

28th May 2020

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

Dear Sir,

SUBMISSION TO PLAN CHANGE 2: LAKE TAUPO CATCHMENT

INTRODUCTION

New Zealand Forest Managers Ltd (NZFM) is a privately owned forest management company established in 1989. The company is a specialised contract forest management organisation that provides commercial forest owners with a comprehensive management service covering the full range of operations from forest development and establishment, protection and investment through to harvesting and marketing.

Within the Waikato Region, NZFM manages plantation forests for a number of clients including:

- The Crown through the Ministry of Primary Industries.
- The Lake Taupo Forest Trust
- The Lake Rotoaira Forest Trust
- Lake Taupo Forest Management
- New Forests
- Global Forest Partners (GFP)
- Taupo District Council
- Other private small forest owners, including multiple owned Maori land.

NZFM was involved with Variation 5 to the Waikato Regional Plan (Lake Taupo Catchment) as a land and forest manager of a significant proportion of productive land within the Taupo Catchment. NZFM represented the views of, and appeared in conjunction with, its clients the Lake Taupo Forest Trust. More recently, discussions have been ongoing with WRC staff in relation to the review of the Waikato Regional Plan and the development of Plan Change 2.

NZFM understood through these discussions that Plan Change 2 is a technical fix to allow for the continued use of Overseer. However there also appears to be policy implications that have the potential to cause a significant negative impact on low nitrogen leaching land uses such as undeveloped land and plantation forests, specifically the change activity status of Rule 3.10.5.4 from Controlled to Non-complying. During discussions and consultation to date that NZFM has had with WRC staff, these changes were not discussed. This is disappointing given the significant impact and uncertainty they will arise for landowners from these changes as a result. The implications that PC2 may have on low leaching land uses, primarily Maori owned land, are significant and it appears that the changes proposed in PC2 have been developed to the benefit of high leaching land uses, while the effects of these on low leaching land uses are not considered or identified.

The historic use of unproductive and plantation forest land has not contributed to the water quality concerns that this Plan Change has been developed to address and the offsetting of contaminants provided by of these low leaching land uses has not been recognised or adequately accounted for.

Specific details of the NZFM submission are outlined below in Table 1.

Thank you for the opportunity to lodge a submission outlining our concerns with Plan Change 2. In lodging this submission please note:

- We cannot gain an advantage in trade competition through this submission.
- The clients that we represent are directly impacted by an effect of the subject matter of the submission that:
 - adversely effects the environment, and
 - does not relate to the trade competition or the effects of trade competition.
- I wish to speak at the hearing in support of my submissions.
- If others make a similar submission I will consider presenting a joint case with them at the hearing.

Yours sincerely,

Jackie Egan
Environmental Planner

Table 1 – NZFM Submission on Proposed Waikato Regional Plan Change 2 – Taupo Overseer

Section number	Support /Oppose	Submission	Decisions sought
General		<p>WRC advises that its review of Chapter 3.10 of the WRP will be done in two stages:</p> <ul style="list-style-type: none"> • 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. <p>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 will occur 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 place for an unknown length of time until they are addressed in Stage 2 of the review process.</p> <p>The s32 report identifies that the Objectives and overall policy framework of Chapter 3.10 are not being changed. The intention is to make changes to the plan in order to maintain the existing policy directions which have been developed to achieve the objectives and thereby continue to achieve the purpose of the Act. However it is hard to see how the changes that are proposed are consistent with Objective 4 and Policy 1, Policy 3 and Policy 14 of Chapter 3.10.</p> <p>The Overseer model is used by the Plan to estimate N leach from various pastoral activities to support the Plan’s purpose of reducing N leach to the Lake by 20%.</p> <p>The PC2 Section 32 report notes that if different Overseer versions are used at the same time, it would not be possible to determine when 20 percent of the catchment nitrogen had been removed. Put another way, the absence of a common denominator (if different Overseer versions are in play) makes summing of modelled N leach reductions not possible.</p> <p>The s32 report also considers that the benefit of requiring the use of one version of Overseer provides certainty for farmers to facilitate business planning, and also establishes a level playing field to allow for</p>	<p>That WRC revise PC2 to constrain the use of Overseer to be a decision support tool, and to cease the use of Overseer as the tool or mechanism to support N leach catchment accounting or N leach trading.</p>

equitable nitrogen trading to occur – between the pastoral land uses that Overseer FM models.

Difficulties with the approach taken in PC2 arise because:

1. The Overseer model does not provide absolute numbers. It models:
 - a. relative numbers (comparisons between different pastoral land management options)
 - b. to the bottom of the root zone (thus what happens between the bottom of the root zone and the lake is not known),
 - c. for some land uses only (it models horticulture poorly and does not model plantation forest).
2. Overseer has to date not been able to provide numbers that are accurate. This is evident by the significant changes over time in the model's predictions for N leach from pastoral land use that has not changed in intensity.

