Recommendation and decision on notification of resource consent application(s) under sections 95-95G of the Resource Management Act 1991 (RMA)

The application

Particulars

Applicant:	Cashmere Bay Dairy
Consents sought:	Land Use Consent – to use land for farming where the dairy platform is increasing beyond what was authorised as at 3 June 2018
Application reference:	APP-20191230
Site address or location:	145 Jaffray Road
New consent(s) for new activity(ies) (s88)	☐
New consent(s) for existing activity(ies) (s88)	☒
Change to conditions of existing consent(s) (s127)	☐
Activity status	Discretionary

Recommendation and decision

Officer's recommendation

I recommend the application be publically notified because I consider that the adverse effects will be more than minor. This is because;

- Localised losses under the sheep block are likely to increase;
- When considering cumulative effects, it is likely than significant adverse effects will occur as a result of the proposed activity;
- The current consented activities are having a significant adverse effects on the receiving environment, and the proposed activities will have a synergetic, additive effect that I consider to be more than minor.

10.1	**The application be processed non-notified**	☐
10.2	**Public notification is required/recommended**	X
10.3	**The application be placed on hold while the applicant tries to obtain written approvals from the affected persons**	☐
10.4	**Limited notification is required. Persons to be served notice are those listed in 8.2**	☐

Alex Erceg

Consents Officer

Date: 13 August 2019

Decision under Delegated Authority

11.1	**I agree with the recommendation**	X
11.2	**The application will be processed non-notified**	☐
11.3	**The application will be publicly notified**	X
11.4	**The application shall be placed on hold while the applicant tries to obtain written approvals from the affected persons**	☐
11.5	**The application will be limited notified. The parties to be served notice are those listed in section 8.2**	☐

This decision is made under delegated authority by:

Michael Durand
Consents Manager

Date: 14/8/19

The proposal

This application

The applicants own an existing dairy farm at 145 Jaffray Road, Gore. The discharge of effluent from up to 1000 cows is authorised by Discharge Permit AUTH-301811-V2 and Water Permit AUTH-301812-V1 authorises the abstraction and use of groundwater.

The applicant has purchased a contiguous block of land which was previously used as an organic sheep farm (the "sheep block") that they propose to incorporate into their dairy platform. The applicant also utilises a lease run-off block which is also contiguous.

Particulars of the Proposal

Property Details		
Property address	145 Jaffray Road	
Property owner(s)	Cashmere Bay Dairy Limited	
Legal Description	Existing Property	
	Section 5 BLK II Otama SD	SL43/63
	Section 2 BLK II Otama SD	SL41/274
	Section 4 BLK I Otama SD	SLB3/911
	Pt Section 10 Blk II Otama SD	SL8D/174
	Pt Section 10 Blk II Otama SD	SL8D/173
	Pt Section 10 Blk II Otama SD	SL8D/171
	Closed Road Blk II Otama SD	SL190/88
	Closed Road Blk II Otama SD	No Details Available
	Pt Section 9 Blk II Otama SD	SL8D/175
	Runoff Block	
	Lot 2 DP 12628	97883
	Lot 2 DP 324253	97883
	Sheep Block	
	Section 14 BLK II Otama SD	SL7D/697
Land Use Consent (use land for dairying)		
Area of new sheep block (ha)	80 ha	
Use of land pre-May 2016	Organic sheep farm	
Proposed use of land	Dairy Platform, which includes wintering	
Number of dairy cows	Existing Herd: 1,000 cows	Proposed Herd: 1,000 cows
Farm Area	Existing Area (Including Lease Runoff Block): 443 ha	Proposed Area (Including Sheep Block): 523 ha
Stocking rate (cows/ha)	Existing Stocking Rate: 2.25	Proposed Stocking Rate: 1.91

Please note the legal description for the sheep block is incorrect. The correct legal description is Section 4 BLK II Otama SD.

Public notification consideration

I consider the adverse effects of the proposed activities will be more than minor, as such, Public Notification is required as detailed by the following section.

The existing environment

The existing environment consists of three blocks of land that under the proposal will become a singular landholding.

- The dairy platform – which includes the current water and discharge permits
- The sheep block
- The run-off block

