trusts were directly involved in was the securing of an 11-tonne allowance which could be applied for by owners of Māori forestry and undeveloped land in the catchment. This would enable at least small areas of these and blocks to develop into some higher and better use at the time housing and tourism developments were envisaged. While we understand that the allowance has had little and possibly no uptake to date, the rule is widely known within Tuwharetoa and provides a degree of comfort that there is some flexibility for these lands.

Submission on Plan Change 2

- 8. WRC advises that its review of Chapter 3.10 of the WRP will be done in two stages:
 - Stage one called Plan Change 2 (PC2) is to provide for the use of updated versions of the Overseer farming model in Taupō land use consents and for associated nitrogen trading contracts, and

- Stage two to address other Chapter 3.10 matters.
- 9. PC2 has been presented to potentially affected parties as being simply a targeted plan change to fix a technical issue, to enable a transition from one Overseer version to another (online) version. Although a broader stage two is flagged as occurring sometime in the future, no details on when this will occur are provided. Changes as a consequence to the change to in Overseer version that occur in PC2, such as the withdrawal of 11 Tonnes of N allocated to Maori land, are therefore in a hiatus of unknown length before these are (potentially) addressed in Stage 2.
- 10. Feedback noted in the section 32 report that lwi:
 - sought that there were no unforeseen consequences to the plan changes.
 - However the s32 report does not explicitly identify that PC2 will change the proportions of N allocation between land uses compared to what was originally allocated, in a way that increases the proportion allocated to high leaching activities and reducing the proportion allocated to low leaching activities;
 - and
 - have aspirations to develop their land.
 - However, PC2 removes N leach allocation from Maori land and there is no guarantee that it will be reinstated through the Stage 2 process.
- 11. PC2 attempts a bridging technique for farms to switch from Ov5.4.3 to OvFM, called reference files, but for the N allocated to Maori land no similar endeavour has been made. The section 32 report notes:

WRC should recognise the decisions Tūwharetoa has made over the years to ensure land use in the Lake catchment does not adversely affect the water bodies, by prioritising forestry development over farm development, ensuring significant riparian margins have been established and retiring large amounts of land. They want to make sure this recognition is built into the discussion about the larger second stage Chapter 3.10 review, and in particular to ensure the additional allocation of Nitrogen for foresters and owners of undeveloped land is back on the table. They considered that this additional allocation went some way to recognising the kaitiakitanga role undertaken by Tūwharetoa, although it does not recognise the full range of ecosystem services that the role has maintained.

- 12. It is concerning that there are no provisions in PC2 to ensure that what is removed as a result of PC2 will definitely be reinstated through the Stage 2 process.
- 13. The s32 report notes that:

Staff are aware that the additional allocation of nitrogen for undeveloped and forested land in rule 3.10.5.4 and 3.10.5.5 is a matter that needs to be carefully considered. There is no clearly practical way of changing the current allocations into allocations that relate to updated Overseer versions.

14. It is not clear why it is regarded as appropriate to make the considerable effort to modify the Overseer output process in PC2 to try to reflect modelling predictions for high leach pastoral use but not to address all other land uses at the same time, such that a common denominator is created for all land uses for the purpose of N leach trading.

- 15. The Trusts consider that the extent of these trade-offs is not accurately represented in the section 32 report at present, and that these trade-offs are to significant detriment to the Trusts and their ability to use their land. The Trusts reach this conclusion because 11 tonnes of N allocation to Maori Land has been removed by PC2, thus significantly reducing the Trusts' ability to make any form of land use change. PC2 also changes the way that the Trusts can participate in any N leach trades from being a controlled activity to a non-complying activity.
- 16. The Trusts reach the conclusion that WRC are understating the effects of PC2 on nonpastoral land uses (section 32 report Page 6):

The plan change will not change the way that land use is managed in the catchment in any significant way. It will not change the impacts of land use on Lake Taupō.

