

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:	Aerodrome Farm Limited
Consents sought:	Land Use Consent – to use land for farming where cow numbers are increasing and the dairy platform is increasing beyond what was authorised as at 3 June 2016
Application reference:	APP-20191021
Site address or location:	95 Aerodrome Road. Invercargill
New consent(s) for new activity(ies) (s88)	<input checked="" type="checkbox"/>
New consent(s) for existing activity(ies) (s88)	<input checked="" type="checkbox"/>

Applicant:	Piobiare Homestead Limited
Consents sought:	Land Use Consent – to use land for farming
Application reference:	APP-20191021
Site address or location:	939 Lochiel Branxholme Road, Invercargill
New consent(s) for new activity(ies) (s88)	<input checked="" type="checkbox"/>
New consent(s) for existing activity(ies) (s88)	<input checked="" type="checkbox"/>

The Landholding

Consideration of what and does not form part of the landholding is an important consideration in respect of this application. As such, I consider it beneficial to address that issue here rather than later on in this report.

There are two applicants for the subject proposal; Aerodrome Farm Limited and Piobiare Homestead Limited. Aerodrome Farm Limited (**'Aerodrome'**) owns and operates an existing and operational dairy farm (**'the dairy platform'**) at 95 Aerodrome Road, Invercargill. Aerodrome is increasing their land area and cow numbers and as such require Resource Consent under Rule 20 of the proposed Southland Water and Land Plan (**'pSWLP'**).

Piobiare Homestead Limited (**'Piobiare'**) operate a farm at 939 Lochiel Branxholme Road, Invercargill. Piobiare offers Intensive Winter Grazing to other operators including Aerodrome.

The application puts forward an argument that the separate properties do not form a singular landholding. The application states:

"The two properties are separate landholdings for the following reasons:

- *Even though Nelson Pyper is a common director between each property, Aerodrome and Piobiare are separate landholdings;*
- *The landholdings are not contiguous;*
- *The landholdings are managed separately and are run as separate financial businesses, which constitutes 'single operating unit';*
- *Aerodrome, in order to operate as a dairy farm, utilise Piobiare as a support block where young stock are grazed, and milking cows are wintered. However, these activities could occur on any other property in Southland without consent;*
- *Piobiare can operate independently of Aerodrome altogether if they grazed stock from another property and can operate in their own right; and*
- *Each landholding individually can't meet the permitted activity Rule 20 (for different reasons) and therefore each property on its own would require a land use consent irrespective of this application."*

In respect of the landholding argument put forward by the applicant, there are a number of points which are superfluous to whether or not the properties form a single or multiple landholdings. The landholding definition is not restricted to contiguous blocks of land, as such the fact the blocks are not contiguous does not automatically result in the blocks being separate landholdings. As Aerodrome utilises Piobiare for their intensive winter grazing, I consider that Piobiare forms part of Aerodrome's "landholding". Although the applicant disputes this, largely because Piobiare can operate without Aerodrome. I accept this, however I do not accept that Aerodrome, as they currently operate and as they propose to operate, could operate without Piobiare, especially with their intention to run a fully 'self-contained' unit. Irrespective of this, should Aerodrome had proposed to utilise any other block of land within Southland as a support block, it would still form part of the consideration of this application.

If I was to accept the application's argument that the two properties were not one landholding, both landholdings would respectively require resource consent for farming under Rule 20 of the pSWLP as neither landholding could meet the permitted activity criteria of the Rule.

Aerodrome cannot meet the requirements of Rule 20 of the pSWLP as they are proposing to;

1. Increase in cow numbers from 800 to 850 cows which is beyond what was authorised at 3 June 2016; and
2. Increase the size of the dairy platform by 48 hectares beyond what was authorised as at 3 June 2016, from 267 hectares to 315 hectares (inclusive of ineffective land areas).

Piobiare cannot meet the requirements of Rule 20 of the pSWLP as they do not meet all the required Good Management Practices of the rule.