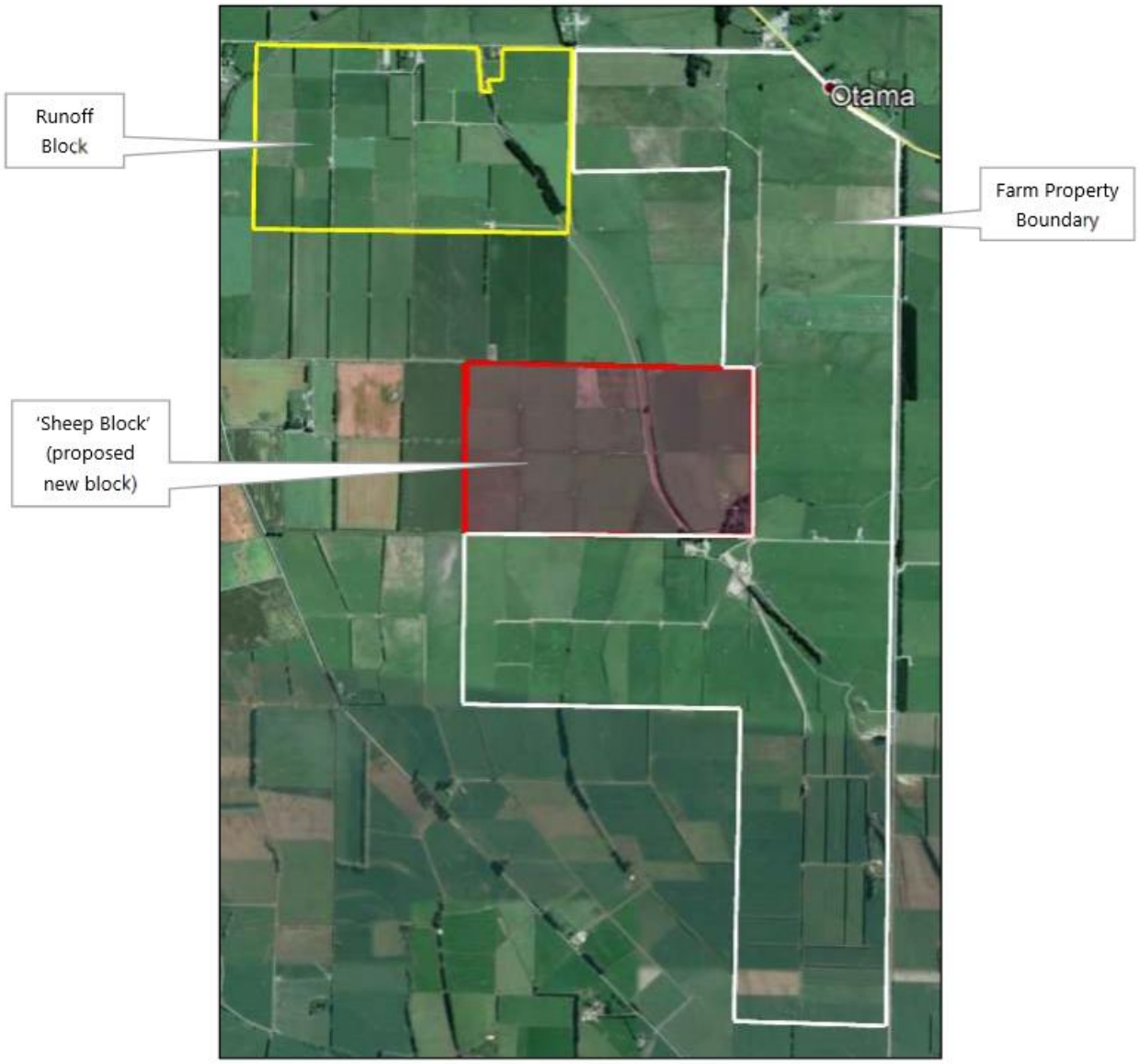

Figure 1: Proposed Landholding (Snipped from Application)

The existing environment is explained in detail in the application. This description is generally not in dispute and is adopted.

The applicants current consents (AUTH-301811-V2 and AUTH-301812-V1) are still current and do not expire until December 2022. The applicant is not proposing to renew these permits. Instead they have applied for a consent term of 13 years for the land use for farming. If the land use consent is granted, the consent holder would then apply to renew their current consents when they are due to expire and seek to align all the consents with a common expiry date.

The applicant also has a Water Permit (AUTH-20158314) for the abstraction of water from pasture irrigation. This expires on 8 October 2025.

Effects and Issues

Adverse effects of the proposed activities on the environment

Consideration of the following effects is required:

- effects on water quality, including potential for contamination of groundwater and surface water, and effects on sources of human drinking water;
- cumulative effects; and
- soil health.

Consideration of all the above effects has been considered, however, those of most concern are all that is covered below.

Effects:

The applicant's application sets out in depth details regarding possible effects and proposed mitigations for the proposal. While I consider that the applicants proposed mitigations will offset some of the potential effects from the activity, there are key issues which I consider will mean the effects from the activity are to be considered more than minor.

Land Use Nutrient and Contaminant Losses:

The key issues with nutrient losses with this proposal are:

- The current dairy platforms are located on soils which promote the movement of contaminants readily to groundwater and/or surface water depending on the specifics;
- The water quality in the receiving environment is already significantly degraded;
- The proposal aims to increase the size of the milking platform onto a previously organic sheep block;
- Expansion of the dairy platform onto land which has previously been used for sheep grazing will result an increase in localised losses on these new blocks through the conversion process and ongoing use for dairy processes and winter grazing; and
- It is accepted and acknowledged in the application that isolated losses will increase due to the change in land use on the sheep block.