- 17. The effect of PC2 is to continue to facilitate N leach trading between pastoral land uses, although the Overseer model predictions are that these are considerably higher than what Overseer 5.4.3 had predicted. PC2 removes 11 tonnes of N allocated to Maori land possibly temporarily, although this is not entirely clear and makes N trading between high leach and low leach land very difficult (non-complying activity).
 - On the contrary, the plan change aims to ensure land use continues to be managed in the way it has been since the Chapter 3.10 rules were established.
 - Social costs of the plan change will be no more than minor.
- 18. The section 32 report does not provide any analysis on: what the removal of 14 tonnes of N allocation from Maori land means; or what the change from controlled status to non-complying means; or whether the OverseerFM model predictions of a considerably greater rate of leaching from pastoral land means the initial estimates were too low or the changes are immaterial; or the effect of changing the N leach proportions between various land uses (e.g. considerably increasing dairy leach rates while holding plantation forest rates constant over versions).

For these reasons, the plan change is consistent with the relevant provisions in the statutory/non-statutory framework described in Appendix 1.

19. The Trusts do not agree that the plan change is consistent with RPS objective 3.2, RPS objective 3.9, RPS policies 4.1, 4.4, 8.3, or 8.4.

Decision sought

20. That WRC revise the section 32 report to:

- accurately identify the risks associated with locking proportionality of the Overseer model 5.4.3 to the current land uses while using Overseer FM; and
- accurately describe the policy effects for the plan provisions of PC2. Among these adverse effects are:
 - removing options for land use change for Maori landowners
 - changing the proportionality between land uses in a way that further disadvantages low leach land uses.

Section 32 Report - Oppose

- 21. Page 10 discusses meeting *Objective 1: Maintenance of the current water quality of Lake Taupō* but nowhere in the Section 32 report is the effect on Objective 4 discussed.
- 22. Although Objective 1 may be met, it cannot be regarded in isolation as to whether meeting it also is the most appropriate way to achieve the purpose of the RMA. The assessment under section 32(1)(a) must consider the effects of PC2 on *all* the objectives of Chapter 3.10.

Decision sought

23. Include in the section 32 report an assessment under section 32(1)(a) of the effects of PC2 on the ability to change land use for Maori land, thus meeting Objective 4.

Rule 3.10.5.3 – Oppose

24. The transition from Overseer 5.4.3 to the current OverseerFM model is proposed to be done at the level of effect of the individual farm, using the approach set out in the table below.

For the purposes of determining nitrogen leaching amounts under Rules 3.10.5.1 to 3.10.5.9 the following nitrogen leaching rates shall be applied where relevant:	
a) Use of land described under Rule 3.10.5.1 has a leaching rate of 8 kilograms per hectare per year	Absolute number, fixed – upwards
	<i>Use of stocking rate proxy applies via table 3.10.5.1</i>
b) Use of land described under Rule 3.10.5.2 has the following leaching rates:	
i) Unimproved land (including gorse and broom scrubland) 2	absolute, fixed
kgN/Ha/yr;	proportionally less of
ii) Non-nitrogen fixing plantation forest land 3 kgN/Ha/yr	catchment N
c) Use of land for farming activities except under Rule 3.10.5.1,	relative, floating - upwards
that may result in nitrogen leaching from the land and entering	
water, has a nitrogen leaching rate of an amount calculated using	
Version 5.4.3 of the OVERSEERTM nutrient budgeting model	
d) advanced wastewater system Rule 3.10.6.3 leaching rate of 3.5	absolute, fixed
kgN/Ha/yr	proportionally less of
e) conventional wastewater system Rule 3.10.6.4 leaching rate of 10.0 kgN/Ha/yr	catchment N