For completeness, in regards to Piobiare, an increase in cow numbers beyond 3 June 2016 does not trigger Rule 20. Rule 20 states that, with my emphasis underlined:

- (a) *The use of land for a farming activity is a permitted activity provided the following conditions are met;*
- (ii) *Where the farming activity includes a dairy platform on the landholding, the following conditions are met:*
- (2) *The dairy platform had a dairy effluent discharge permit on 3 June 2016 that specified a maximum number of cows; and*
 - (3) *Cow numbers have not increased beyond the maximum number specified in the dairy effluent discharge permit that existed on 3 June 2016...*

Piobiare, as at 3 June 2016, had a discharge permit that authorised the discharge of winter barn effluent from 400 cows and they are now proposing to discharge winter barn effluent from up to 450 cows. This results in an increase of 50 cows. However, this increase in itself is not a breach of Rule 20 (if the separate landholding argument is accepted) as the rule states where the landholding had a dairy platform with a discharge permit. Piobiare does not have a dairy platform. The rule also specifies a dairy effluent discharge permit. The pSWLP does not define dairy effluent however the Regional Water Plan ('RWP') does and it only includes agricultural effluent from a farm dairy shed. As such, the increase in cow numbers beyond 3 June 2016 is not a trigger to enter into the consenting framework of Rule 20 on Piobiare if accepting the separate landholding argument put forward by the application.

The application implies rather than being a single landholding the two properties operate in a form of partnership rather than a single operating unit.

In respect of the applicant and their proposal, I consider that it is unnecessary to determine or come to an agreement on what does and what does not form part of the landholding. The application considers all of the effects from the proposed activities and, should consent be granted, both properties will have a suite of consents that controls the farming activities and the adverse effects associated with the activities. However, my assessment will be based on the activities as a single farming activity, but any resulting consents that may be granted would be separate.

Recommendation and decision

Officer's recommendation

I recommend the application be processed non-notified because I consider the adverse effects will be less than minor. This is because the applicant has proposed significant mitigations which directly target the adverse effects of the proposed increase in cow numbers and land area of the dairy platform. These are the use of sediment traps and wetlands, which correspond with the contaminant pathways on the property.

10.1	The application be processed non-notified	<input checked="" type="checkbox"/>
10.2	Public notification is required/recommended	
10.3	The application be placed on hold while the applicant tries to obtain written approvals from the affected persons	<input type="checkbox"/>
10.4	Limited notification is required. Persons to be served notice are those listed in 8.2	<input type="checkbox"/>



Alex Erceg
Consents Officer

Date: 23 September 2019

Decision under Delegated Authority

My decision is that the application will be publicly notified. This is for the reasons described below.

Section 95A of the RMA

The question to be answered at this stage in the consent process is in s 95A(8)(b) and is whether “the activity will have or is likely to have adverse effects on the environment that are more than minor.” For completeness, provisos applying to the assessment of effects are set out in s 95D though none are relevant to this decision. This is because first, the application is for a discretionary activity so s95D(c) does not constrain the assessment, and second, policy 39 of the pSWLP expressly removes the ‘permitted baseline’ test from the assessment.

Leaving these matters aside therefore, there are two main elements in this test in s 95A(8)(b):

- The significance of adverse effects on the environment. This is a question about evaluating the importance of effects, rather than a question about the effects themselves.
- The likelihood of more than minor effects occurring. This is a question of how likely it is that the effects will be more than minor.

Environmental effects

The nutrient budgets provided by the applicant show that environmental effects arising from the activities on the whole landholding would be negligibly different under the proposed farming scenario. The losses calculated are more or less the same and it follows logically that the environmental effects would also be similar.

This does, however, ignore two factors:

1. It ignores the environmental effects of the change in land use on the Pypers Block. The application seeks to expand an existing dairy farm onto this new block that is currently a sheep farm. On this block nutrient losses will almost certainly increase. The block is classified as oxidising Physiographic Zone with the artificial drainage variant and wetlands are intended to be constructed to capture the overland flow and tile drain flow surrounding land. However I consider it is still likely that there will be an increase in losses to groundwater from deep drainage on this block. This is a particular risk factor for this

Losses from the farm system to groundwater will be likely to continue to adversely affect the quality of groundwater. This is set in a policy framework where action must be taken to improve water quality where it is already degraded. The increase in losses and subsequently environmental effects on the Pypers Block are likely to have a more than minor effect when compared to the current land use.

2. It takes advantage of the reduction of intensive winter grazing on Piobiare of ~200 cows, but does not account for the likely corresponding increase in intensive winter grazing elsewhere. Environmental effects from that displacement of cows are part of the proposal and have not been accounted for.

Conclusion

Overall I consider that the activity is likely to have environmental effects that are more than minor. Other applications to expand existing dairy farms have been publicly notified when they showed similar characteristics and for the same reasons as here, so this decision is consistent with those earlier decisions.