The assessment of environmental effects contains in-depth detail on the nutrient budgets for the landholding and explains that the overall N and P losses over the landholding will decrease under the proposal, largely relying on the increased land area to cause a decrease in losses. A technical report undertaken on behalf of Council also concludes that "*although we agree that 'overall' the increase in NO3N leaching losses is likely to be small, due to an increase in the area of the dairy platform, we do expect localised increases in groundwater NO3-N to occur beneath the well-drained soils of the sheep-block if this consent were to be granted*"[1]

The Overseer Modelling supplied shows an almost 50% increase in N loss from the sheep block and an increase of 0.3kg/ha/yr (0.2 to 0.5) in phosphorous loss. It is unclear if the additional mitigations proposed will change this figure as the sheep block was not modelled separately with the updated Overseer budgets.

It is noted that overseer assumes good management practices are being undertaken on farm. The applicant has offered mitigations to mitigate nutrient and contaminant losses in the property.

Subsequent to lodging the application, the applicant provided further mitigations which related to the replacement of rotorainer irrigators which are currently used for pasture irrigation with centre pivots. It is noted that this will result in a decrease in nutrient losses from the dairy platform. This mitigation does not mitigate the effects of most concern, which are the increased losses resulting from the change in land use on the sheep block.

Groundwater quality

Groundwater quality in the catchment is degraded in areas, with some bore monitoring showing high groundwater nitrates. Soils in the area of the property are considered "leaky", with high risk of nutrient loss to groundwater. Due to these factors, I consider that groundwater quality is an issue to address with this application and that it is likely the effects will be more than minor. It should be noted that a monitoring bore beneath the subject property regularly exceeds drinking water standards for nitrates and recorded the highest nitrate level of any monitoring bore in all of Southland during recent monitoring.

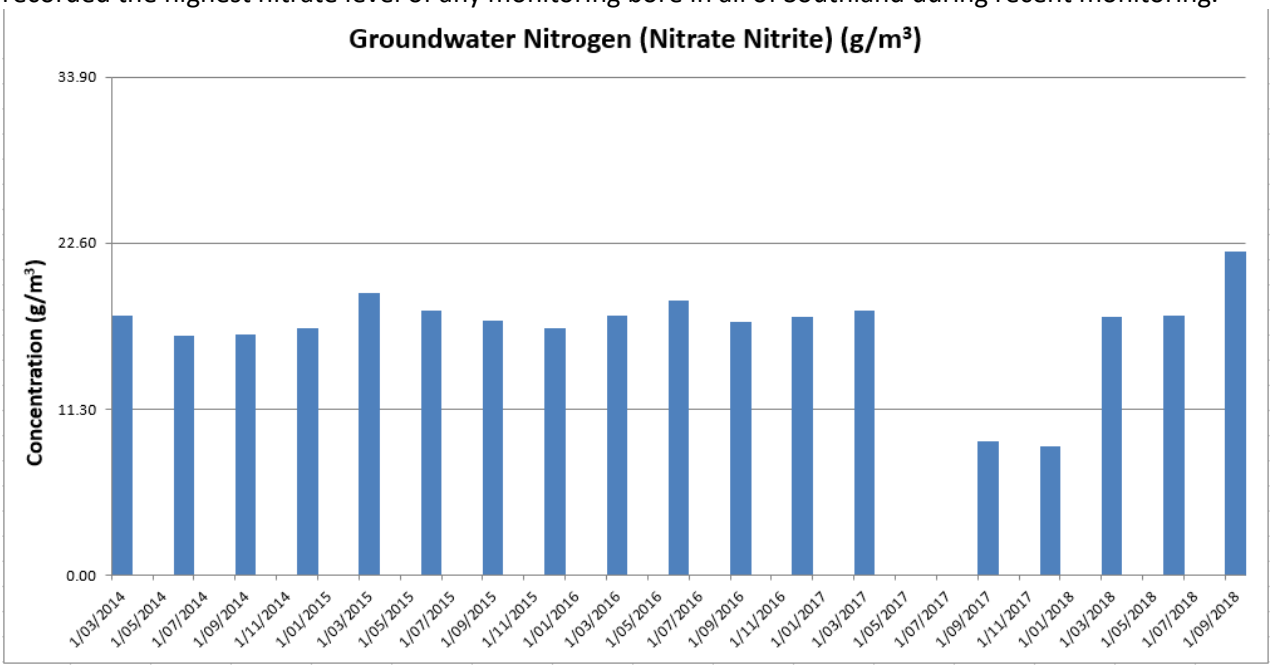

Figure 2– Groundwater Nitrate Levels from Bore F45/0172 (Note: 11.3mg/l is the limit for NZDWS)