- 25. It is not clear how the proportional cross reference between land uses is made, as the methodology for change is not applied consistently across all land uses or discharges, therefore the effect will be to change proportionality for different land uses.
- 26. The section 32 report supports the use of this approach: Model existing farm operations, as they would be if the full NDA is being used, in OverseerFM (Overseer Reference Dataset Approach).
- 27. Existing farm operations should be occurring in a way that is within each farm's NDA as required by the farm's consent. Under this option, in consultation with the farmer, the farm system is described in a way that can be accurately modelled in OverseerFM. To ensure the farm carries forward its full nitrogen allocation, if the farm is currently operating under its NDA, farm inputs will be altered as though it was using its full

allocation. The resulting OverseerFM inputs will be referred to as the Overseer Reference Dataset (ORD) and is given a unique reference number and locked into the OverseerFM model. The ORD effectively replaces the NDA as the 'expression' of the farm's nitrogen cap.

- 28. This has the effect of increasing the proportion of N allocated to higher leaching pastoral uses and decreasing the amount allocated to low leaching uses. This is contrary to Objectives 4, Policy 1, Policy 3 and Policy 14 of Chapter 3.10.
- 29. The Trusts realise that the application of a nitrogen leaching rate for unimproved land (including gorse and broom scrubland) of 2 kgN/ha/year is not a change. However, we suggest this is contrary to the understanding of how plantation forestry and unimproved land would be handled when Variation 5 was initially implemented over a decade ago. It is essential for owners of undeveloped lands and owners of plantation forestry land that both lands have the same leaching rate of 3 kgN/ha/year.
- 30. For owners of unimproved land, plantation forestry is often the only productive landuse they can aspire to, but applying a leaching rate of 2 kgN/ha/year would preclude them from being able to take up this opportunity.
- 31. Owners of plantation forestry land commonly adjust planting boundaries, particularly at the time of replanting after harvest. This often involves planting areas missed or damaged (through wind in particular) in the previous rotation. Such areas, while normally fairly small, would under the rule be assessed as unimproved land, and a strict application of the rule would prevent forest owners from carrying out this standard forest management practice, and preclude them from utilising their productive land to its best advantage.

Decision Sought

- 32. Remove the approach of reconciling the new OverseerFM numbers to the Overseer 5.4.3 via an Overseer Reference Dataset approach from rule 3.10.5.3 and all other instances that it occurs in PC2
- 33. Increase the nitrogen leaching rate applying to unimproved land (including gorse and broom scrubland) match that of non-nitrogen fixing plantation forest land.

Page 25 Rule 3.10.5.4 - Oppose

- 34. Te Ture Whenua land (rule status = controlled. PC2 changes this to non-complying). PC2 is described as being technical, however the change in Overseer version will remove the ability to use the nitrogen allocated to Te Ture Whenua land because of concerns that the total of 11,000 kilograms is not pegged to the replacement OverseerFM version.
- 35. The reasoning given is that because OverseerFM will be updated quite often, and because updated versions will model inputs differently, it would not be possible to add up different allocations from different versions of Overseer. i.e. there is a denominator problem, in that total amounts can only be precisely calculated if the individual allocations are modelled by a single version of Overseer.
- 36. Reviewing the rule would likely raise issues about nitrogen allocations. Staff recommend that this matter be addressed during the second stage and not be part of

the more targeted plan change to allow later versions of Overseer to be used in farming consents.

37. It is unacceptable that owners of forestry and undeveloped lands will have no avenue to utilise their lands at a higher leaching level as a result of PC2. There is not even any guarantee that the matter will be dealt with at a later date, and even if there was there should in the interim be an allowance of nitrogen made available for such land owners – despite, we accept, this be challenging from an Overseer measurement perspective.

Decision sought

38. Retain the functionality of rule 3.10.5.4 and the ability to trade N allocation

Rule 3.10.5.5 – Oppose

39. This rule faces the same issues as those faced by Rule 3.10.5.4. The staff report recommends that this rule be reviewed during the second stage of the Chapter 3.11 review. However there are no guarantees that the N allocation will be retained.