11.1 I agree with the recommendation	<input type="checkbox"/>
11.2 The application will be processed non-notified	<input type="checkbox"/>
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	<input type="checkbox"/>
11.5 The application will be limited notified. The parties to be served notice are those listed in section 8.2	<input type="checkbox"/>

This decision is made under delegated authority by:



Michael Durand
Consents Manager

Date: 13/10/19

The proposal

This application

Aerodrome own an existing dairy farm at 95 Aerodrome Road. The discharge of effluent from up to 800 cows is authorised by Discharge Permit AUTH-301219 and Water Permit AUTH-301220-V1 authorises the abstraction and use of groundwater.

The applicant has purchased a contiguous block of land which was previously used as a sheep farm and for vegetable growing ("**sheep block**") that they propose to incorporate into their dairy platform.

The applicant also utilises Piobiare for their wintering and support activities which is also subject to this application.

Piobiare is an existing wintering and support block with a discharge permit authorising the discharge of winter barn effluent from up to 450 cows.

As part of this application, Piobiare will stop offering services to all other parties and operate in a "partnership" with Aerodrome. This results in the reduction of approximately 200 cows that have been grazed on Piobiare under another contract held by Piobiare that will be discontinued.

Particulars of the Proposal – Aerodrome

The following tables (taken from the application) detail the particulars of the proposal for Aerodrome:

Land use consent for dairy farming:	
Property Address	95 Aerodrome Road, Lorneville
Property Owners	Aerodrome Farm Limited
Legal Description of dairy platform	Lot 2 DP 444882, Lot 1 DP 387607, Lot 3 DP 307719, Lot 2 DP 500581, Lot 6 DP 403135, Section 33 BLK IV Invercargill Hundred, Lot 2 DP 375267, Sections 1, 2, 3 & 4 BLK IX Invercargill Hundred, Lot 2 DP 449748 and Lot 2 DP 451891.
Property Area (proposed)	315 ha
Map reference	NZTM 2000: 1245258E 4855827N (Dairy Farm)
Peak milking cows on farm (proposed)	850
Stocking rate	2.8 cows/ha

Replacement of permit no.	301219	
Peak number of dairy cows	850	
Winter milking ² ?	No milking between 20 June and 20 July other than slipped cows and/or early calvers, the herd won't typically begin calving until 21 July each year.	
Sources of effluent?	Dairy shed, silage pad leachate (existing) and effluent from the proposed calving pad, slurry from weeping wall sludge beds, effluent pond when de-sludged and sump.	
Effluent treatment	Weeping wall, solid separation Solids/slurry from proposed calving pad will be discharged to land via the slurry tanker.	
Storage	Pond	Sludge beds
Storage available (m ³) – working volume	3,816 m ³	342.5
Storage required (m ³) – as per attached dairy effluent storage calculator	1,940 m ³ (90% probability) and 2,513 m ³ (maximum)	250.7 (maximum)
Disposal area proposed (ha)	159.7 ha. See Attachment A for current and proposed effluent disposal area.	
Irrigator proposed	Pod irrigation (or equivalent low rate irrigation method), slurry tanker and umbilical	
Instantaneous application rate and maximum depth per application (See Attachment A for EFFLUENT category Plan)	10 mm/hr rate and 12 mm maximum depth per application (for pods applying EFFLUENT in Category A and D soil risk zones). 10 mm/hr rate and 10 mm maximum depth per application (for pods applying EFFLUENT in Category C soil risk zones). 10 mm maximum depth for umbilical in Category A and D only. 5 mm maximum depth for slurry tanker in Category A and D only.	
Effluent pond details	Clay-lined, constructed in 2012 by way of AUTH-301221. Pond and weeping wall passed drop-tests. The pond and one sludge bed has also	

Replacement of permit no.	301219
	been visually inspected by a suitably qualified professional. See Attachment B for further details.