The Overseer model provides *precise* numeric outputs for each of its iterations, but different versions of this model provide quite different outputs, i.e. instantaneous precision is not the same as making predictions that are accurate over time. This means that the proportional contribution of N leach between pastoral land uses (and between properties) is modelled differently over time, even though the activities are unchanged.

The Overseer model's ability to model land uses other than pastoral uses is poor (e.g. for horticulture) or non-existent (e.g. for plantation forest). This means that the proportional contribution of N leach between pastoral and non-pastoral land uses varies over time, even though the activities are unchanged.

The Section 32 report notes that Iwi:

- 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 that:

- 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. This results in a huge amount of uncertainty for low emitting land uses.

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 and other low leaching land uses no similar approach has been taken. There is a definite inequity that exists between the management of effects from PC2 between high leaching land uses and low leaching land uses.

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. ‘

It is concerning that there are no provisions in PC2 to ensure that what is removed as a result of PC2 (the ability to change to a higher leaching land use) will be reinstated through the Stage 2 process.

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. ‘

This view is premised on an expectation that Overseer provides useful and accurate predictions and is thus worth the effort that has been made to make it work for high leach pastoral activities. Overseer does not provide accurate outputs over time, evidenced by the significant changes to the Overseer predictions between 5.4.3 and FM.

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 in the Taupo catchment.	
Section 32 report	Oppose	<p>The section 32 report should accurately identify where the benefits and costs are and who they affect.</p> <p>NZFM consider that the extent of these costs and benefits is not accurately represented in the section 32 report at present and that the costs are significant and to the detriment to the landowners that NZFM manages land on behalf of. The removal of the N allocation for low leaching land uses significantly reduces the ability for owners of undeveloped and plantation forestry land (low leaching land uses) to undertake any form of land use change.</p> <p>The change in activity status from controlled to non-complying in Rule 3.10.5.4 effectively removes the ability to undertake land use change as there is no guarantee that the process will be consented due to the elevation in activity status being a very high bar to meet.</p> <p>Page 6 of the Section 32 report states:</p> <p><i>'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.</i></p> <p>For the reasons outlined above, NZFM disagrees with this statement. Further the report states:</p> <p><i>'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.</i></p> <p>Again, for the reasons above NZFM contends that this may not be the case due to the change in activity status for Rule 3.10.5.4.</p> <p>The section 32 report does not provide any analysis on what the removal of N allocation from Maori owned land means, what the change from controlled status to non-complying means, or what the effect is 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).</p>	<p>That WRC revise the section 32 report to:</p> <ol style="list-style-type: none"> 1. 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 2. Accurately describe the policy effects for the plan provisions of PC2. Among these adverse effects are: <ul style="list-style-type: none"> ➤ removing options for land use change for Maori land owners ➤ changing the proportionality between land uses in a way that further disadvantages low leach land uses.

<p>Page 25 Rule 3.10.5.4</p>	<p>Oppose</p>	<p>Rule status change = Controlled to Non-complying.</p> <p>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 accurate in the replacement OverseerFM version.</p> <p>While NZFM recognises the issues and complexities of calculating these amounts, some form of middle ground should be able to be established to enable low leaching land uses to change to a higher leaching land use within the period of time between Stage 1 and Stage 2 of the PC2 review process. If there is no interim measure established these low leaching land uses are effectively rendered incapable of reasonable use as no activity that increases an already very low leaching rate is allowed. Furthermore, the 'non-complying' status of the activity provides no certainty and the application process will be a significant financial cost to the landowner.</p> <p>Given that the nitrogen allocation in Rule 3.10.5.4 was introduced in recognition that low leaching land uses (Maori land) had been disadvantaged through the Variation 5 process, to remove the intent of this rule disadvantages these landowners once again. This is particularly disappointing as the main reason for implementing Plan Change 2 was not specifically related to this rule.</p> <p>While Plan Change 2 addresses an immediate and relatively straight forward issue for high emitting land uses (by updating the version of Overseer), it has had the effect of removing opportunities for land use change for low emitting land uses and there is no guarantee that these will be reinstated in the future.</p>	<p>Retain the functionality of rule 3.10.5.4 and the ability to trade N allocation.</p> <p>Consider an interim measure to allow this rule to function until Stage 2 of PC2 is complete.</p>
<p>Rule 3.10.5.5</p>	<p>Oppose</p>	<p>This rule faces the same issues as those faced by Rule 3.10.5.4 above.</p> <p>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.</p>	<p>Retain the functionality of rule 3.10.5.5 and the ability to trade N allocation</p>

<p>3.10.5.12 Nitrogen Leaching Rates</p>	<p>Oppose</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>The RPV5 Section 32 report noted: <i>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).</i></p> <p>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.</p>	<p>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</p>
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