

## Capil Grove Hearing Summary

I acknowledge my s42A report was received some time ago so I will not repeat it here today. I have considered everything that has been said today and have the following summary.

I wanted to mention GHG and climate change with regard to policy 4 of the NPSFM and section 7(i) of the RMA. As per Mr Lowe's handout, GHG increasing from 7,874kg/ha to 16,374kg/ha (+108% or to put it simply, more than double). I don't consider that increase consistent with policy 4 of the NPSFM but it has also just dawned on me today - is the air considered a 'receiving environment' and are GHG considered a 'contaminant' with regard to regulation 24 NES-F?

Mr Lowe mentioned the word intensification, I personally hate the word intensification and that particular word is only mentioned three times in the pSWLP at the beginning of the plan. It does not appear in the objectives, policies or rules. However, the Revised Stock Units (RSU) are increasing from 6,581 to 7,602 when the sheep/beef scenario is compared to the proposed dairy farm. I am unsure what the RSU change is between the currently authorised dairy support system vs the proposed dairy farm as this is not modelled in Overseer. RSU are important because they allow different stock types to be compared in a relative way, essentially comparing apples with apples.

Mr Lowe criticises the e3 evidence's ability to compare the current proposal to the exiting farm system. However, the existing environment changes depending on which policy framework you are looking at. The existing environment for NES-F regulation 24 is the sheep and beef farm (Stage 0) however when giving regard to the pSWLP objectives and policies then the authorised dairy support activity would be considered part of the existing environment.

As good as the sediment traps and retention bunds are for capturing overland of contaminants, water carrying contaminants is still going to make its way to surface water via the extensive network of tile drains (estimated at 100). I also consider the entire proposed herd of 640 cows should not be authorised to be milked, or their effluent be discharged to land, until a number of the sediment traps and retention bunds are operational to ensure the mitigations are operational to avoid, remedy or mitigate the effects of the land use change. If the land use change happens first and then the sediment traps and retention bunds are constructed, I consider there is a possibility that concentrations of contaminants in the receiving environment will increase during that interim period. This requirement is similar to the condition restricting milking cow numbers until the second winter barn is operational.

I consider that the proposal would only be consistent with policy 11 (peat wetland physiographic zone) if the area referred to in the application as the gorse block located in the peat wetland physiographic zone is left to revert back to a wetland. This is because policy 11 is very specific about decision makers not granting consents for additional dairy farming where contaminant losses will increase in this zone. Additionally, this area may need assistance to reverse the damage of draining and grazing of the area.

There has been a number of iterations of the consent conditions but in the latest set received with the legal submission from Mr Mulholland (version 8) I have some concerns with...

1. Farming LUC 7 - Soil moisture monitoring site for Makarewa aquifer at McKinnon Road has been exceeding soil moisture capacity since 28<sup>th</sup> June at 2:20am, so this means that condition would require cows to be in the barn for 18hrs/day from tomorrow (Wednesday 5<sup>th</sup> June) onwards. I consider having cows on pasture at that property during heavy rain events would have adverse effects on the environment due to the movement of run-off and contaminants to surface waterways. Mr Lowe referred to ES restricting the discharge of effluent to land

when the soil moisture capacity is exceeded, he is correct in saying this but there is no flexibility to keep discharging for 7 days and then stop, which is what this condition is allowing.

2. Farming LUC 13 – The use of synthetic nitrogen fertiliser at 190kg/ha is the maximum dictated by the NES-F, not a target. Stage 0 is modelled at 54kg/ha and Stage 4 has been modelled at 85kg/ha. Allowing this condition to remain at 190kg/ha is a significant increase from what I assume has been occurring on farm in the past.
3. Farming LUC 27 – 640 milking cows have been modelled in Overseer in the barn 24/7 between May – Sept. The 200 extra cows coming onto the farm have been modelled on pasture 24/7 June-August. 640 cows x 24hrs = 15,360 cow hours compared to the consent condition stipulates 840 cows x 18hrs = 15,120 cow hours (maximum). I don't consider that this reflects the proposal as the condition does not lock the applicant into 840 cows in the barn 18hrs/day everyday of winter, but only after 7 days of rain.
4. Farming LUC 30 – The riparian planting proposed is minimal considering the extensive (5km) waterways present. More riparian planting is needed and if the fencing is too close to the waterways to achieve this (<1m) then those waterways should be re-fenced with a buffer large enough (2-3m) to riparian plant.
5. Farming LUC 38 – The audit conditions have been removed from the LUC for farming. These conditions used to be included in the suite of LUC conditions however Council opted to remove these conditions and include in an appendix to cut down the body of the consent. Removing these conditions, which essentially detail farm audit criteria and frequency, results in the single remaining audit condition becoming ambiguous and not fit for purpose. Especially in the interim until the certified and audited FFP pathway is operational.
6. Discharge condition 26 – no trigger related to the surface water monitoring. This is essentially just a data gathering condition.
7. Winter barn LUC Condition 6 & 7 - No impermeable base in winter barns is concerning considering Carl informed me on the recent site visit that under the straw is crushed lime and under that is concrete, which would be considered an impermeable base.
8. Winter barn LUC 6 & 7 - Size of barn has also been removed, however this is directly connected to the effluent pond size requirement as per the Dairy Effluent Storage Calculator (DESC), unless the roof is diverted 24/7 then it is less of a concern.

My recommendation still remains that the application should be declined due to not satisfying regulation 24(1)(b). I reach this conclusion because, with the exception of the winter barns, minimal mitigations have been proffered relating to nitrogen concentrations being lost to the receiving environment in order to satisfy NES-F regulation 24. Phosphorus has been focused on due to the physiographic zones present, however it is assumed N will still be lost to surface water on the property. The winter barns may mitigate concentration of contaminants (nitrogen) increasing during winter, however they will not mitigate concentration of contaminants (nitrogen) increasing during summer.

I could also not recommend grant unless:

1. All the concerns I have raised regarding conditions can be addressed in order to be consistent with pSWLP policy 16;
2. The gorse block located in the peat wetland physiographic zone is left to revert back to a wetland in order to be consistent with pSWLP policy 11; and
3. Waterways with fencing <1m buffer are re-fenced with 2-3m buffer and riparian planted.