Replacement of permit no.		301220-V1
Location of point of take	NZTM2000: 1244931E 4855816N (Bore E46/0667) NZTM 2000: 1245336E 4855868N (Bore E46/1442)	
Freshwater storage onsite?	3 x 30,000 L tanks (90,000 L)	
Rate of take over 24 hrs (L/s)	1.18 L/s (average over 24 hours)	
Peak daily volume (L)	102,000 L/day	
Allocation per cow (L/cow/day)	120 L/cow/day	
Yearly volume (m ³ /year)	31,312 m ³ /year. Includes, volume required during milking season and a stock drinking allowance in July for cows brought back early/on calving pad	
Groundwater Zone	<i>Makarewa (RWPS)</i>	<i>Waihopai (PSWLP Decision Version)</i>
Amount currently allocated, including current permit (m ³ /year) and percentage currently allocated.	3,935,161 (8 %)	2,775,508 (6.2 %)

The following table (taken from the application) details the use of a calving pad as a permitted activity:

Type of structure	Calving pad – where animals may also be fed
Location	95 Aerodrome Road, Invercargill
Peak Number of cows 1 July – 31 September	No more than 120 adult cattle. Up to 120 cattle outside of these months. Other (equivalent) stock classes when not utilised by adult cattle.
Material	Concrete with sawdust or rubber in accordance with Rule 35A(a)(iv).
Dimensions of pad	Up to 1,200 m ² (10 m ² per animal)
Proposed construction completed date	Within 12 months of commencement of the land use consent as applied for a farming activity on Aerodrome Limited
Directed to pond?	Yes

Particulars of the Proposal – Piobiaré

The following tables (taken from the application) detail the particulars of the proposal for Piobiaré:

Property details:	
Property address	939 Lochiel Branxholme Road, Branxholme
Property use	Dairy Support Runoff
Property Owner	Piobiare Homestead Limited and A & J Roxburgh (lease land)
Legal description of wintering platform	Lot 1 DP 12462, Lots 1 & 2 DP 429633, Section 2 and Part Section 3 Block III New River HD, Section 2 Survey Office Plan 385656, Lots 1-3 DP 517446, Lot 1 Deposited Plan 7084
Property area	165.1 ha
Proposed winter grazing in-situ	18 ha of crop
Peak stock number on farm	885 milking cows and 220 young stock
Map reference	NZTM 2000: 1238402E 4864404N

Type of structure	Wintering barn
Location	NZTM2000: 1238445E 4864407N
Cow numbers modelled/proposed	May: 125 June: 400 – 440 July: 400 – 440 August: 150 – 440 September: 25
Material	Constructed of concrete, steel, rubber and water beds
Directed to pond?	Yes

Permit no.	AUTH-3009980-V1		
Number of dairy cows accommodated in wintering shed	Consented Number	Proposed Number	
	400	Maximum 440	
Sources of effluent?	Wintering shed effluent produced from up to 440 cows, from 1 May to 30 September each year.		
Effluent treatment	Screw press solid separation		
Storage	Pond	Concrete Sump (pump sump)	Bunker
Storage available (m ³) – working volume	2,945 m ³ (excluding 0.5 m freeboard)	72.4 m ³	30 m ³
Storage required (m ³) – as per attached	1,899 m ³ (total)		
Disposal area proposed (ha)	94 ha (see Attachment A)		

Irrigator proposed	Pod irrigation/K-Line (or equivalent low rate irrigation), slurry tanker and umbilical
Application rate and depth	Pod irrigation: 10 mm/hr rate and 12 mm depth per application Umbilical system: 10 mm depth per application Slurry tanker: 5 mm depth per application
Effluent pond details	Clay-lined, constructed in 2012 by way of AUTH-300999. The pond passed a drop-test and it and other effluent storage structures have been visually inspected by a suitably qualified professional as per Attachment C

The abstraction and use of groundwater on Piobaire is a permitted activity.

Public notification consideration

The existing environment

The existing environment consists of three blocks of land;

- The dairy platform – which includes the current water and discharge permits
- The sheep block
- The Piobaire block – which includes the current discharge permit and permitted activity water abstraction.