[1] C Rissmann and L Pearson (2019) – Technical Assessment of APP-20191230: Cashmere Bay Dairy

A report for Council states that *"The main reason for these* [nitrate] *hotspots* [for the property and usrrounds] *is intensive land use occurring in association with well drained soils overlying oxidising aquifers that are not flushed by alpine or hill country derived streams"*[2]*.*

The consultant for the applicant has suggested this may have been as a result of poor well head protection. However, the onus is on the applicant to address this issue and it is not accepted that such nitrate levels could be blamed on poor well head protection solely. Even so, I would consider that any infiltration of contaminants into the bore, of which the applicant uses to abstract water from and is responsible to maintain in accordance with the permitted activity rules of the Regional Plans, should be considered as an adverse effect of the farming activity itself.

However, the report for Council identified that "*although possible, we consider it unlikely that up gradient land use is the dominant control over nitrate concentrations beneath the dairy platform*" and one of the reasons supplied of this was, "*The current intensity of consented land use within this setting is sufficient on its own to generate elevated groundwater NO3*-N" [3]*.*

Cumulative Effects

The applicant is currently operating under current discharge permits and water permits which are valid until December 2022. Due to the nature of the existing environment, high intensity operations such as this one, and other ones in the catchment cumulatively introduce significant nitrogen loadings into the groundwater. Considering the proposed activities, with the applicant's current activities and other properties in the area, it is likely the cumulative effects will have a significant effect. In Kuku Mara Partnership v Marlborough DC[4], "*the extent that one could have regard to existing adverse effects when, and only when, taken together with the new effect, they produce a synergetic impact on the environment*." As such, I consider that the additive effects of the proposed activity with the current activities, will have a synergetic impact on the receiving environment that will be more than minor.

Issues

Proposed Mitigations

The applicant has proposed a number of good management practices and mitigations. These include additional fencing and the construction of a wetland, however plans nor timeframes have not been provided for the implementation, and as such cannot be assessed as to their effectiveness nor appropriateness.

The applicant has also listed mitigations such as having (and using) soil moisture probes as being mitigations above good practice. However, these are required by the conditions of their consent and the applicant is lawfully required to have them installed.

Consent Duration

The applicant is applying for a 13 year term for a land use consent for farming. As such all farming activities form the basis of this consent. The applicant's current consents relating to the dairy operation are current for another three years, with the irrigation permit current until 2025. Consequently, there is 10 years of some of the farming activities (subject to the consent duration applied for) that are unable to be assessed or considered and as such the adverse effects are wholly unknown.

[2] C Rissmann and L Pearson (2019) – Technical Assessment of APP-20191230: Cashmere Bay Dairy
[3] C Rissmann and L Pearson (2019) – Technical Assessment of APP-20191230: Cashmere Bay Dairy
[4] Kuku Mara Partnership v Marlborough DC (2005) 11 ELRNZ 466 (EnvC),

Adverse effects that have been disregarded

Policy 39 states that when considering any application for Resource Consent for the use of land for a farming activity, all adverse effects should be considered of the proposed activity on water quality, whether or not this Plan permits an activity with that effects.

As such, all effects have been considered.

Planning provisions (policies and objectives) relevant to adverse effects

There is clear policy direction in the pSWLP that water quality should be improved where it is degraded. This is particularly relevant to the land use component of the application. The main relevant policy is Policy 16, which requires that applications to intensify dairy farming are generally not granted where the adverse effects cannot be avoided or mitigated. Policies 13 and 15A-C require that land use is managed to maintain or improve water quality. In this case, due to the degraded state of the receiving environment, Policy 15B is of most relevance. Policy 6 is specific to the Gleyed physiographic zones on the property and requires that good management practices are implemented to manage adverse effects on water quality from contaminants transported via artificial drainage and overland flow, and that Council have particular regard to contaminants transported via artificial drainage and overland flow. Policies 9 and 10 are specific to the Old Mataura and Oxidising Zones respectively on site and are similar to Policy 6 in its intent. However, direction is provided to decision makers that consents shall generally not be granted where contaminant losses will increase as a result of the proposed activity.

Conclusion: significance of adverse effects on the environment

The above policies have been used to inform and determine the level of adverse effects associated with the proposed activity, as the direction of the policies help establish what effects are acceptable and therefore whether the adverse effects of the proposed activities are less than minor, minor or more than minor.

I do consider that the adverse effects arising from the activity are likely to have a more than minor effect on the environment. This has been explained in more detail in the effects and issues section. I consider that the proposed change in land use will result in an increase in isolated losses that will result in adverse effects on the environment, especially cumulatively with activities currently occurring, that will be more than minor.

Overall, I consider that adverse effects of the proposed activities on the environment will be more than minor.