Decision sought

40. Retain the functionality of rule 3.10.5.5 and the ability to trade N allocation

Rule 3.10.5.12 Nitrogen Leaching Rates – Oppose

- 41. The s32 report notes: rule 3.10.5.12 does not rely on Overseer modelling so does not have to be changed at this stage. There is further work underway to update Overseer modelling of leaching from plantation forests. Until this work is progressed, it is recommended that the leaching figures in 3.10.5.12b) be retained and reviewed during the more comprehensive Chapter 3.10 review that will follow Plan Change 2.
- 42. The leach rates for plantation forest and "unimproved" land are known to be inaccurate. Overseer is fundamentally not designed to model plantation forest processes so is unlikely to ever be an appropriate modelling tool.
- 43. The RPV5 Section 32 report noted:

Scientific measurement and modelling indicate that pastoral farm land contributes most (93 per cent) of the human-generated (and therefore manageable) nitrogen entering the Lake, with urban stormwater and wastewater being a localised nitrogen source (7 per cent).

44. Given the proportionally small contribution to N leach of plantation forest and "unimproved" land, providing a flat per hectare N leach rate - that reflects current scientific understanding of these land uses' leach rates will be a least as accurate as any Overseer output used on the high leach land uses.

Decision Sought

45. Provide a more realistic per hectare figure for each of plantation forest and unimproved land, to enable these land uses to occur without requiring consent and to participate in N leach trades as part of PC2

Keita Kirchin

From:	Geoff Thorp <geoff@ltfm.co.nz></geoff@ltfm.co.nz>
Sent:	Friday, 5 June 2020 5:06 pm
To:	Healthy Environments
Subject:	RE: Submission on Plan Change 2 - information needed
Follow Up Flag:	Follow up
Flag Status:	Flagged

Kia ora Keita,

I could / could not gain an advantage in trade competition through this submission. [Refer to guide below for further information] I am / am not directly affected by an effect of the subject matter of the submission that:

- (a) adversely affects the environment, and
- (b) does not relate to the trade competition or the effects of trade competition.

Nga mihi Geoff Thorp

From: Healthy Environments <HealthyEnvironments@waikatoregion.govt.nz>
Sent: Friday, 5 June 2020 5:03 PM
To: Geoff Thorp <Geoff@ltfm.co.nz>
Cc: Healthy Environments <HealthyEnvironments@waikatoregion.govt.nz>
Subject: RE: Submission on Plan Change 2 - information needed

Hi Geoff

Could you please answer the following on behalf of the joint Lake Taupō and Lake Rotoaira Forest Trusts' submission and return by email?

TRADE COMPETITION AND ADVERSE EFFECTS (select appropriate)

I could / could not gain an advantage in trade competition through this submission. [Refer to guide below for further information] I am / am not directly affected by an effect of the subject matter of the submission that:

- (a) adversely affects the environment, and
- (b) does not relate to the trade competition or the effects of trade competition.

1. Trade competition

If you could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of part 1 of Schedule 1 of the Resource Management Act 1991 (RMA).

- 6 Making of submissions
 - (4) A person who could gain an advantage in trade competition through the submission may make a submission only if directly affected by an effect of the proposed policy statement or plan that
 - a) adversely affects the environment; and
 - b) does not relate to trade competition or the effects of trade competition.

Kind regards

Keita

Keita Kirchin | BUSINESS SUPPORT OFFICER - PLANNING ASSISTANT | Business Support (SAS), Science and Strategy

WAIKATO REGIONAL COUNCIL | Te Kaunihera ā Rohe o Waikato

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From: Geoff Thorp <<u>Geoff@ltfm.co.nz</u>>
Sent: Thursday, 28 May 2020 2:40 pm
To: Healthy Environments <<u>HealthyEnvironments@waikatoregion.govt.nz</u>>
Subject: Submission on Plan Change 2

Kia ora,

Please find attached the submission from the Lake Taupō and Lake Rotoaira Forest Trust on Plan Change 2.

Regards Geoff Thorp

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