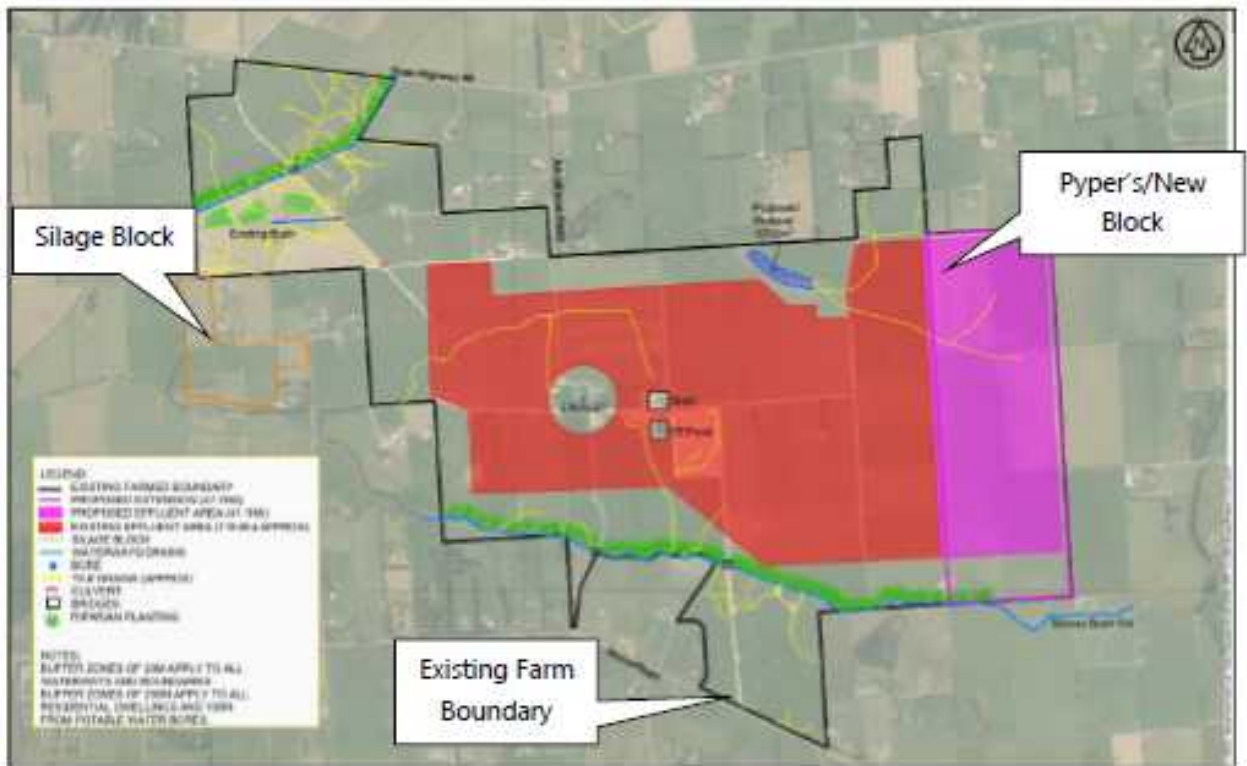


Figure 1: Proposed Dairy Platform (Snipped from Application)

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

The following table summarises the expiry dates of the current consents held by the applicants;

Notification memorandum

Consent Holder	Consent Number	Type of Permit	Expiry Date
Nelson Pyper	AUTH-300998-V1	Discharge Permit	1 March 2022
Aerodrome Farm Limited	AUTH-301220-V1	Water Permit	28 August 2022
Aerodrome Farm Limited	AUTH-301219	Discharge Permit	28 August 2022

The following sections will summarise the points of the existing environment that are important for determining the level of adverse effects.

Soils and Physiographic Zones

The soils and physiographic zones present illustrate the contaminant pathways of concern and which contaminants will be of most risk at being lost to the receiving environment.

Aerodrome Dairy Platform

Soils	Soil Type	Vulnerability Factors		
		Structural Compaction	Nutrient Leaching	Waterlogging
	Waikiwi + Woodlands	Slight	Moderate	Slight
	Titipua + Tisbury	Minimal	Slight	Severe
	Dacre + Titipua	Moderate	Slight	Severe
	Waikiwi	Slight	Moderate	Slight
	Woodlands + Waikiwi	Moderate	Slight	Moderate
	Otanomomo	Minimal	Slight	Severe
	Dacre	Slight	Slight	Severe
Physiographic Zones	Physiographic Zone	Variant Type		
		No Variant	Overland Flow	Artificial Drainage
	Gleyed	√		
	Oxidising			√
	Peat Wetlands	√		
FDE Land Classification (Discharge Area)	Category A – Artificial Drainage or Coarse Soils Structure Category C – Sloping Land Category D - Well drained flat land			

The proposed dairy platform sits largely on the Oxidising physiographic zone, as does the area of new land proposed to be added into the platform, with a strip of the Gleyed zone which basically dissects the property along the western and southern boundaries. The area of peat wetlands is very minor and is situated in the area of a proposed wetland. The entire site is covered with an extensive artificial drainage network which is a typical component of the gleyed zone. The Oxidising Zone present also has an artificial drainage variant. The need for artificial drainage is also confirmed the properties vulnerability to waterlogging, being largely severe. The gleyed physiographic zone has denitrifying potential as does the peat wetland zone. The oxidising zone is characterised by soil water and groundwater that contains high levels of oxygen which, although good for phosphorous retention, allows nitrogen to accumulate. The drainage to waterways varies depending on slope, soil texture and permeability. The zone can consist of flat and free drainage soils which provide for a deep drainage contaminant pathway to underlying groundwater or slowly permeable soils which may experience seasonal waterlogging. In this instance, the

soils are largely impermeable as characterised by the vulnerability to waterlogging and the zone has artificial drainage.

Piobiare Intensive Winter Grazing Block

Soils	Soil Type	Vulnerability Factors		
		Structural Compaction	Nutrient Leaching	Waterlogging
	Edendale	Slight	Moderate	Slight
	Woodlands + Waikiwi	Moderate	Slight	Moderate
	Dacre	Slight	Slight	Severe
Physiographic Zones	Physiographic Zone	Variant Type		
		No Variant	Overland Flow	Artificial Drainage
	Gleyed	√		
Oxidising	√		√	
FDE Land Classification (Discharge Area)	Category A – Artificial Drainage or Coarse Soils Structure Category D - Well drained flat land			

The soils and physiographic zones on the IWG block are similar to that of those on the dairy platform will similar contaminant pathways and vulnerabilities. A larger portion of Piobiare is on the Gleyed zone and as such has a greater denitrifying potential.

Groundwater

Groundwater Quantity Aerodrome

The groundwater zones whereby water abstraction is proposed to occur have changed from the Makarewa Zone under the Regional Water Plan to the Waihopai Zone under the proposed Southland Water and Land Plan. The boundaries of the zones is significantly different under each plan respectively, with the Makarewa Zone extending further south under the Regional Water Plan when compared to the boundaries under the proposed Southland Water and Land Plan.

Both of the proposed abstraction bores sit within the same zones however under the respective plans.

Groundwater Zone	Makarewa (Regional Water Plan)	Waihopai (proposed Southland Water and Land Plan)
Discretionary Allocation	49,065,000	44,500,000
Amount Currently Allocated	3,883,616	2,724,576
Mean Annual land Surface Recharge	327,100,000	N/A
Percentage Currently Allocated (%)	7.9	6.1

The respective zones have a low percentage currently allocated with a significant amount of allocation available.

Groundwater Quantity Piobiare

The abstraction for Piobiare is undertaken as a permitted activity which has been demonstrated in the application. Quantity is not relevant to this application.

Groundwater Quality Aerodrome

Groundwater quality beneath the property and just north of the property are indicative of moderate to high land use impacts. There is no monitoring south of the property as this is urban.

Groundwater Quality Piobiaré

The groundwater quality in the vicinity of Piobiaré is variable and ranges from moderate to high land use impacts to exceeding NZDWS. The hotspot where groundwater quality exceeds NZDWS is however North of the property and is not effected by the activities occurring on Piobiaré.

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;
- odour; 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 and good management practices for the proposal.

Good management practices and mitigations are not referred to interchangeably. Good management practices are, for the most part, required as a bare minimum as required by both Rule 20 and a number of policies within the pSWLP. As such, an application is required to identify those mitigations that go "above and beyond" good management practice to mitigate the adverse effects of the proposed activities.

Change in Land Use Nutrient and Contaminant Losses:

Aerodrome Dairy Platform

The proposed activities include an increase in land area and cow numbers on the dairy platform. The application has prepared Overseer budgets and additional calculations which demonstrate a decrease in losses of contaminants. However, this can largely be attributed to the increased land area, as such the applicant is required to demonstrate that the adverse effects are mitigated. It is not sufficient to simply demonstrate a decrease a losses. There also needs to be a delineation between losses and the actual adverse effects of the proposed activities.

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 sheep and vegetable growing 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.

The applicant has proposed a number of good management practices as is required and these are detailed in the Management Plan included in the application. The applicant has also proposed a number of significant mitigations which include sediment traps and the creation of a wetland. The contaminant pathways of most concern on the dairy platform are artificial drainage and overland flow. As such, these mitigations are directly targeted to those pathways. In addition to that the sediment traps and wetlands are located in areas where overland flow would be expected to occur and artificial drainage is directed to the traps and wetland also. The applicant states that 20% of the dairy platform will be captured by the wetland (a greater area will be captured, but this is made up of neighbouring properties). The wetland will also be located on the new block and as such directly mitigates the isolated losses from that new block.

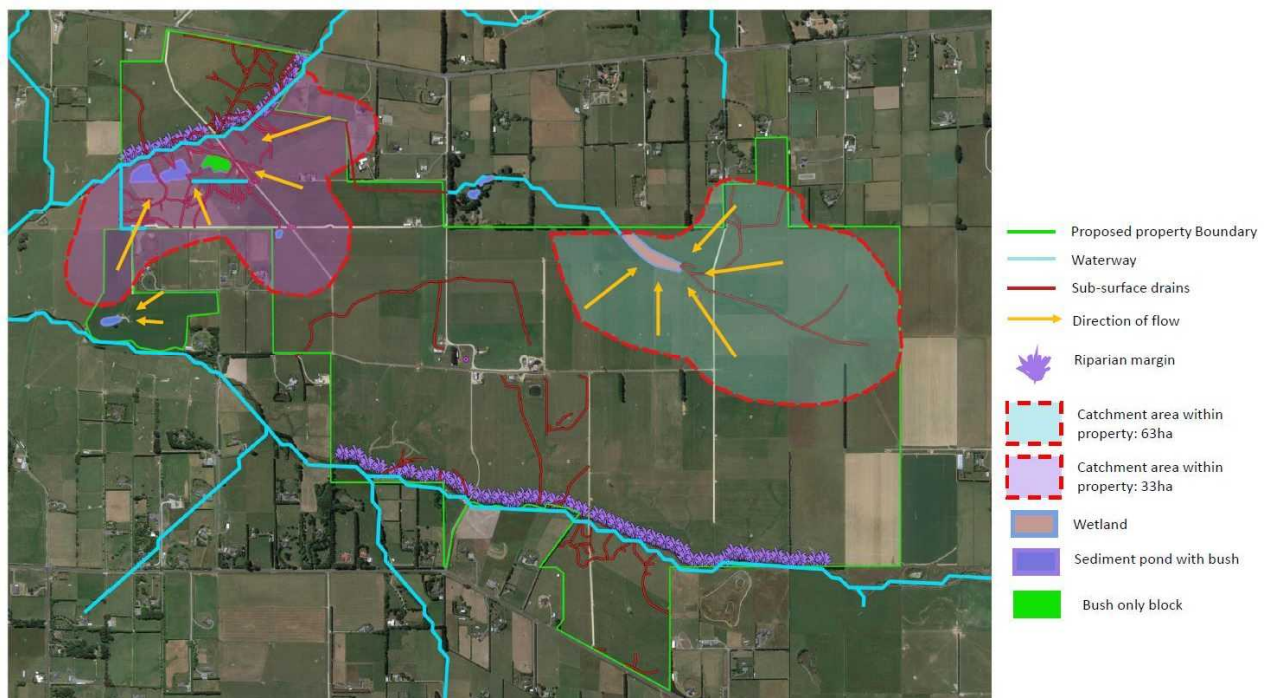


Figure 2: Map of Wetland and Sediment Traps

Piobiare

The application details a decrease in cow numbers at Piobiare as well as increased use of winter barns. This block will be used for intensive winter grazing largely in accordance with the permitted activity requirement of Rule 20 of the pSWLP. The applicant cannot meet the requirement which requires

portable water troughs to be used. However, the topography of the land is flat and winter grazing is undertaken away from waterways. As such, I consider the risk of overland flow of contaminants here to be minimal.

Conclusion

The applicant has addressed the effects that are of most concern by proposing to implement mitigations that target contaminant losses from overland flow and artificial drainage. The wetland is on the new block and consequently targets the increase in losses that would be expected to occur on that block. The cow numbers on Piobiare will decrease and the use of winter barns will increase which further mitigates the adverse effects of the proposed activities. I consider these additional mitigations specifically target the effects of most concern and as such the adverse effects of the proposed activities will be less than minor.

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 less 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, however these have been mitigated by targeted mitigation measures which correlate with the expansion and the contaminant pathways present. Although, cow numbers will increase on Aerodrome they will decrease on Piobiare. Although "offsetting" of adverse effects is not appropriate as per Policy 16 of the pSWLP, the applicants proposal has mitigations (which are not rewarded in overseer) which will expand the decrease in losses and mitigate the adverse effects of the proposed activities.

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